



avia solutions

Study on the functioning of the internal market.

Invitation to Tender N° TREN/F2/08-2004

Contract N° TREN-4/MD/S07.37804

Part 2: land-use planning and management in the EU

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This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

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contents

CONCLUSIONS REPORT

COUNTRY REPORTS:

AUSTRIA	LATVIA
BELGIUM	LITHUANIA
CZECH REPUBLIC	LUXEMBOURG
DENMARK	MALTA
ESTONIA	NETHERLANDS
FINLAND	POLAND
FRANCE	PORTUGAL
GERMANY	SLOVAKIA
GREECE	SLOVENIA
HUNGARY	SPAIN
IRELAND	SWEDEN
ITALY	UNITED KINGDOM



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1. INTRODUCTION

The growth of the aviation sector depends to a large degree on the expansion of airport capacity both through improvements in the ability to process air traffic and the enlargement of airport facilities and infrastructures.

Both types of growth have met with increasing problems because of the impact that expanding traffic or new infrastructures have on neighbouring areas. Many do not see airports as easy neighbours, and the resulting conflicts are hampering the development of this essential sector. Airport capacity studies have pointed out that *“the maximum aircraft movement rate can be determined by many factors including airfield layout ..., air traffic control procedures ... and environmental considerations”*¹. The Commission itself has launched a consultation on airport capacity², with a view to preparing a communication in the first half of 2006. In this consultation, the importance of environmental and land management issues is also a key concern.

In this context the Directorate-General Energy and Transport (DG TREN) commissioned the study on land-use planning and management which has resulted in this Conclusions Report and separate individual reports that describe the situation in each of the EU Member States.

1.1. Terms of reference

This document presents the conclusions to Part 2 of the project entitled “Study on the functioning of the internal market comprising of two parts: Part 1: Air transport infrastructures in the new EU member States. Part 2: Land-use planning and management in the EU.”

The consultant’s work was being conducted in accordance with the methodology proposed in its Technical Proposal of 1 July 2004, following the Call for Tender N° TREN/F2/08-2004.

According to the Terms of Reference:

“Land-use planning and management is one of the four principal elements of the balanced approach to noise management as the number of people affected by aircraft noise is dependent on the way in which the use of land surrounding an airport is planned and managed, in particular on the extent to which residential development and other noise-sensitive activities are controlled. Air transport activities are expected to continue to increase with the risk that future

¹ ECAC – EUROCONTROL, Study on Constraints to Growth. Vol.I, page 9. Available at: http://www.ecac-ceac.org/file_pub/get_file.php?idDoc=199

² Consultation on Airport capacity, efficiency and safety in Europe
http://www.europa.eu.int/comm/transport/air/safety/consultation_en.htm

growth may be constrained by inappropriate land-use near airports.

.....

In this light, the study should explore the basis for the promotion and application of future harmonised land-use management in the EU and should provide in-depth information on current practices and make recommendations for such harmonisation.

In particular, this part of the study should

- *look at present land-use planning practices in each Member States*
- *identify the bottle-necks in each Member State*
- *take stock of what benefits Member States would expect from a common approach or policy to the issue*
- *identify on what (common) parameters the EU could focus as a first step e.g. environment, capacity development and compliance with competition rules.”*

1.2. Approach

In order to fulfil the goals set by the terms of reference, the contractor developed an outline of issues to be considered and submitted it to DGTREN. The purpose of the outline was to establish a common framework as a basis for gathering information on the 25 Member States in order to prepare individual country reports that followed the same pattern in order to achieve maximum comparability.

Information was gathered for each Member State both via documentary research and by means of a series of interviews conducted both at airports and at the offices of central, regional or local administrations in charge of civil aviation, environmental matters and spatial planning. Time and availability constraints did not allow for consultation with all airport policy stakeholders involved in all countries, but, given the level of information required, sufficient information was gathered in all cases. The sole exception has been Cyprus, where the consultants were unable to arrange the necessary meetings with the civil aviation and aviation authorities and the documentation available on the subject was not sufficient to prepare an adequate report.

A list of the persons interviewed in each Member State is provided at the end of the individual country reports. To all these people, the authors extend their sincerest gratitude. Without their contribution, this study would not have been possible. Special thanks are given to those who improved the quality of this study by reviewing the report on their country.

The information collected on each country was synthesized and homogenised to provide a series of reports in which the descriptions not only followed the

same outline, but also used the same concepts and terminology. The country reports constitute the core of the study and provide the grounds for the conclusions in this Report.

The Study was organized along four major lines of inquiry which constitute the main chapters of each country report:

- Spatial planning system
- Regulations and permits
- Airport planning and construction
- Airport noise and air quality

Based on the assumption that those reading the Study may have different backgrounds and interests, it was decided to give equal importance to information pertaining to the spatial planning field and to the airport sector. Since the purpose of the exercise is to analyse how land use is planned and managed in the vicinity of airports, the authors decided to begin by describing the planning system for each country, given that land use plans must usually be seen in the light of a well structured system of inter-related planning instruments. The relationship between spatial planning and land use management by looking into the different permits required for construction and operation projects.

Having described the land use planning and management system in general, the reports turn to specific issues concerning airports. The instruments used for airport planning are analysed first, and then the permits required for their construction and operation. This information is put in the context of land use planning and management to provide a picture of the relationship between spatial plans and airport development.

The chapter on airport planning takes into account the fact that the airport “footprint” extends far beyond the boundaries of the infrastructure, and describes how such external impact is considered in terms of noise, obstacle clearance areas³, and land reserves for future expansion. Where applicable, it mentions also, what provisions exist to take into account third party risk prevention.

The final chapter of each report focuses on the two most significant environmental issues directly related to airport operation: noise and air pollution.

³ The report uses the technical term “obstacle limitation surfaces” as defined in Annex 14 of the ICAO’s Convention.

1.3. Findings

It is not possible to summarize in a few paragraphs the information contained in more than 900 pages of reports. Some of the main commonalities and differences are, however, synthesised in the next pages.

1.3.1. *Spatial planning*

Spatial planning systems in Europe share many common traits despite the fact that each country, and in some cases each region, has developed its own set of instruments and practices. Similarities are greater at the local level of planning where it can be said that all EU countries have some type of spatial plan that governs the use of land for entire municipalities or parts thereof. Differences become more apparent when comparing plans at a regional or sub-regional level as this kind of “strategic plan”⁴ exists in practically all Member States except those with reduced territories such as Malta or Slovenia. However, in practice these plans are not really being prepared in some countries as is the case in many Spanish regions, Hungary, and parts of Portugal or they have only been introduced very recently as happens in the UK.

Whether these supra-municipal, strategic, planning instruments exist or not is not an academic issue. The spatial impact of airports most often extends beyond the boundaries of single municipalities, which means that when only local plans are available, it becomes much more difficult to integrate airport development considerations into spatial planning. It must also be said that even if such plans do exist in the majority of countries, it is only a small minority, like the Walloon Region in Belgium, the Netherlands, or German *Länders* such as Hessen, that seem to effectively integrate airport development into strategic planning.

The fact that the spatial planning system is ill prepared in most EU countries to integrate the full territorial impact of the airports can be considered one of the bottlenecks preventing a more positive, fruitful relationship between such infrastructures and their surrounding areas.

1.3.2. *Airport planning, construction and operation*

While spatial planning has a long tradition, dating from the XIX century in most European countries, and has been legally regulated, airport planning in most Member States is considered as a purely technical activity not subject to any regulation. The exceptions are Italy, where a “*Piano di Sviluppo Aeroportuale*” has been prepared for the majority of airports, although it is not required by law; France, with a similar situation in which many airports have prepared their

⁴ Planning concepts and terminology used in the report are based on “The EU compendium of spatial systems and policies”. Published by the European Commission in 1997.

“*Avant Projet de Plan de Masse*” even though the law does not require it and does not regulate the form and contents; and Spain, where all “general interest” airports are legally required to prepare a “Plan Director”.

Although airport plans are not regulatory documents, this does not mean that airports do not prepare this kind of instrument. As a rule, all airports do draft airport plans of one sort or another, although in some cases they do not go beyond the short or medium term. Nevertheless, it must be emphasized, that another bottleneck evidenced by the study can be found in the fact that in very few countries is airport planning designed to achieve better integration with spatial planning and to facilitate communication with neighbouring communities.

The study has also looked into the relationship between airport construction or expansion and spatial planning in terms of the development control system. To this end it has examined whether or not construction permits are required for airport projects. In most countries, there are no special provisions concerning airports, and all projects need a regular building permit like any construction. There are a number of countries, however, where the requirements are different. In Austria and Germany airport constructions require a specific permit issued by the aviation authorities, but no building permit from local authorities. In France and Hungary only buildings need a construction permit, but infrastructures, i.e. runways, are excluded from this requirement. No building permit is necessary in Greece, Portugal or Spain. In some countries, such as Belgium, Poland, Slovakia and Slovenia, the permit is not issued by local authorities, but rather by regional or central governments. In the Netherlands, the expansion of Schiphol airport was authorized by means of a specific law adopted in Parliament.

Another type of control over airport construction and operation can be found in the environmental permits required to build and/or operate airport facilities. All countries require Environmental Impact Assessments for airport construction as mandated by EU environmental legislation and in a number of States airports also need a specific permit to operate. Such is the case of Belgium (both in Flanders and Wallonia), Denmark, Estonia, Finland, Hungary, Lithuania, Luxembourg, Slovenia and Sweden. Only in a very limited number of countries, such as France and the Netherlands, is an environmental evaluation process also needed for the modification of operations involving changes in the number of people affected by noise.

1.3.3. Airport impact

In examining the impact of airports on their surrounding areas, the study focused on how each country dealt with noise, obstacle clearance areas and land reserves for future construction or expansion, and how these impacts are integrated into spatial planning.

The preparation of noise contours is now common practice in all major European countries, and a majority includes the resulting areas within the spatial plans for the area. The only countries where noise mapping is not integrated into spatial planning instruments are Greece, Ireland, Malta, Poland, Slovenia and Spain. In some countries, such as Italy, Sweden and the UK, noise maps are prepared and made public, but do not appear in spatial planning documents.

Most European countries also make public the extent of obstacle clearance areas, either in separated noise maps or within spatial plans. The exceptions are Belgium, where no special provisions appear to be in place; and Greece and Spain where such areas may be defined in a descriptive form without an accompanying map. In the Czech Republic, Denmark, France, Ireland, Italy, Lithuania, Luxembourg Malta, the Netherlands, Portugal and Slovakia, spatial plans integrate explicitly safeguarded area maps. In Estonia, Finland, Hungary, Latvia, Slovenia, Spain, Sweden and the UK spatial plans must comply with the requirements of safeguarded areas but do not reproduce them in their documentation. In Germany, safeguarded areas are represented in the planning decision authorizing airport construction or expansion, and all subsequent spatial plans must take them into consideration.

Land reserves for airport construction or expansion are included in spatial plans in Belgium (Wallonia), Czech Republic, Denmark, Estonia, Finland, France, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Portugal, Slovakia, Slovenia and Spain.

Third party risk is a factor which is now being discussed in many European countries, but up to now, only the Netherlands and the UK have adopted the necessary legislation to require the establishment of specific areas for this purpose, and Ireland is considering a proposal for its major airports.

1.3.4. Noise and air pollution

While all EU countries have already adopted legislation on noise, some, such as Greece, Ireland, Malta and Slovenia, have yet to establish specific rules for aircraft noise. In most countries, airport related noise is either integrated or taken into consideration in spatial planning, but less than half of the Member States provide financial assistance to the population affected by noise for soundproofing or relocation purposes (Austria, Belgium, Czech Republic, Finland, France, Germany, Hungary, Italy, the Netherlands, Spain, Sweden and the UK).

Air pollution measured at or near airport sites has usually been found to be lower than or comparable to that in other points of the surrounding areas or city centres. This is interpreted as evidence that for most pollutants the main contributor is automotive traffic. Some airports have reported specific problems with certain pollutants, such as ozone in Athens, Lisbon and Stockholm

Arlanda, NO_x in Dublin, Madrid Barajas and London Heathrow, and Particulate Matters in Dublin, Madrid and Lisbon. Only in the Netherlands has the Government established specific rules for air pollution in and around an airport (Schiphol), and only two countries in the EU are applying air pollution charges in some airports (Sweden and the UK).

1.4. Spatial planning and the EU

Spatial planning is currently not a formal responsibility of the Community, but many EU policies have important territorial effects as recognized in the European Spatial Development Perspective (ESDP) agreed at the Informal Council of Ministers responsible for Spatial Planning in Potsdam on 10 and 11 May 1999⁵. The ESDP does not intend to be a legally binding document, but rather a *“policy framework for the sectoral policies of the Community and the Member States that have spatial impacts, as well as for regional and local authorities, aimed as it is at achieving a balanced and sustainable development of the European territory”*. Continuing research and monitoring carried out through the “European Spatial Planning Observatory Network” (ESPON)⁶ provide valuable information and insight on the impact of EU policies stressing the importance of analysing the territorial implications of such policies since *“without spatial coordination and a spatial development perspective there is the danger that policy interventions may be contradictory, inefficient, and more costly”*.⁷

The ESDP is based on a “Triangle of Objectives”:

- *“economic and social cohesion”*;
- *“conservation of natural resources and cultural heritage”*; and
- *“more balanced competitiveness of the European territory”*.

These objectives are a manifestation of the basic goals defined in Article 2 of the Treaty establishing the European Community, among which are:

- *“harmonious, balanced and sustainable development of economic activities”*,
- *“sustainable and non inflationary growth”*,
- a *“high degree of competitiveness and convergence of economic performance”*,

⁵ http://europa.eu.int/comm/regional_policy/sources/docoffic/official/reports/som_en.htm

⁶ <http://www.espon.lu/online/homepage/index.html>

⁷ ESPON, Synthesis Report: “In search of territorial potentials. April 2005. page 71. available at: <http://www.espon.lu/online/documentation/programme/publications/2928/insearch-part1.pdf>

- a “*high level of protection and improvement of the quality of the environment*”
- “*raising the standard of living and quality of life*”, and
- “*economic and social cohesion and solidarity among Member States*”.

Based on this “Triangle of Objectives”, the ESDP reviews EU policies with spatial impact, and puts forward its proposals to take into account the spatial dimension in Community and Member State decision-making.

Of all the policies considered to have important spatial impacts, some are very closely related to the issues discussed in this report.

Transport policy can have a substantial impact on the European territory both at a “macro” level, involving the entire Union, and at a more detailed level, affecting a particular region or area. Trans European Networks (TENs) are an example of how EU policies can influence spatial changes in many European regions. TEN-Transport programmes, although investment has focused primarily on rail and road, cover also airports and include among their priorities the “*integration of environmental concerns into the design and development of the network*”⁸. It would be worth analysing whether it is feasible to introduce in the future criteria aimed at ensuring better integration of airport and spatial planning. TEN supported actions might be oriented in this direction when dealing with airport development.

The Common Transport Policy shares with the ESDP the same goals listed above as set out by Article 2 of the Treaty that established the European Community, balancing sustainable development with environmental protection, competitiveness and cohesion. If European spatial and transportation policies are based on the same set of goals, it seems only logical that implementation of the ESDP should foster the integration of airport plans into spatial planning documents.

In addition to transportation policy, the ESDP also identifies environmental policy as one of the policies having substantial spatial impact, not only because of the specific policy instruments, but also in the light of the general requirement established in the Amsterdam Treaty which states that :

“environmental protection requirements must be integrated into the definition and implementation of Community Policies and activities in particular with a view to promoting sustainable development”

⁸ Decision No 1692/96/EC of the European Parliament and of the Council of 23 July 1996 on Community guidelines for the development of the trans-European transport network. <http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31996D1692:EN:HTML>

Sustainable urban development is not only the basis of one of the policy aims defined in the ESDP, but it has also been singled out as a specific focus for policy action, as stated in the Commission Communication entitled “Sustainable urban development in the European Union: a framework for action”, COM (98) 605. That document places great importance on environmental and transport issues, and emphasises the need for integrated environmental management approaches and has been continued in the Communication of 11 February 2004 “Towards a Thematic Strategy on the Urban Environment” (COM(2004)60)⁹.

The need to pursue sustainable development policies is one of the key elements of the EU treaties, and there is no doubt that, both from an environmental and a transportation point of view, sustainability would clearly benefit if the airport “footprint” was better integrated into spatial planning. Existing EU policies on transport, environment, spatial development, and urban sustainability could provide the basis for instruments to promote a better understanding between airports and their surrounding territories.

For example, transportation policy could influence the way in which airport planning takes place, environmental policy might refine current regulation on noise mapping and noise impact to foster integration into land use plans, and spatial planning and urban sustainability policies could promote better integration of the territorial long term effects of infrastructures into regional and local plans.

⁹ http://europa.eu.int/comm/environment/urban/thematic_strategy.htm#language_versions

2. THE ROLE OF PLANNING

This study is based on the premise that in order to improve the relationship between neighbours one must examine how they reach decisions and how decision-making processes are taking into consideration the needs and wants of other stakeholders. These decision-making processes are especially critical when they deal with SPACE: a finite resource which in some areas permits only exclusive uses, but in others must necessarily be shared.

It is an obvious truism that land occupied by the airport can not be used by the city, and viceversa. However, it is not always equally obvious that there is a large portion of territory that must be shared by different users. Land affected by airport related activities does not always belong to the airport and does not need to be used solely for aviation purposes. At the same time it is not necessarily compatible with just any kind of land utilization.

The problem of the relationship between the airport and the surrounding areas can, therefore, be seen as a land use conflict, a type of problem that is often managed with a specific instrument that has been developed for this purpose: Spatial Planning.¹⁰

Spatial plans play a two faceted role in the search to improve neighbour relations: they function both as a decision-making tool and as an instrument for conflict resolution. Different countries may have planning systems that differ in many respects, but they all share this common trait, and view spatial planning as the instrument of choice to deal with land use issues. Planning is probably the most viable approach to assist in the resolution of conflicting claims over the use of a given territory. Wholesale land acquisition by one of the stakeholders is usually impractical. Case by case negotiation may work for relatively small areas in the short run, but it becomes impractical for larger areas or longer timeframes. Planning, on the other hand, is suitable for dealing with both with very large areas and long time horizons.

Furthermore, nowadays spatial planning is considered an indispensable tool for achieving sustainable development because it helps to reconcile the pressures for economic development with the needs of environmental protection.

¹⁰ Spatial Planning is defined in the EU Compendium on spatial planning systems and policies as: “Public policy and actions intended to influence the distribution of activities in space and the linkages between them”.

In order for spatial planning to work as a decision-making tool and a conflict resolution instrument, it must be seen as a process based on three elements:

- Information
- Regulation
- Communication

Information

In any planning (or decision-making) process, the first step is information gathering. If the process concerns the future of the area around an airport, information must be obtained on both the area inside and outside the airport. Airport plans are the means by which all the information needed to define, and justify the claim aviation makes on the surrounding space is brought together.

Seen in this light, airport plans are essential prerequisite in the overall planning process. If the requirements — and implications — of the aviation sector are not known, it will be impossible to take them into account.

Regulation

The end result of a conflict resolution process is often a document where the outcome is formalised in such a way that all parties may feel confident that common decisions will be implemented. Spatial plans are one such kind of documents, and land use regulation, regardless of its legal form or value, is the way in which the solution to spatial conflicts is materialised.

Communication

In a conflict resolution process it is not enough for each party to know its own needs or desires, it must be aware of what other parties need or want. Information must be exchanged, and when such information is contained in a planning document, it seems only logical that plans be made mutually available. Communication is also indispensable in any confidence-building process, so resolving land use conflicts may require a good amount of trust on all sides.

These are the three elements on which these conclusions are based.

3. INFORMATION

3.1. Airport planning requirements

In order for airport planning¹¹ to fulfil its role as the vehicle that expresses the spatial needs of the aviation sector, such plans ought to meet three criteria:

- Consider long range development
- Estimate the impact outside airport grounds
- Provide for public debate

It seems obvious that if airport plans are to serve a purpose in the process of solving spatial conflicts with the surrounding areas, they must first contain an estimate of what future is expected. It would also appear that future needs should be expressed in a long range perspective if long term development is to be made possible.

In order to fulfil such long range needs the plan must also include reasonable estimates of what areas will be affected and how. Clearance requirements for obstacle limitation surfaces in the vicinity of the airport must be shown for different alternatives and noise contours have to be calculated for different airport and fleet configurations. Even if these estimates can not be fully precise for the long term, this type of information is important and preferable to no information at all because its absence may result in poorer if not undesirable land use decisions.

The information included in airport plans may be based on very specialised technical studies, but this does not justify withholding it. Local and regional governments in the area as well as concerned citizens must be able to understand the technical foundations of the plan. For example, one common complaint is that the basis for noise contour calculations are not known, and that to a large extent, undisclosed, "technical" criteria largely determine the dimension of noise affected areas. While there is no denying that noise contour calculation can be very complex, and that noise index formulae are not easily understood by everybody, keeping this information from the public has often

¹¹ ICAO's "Airport Planning Manual" (Doc. 9184-AN/902) Part 1 Master Planning, in Section One, article "Definition and planning considerations") states that:

"An airport master plan presents the planner's conception of the ultimate development of a specific airport" ... "In the context of this definition, the term "development" is taken to mean inclusion of the entire area of the airport -- both aviation and non-aviation uses. It also includes suggested land use on land adjacent to the airport"

In this report the terms "airport plan" and "airport planning" refer to "Master Plans" understood in a very broad sense.

resulted in situations in which citizens feel manipulated. This does not lead to trust, and without trust it is very difficult to achieve long-lasting conflict solutions.

How well current airport plans fare in meeting these requirements can be seen in Table I in which the second column, Type of Plan, shows the kind of airport planning documents prepared in each country for the most important airports. It must be pointed out that the majority are only internal documents prepared by the airport operator, and that only in some countries are these plans sent to the aviation authorities and spatial planning authorities.

The third column, Spatial Impact, shows what kinds of spatial impacts, if any, are represented in airport planning instruments for the areas around the airport that might be affected by future airport developments. For example, in Italy Airport Development Plans show the extension of the safeguarded areas, while in the UK, Master Plans also represent the areas affected by noise and third party risk zones.

Finally, the fourth column, Participation, shows which airport plans are subject to citizen participation or submitted to the spatial planning authorities. In some cases, airport development will be subject to public consultation as part of a spatial planning instrument, this is indicated in the table by the expression "Spatial plan", and in some other cases consultation takes place during the EIA process or only for noise plans. For example, in Denmark airport planning is submitted to consultation in the course of the EIA procedure, in Italy this is also the case but the law requires also that local and regional governments be consulted. In France the airport plan (APPM) itself is only submitted to the local governments but the noise plans undergo a full public participation procedure. Where the table mentions only local or regional governments, as is the case, for example of Spain, it means that there is no public consultation at present.

Table I Airport Plans

COUNTRY	TYPE OF PLAN	SPATIAL IMPACT	PARTICIPATION
Austria	Develop. Plan, internal	-	-
Belgium	Technical, internal	Noise ¹²	-
Cyprus			
Czech Republic	Internal	-	-
Denmark	Corporate Plan	-	If EIA is needed
Estonia	Develop. Plan, internal	-	-
Finland	Development Plan	Noise	-
France	APPM, PSA, PEB ¹³	Noise, Safeguard. areas	Public. (APPM Local gov.)
Germany	Airport strategy, internal	-	-
Greece	Athens concession ¹⁴	-	-
Hungary	Technical, internal	Separate noise map	Public (Noise map)
Ireland	Technical, internal	-	-
Italy	Airport Develop. Plan ¹⁵	Safeguarded areas	EIA, local/region. gov.
Latvia	Strategic Plan, internal	Safeguard. areas, noise	-
Lithuania	Technical, internal	Safeguard. areas, noise	-
Luxembourg	Spatial Plan	Safeguard. areas, noise	Pub. (Spatial plan)
Malta	Local Plan	Safeguarded areas	Pub. (Spatial plan)
Netherlands	Airport strategy, internal ¹⁶	-	-
Poland	Outline, technical	-	-
Portugal	Develop. Plan, internal	-	-
Slovakia	Master Plan, internal	Noise	-
Slovenia	Internal ¹⁷	-	-
Spain	Plan Director ¹⁸	Safeguard. areas, Noise	Local/Regional Gov.
Sweden	Development Plan	Safeguard. areas, Noise	Local Gov.
UK	Master Plans ¹⁹	Safeguard., Noise, PSZ ²⁰	Local Gov.

¹² In Wallonia

¹³ APPM = Avant Projet de Plan de Masse (not compulsory but non binding); PSA= Plan de Servitudes Aéronautiques (regulatory and binding); PEB= Plan d'Exposition au Bruit (regulatory and binding)

¹⁴ Airport plans are included in the concession agreement result of a Private/Public Partnership

¹⁵ Official airport planning instrument defined by the Ministry of Transport and Public Works

¹⁶ Airport planning has taken the form of specific legislation which includes spatial impact.

¹⁷ In the future, Detailed Plans of National Importance

¹⁸ Official airport planning instrument defined by a Royal Decree, regulatory and binding.

¹⁹ As recommended by the Government White Paper on the Future of Air Transport

²⁰ Safeguarded areas, noise contours and Public Safety Zones are delineated in separate maps, not necessarily linked to the Master Plan. Non regulatory and non binding.

3.2. Current practice

As shown in Table I, in most cases, airport plans of one sort or another were prepared in the twenty-five countries described in this study, but none comply fully with the three criteria (long range, external impact and public debate) proposed above to maximise their usefulness in the process of spatial conflict solving. Table I presents a panorama in which few airport planning systems appear to come close to fulfilling the triple requirement: looking at the long range, considering complete spatial impact and being available to governments and citizens.

For example, in Sweden, airport plans exist for all the main airports and show their full external impact, but they are sent only to local administrations, and not submitted to public scrutiny. France has put in place suitable instruments to provide information on safeguarded areas and noise affected areas, but airport plans are not always kept up-to-date and are not always required. The Netherlands dedicated significant effort to planning the expansion of Schiphol airport and presenting the information to citizens and planners, but no planning instrument contemplates long range airport development. Spain requires airports to prepare long range development plans showing noise affected zones and safeguarded areas, but these plans are not submitted to citizen participation.

This does not mean that airport planning has not been a useful instrument, but it does show that one of the current impediments to achieving proper integration of airports into their spatial context is the absence of instruments that provide the information necessary for adequate spatial decision-making and conflict-resolution.

3.3. The effects of strategic evaluation

In the near future the situation may change somewhat in countries where airport plans are now prepared but are treated only as technical documents to be used for internal purposes or for negotiations with local/regional authorities. The implementation of the Strategic Environmental Assessment (SEA) Directive²¹, should lead to the evaluation (and public debate) of instruments which usually have no statutory character, and are often treated merely as “internal” documents. Until now, these “plans” were treated as internal documents excluded from public debate and inter-government consultation, but the fact that they include projects that must necessarily be submitted to EIA will determine the need to evaluate the plans themselves because Article 3.2.(a) of the Directive requires environmental assessment for plans and programs regarding

²¹ Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment. The deadline for transposition expired on 21 July 2004.

transport “*which set the framework for future development consent of projects listed in Annexes I and II to Directive 85/337/EEC*”.

The SEA Directive requires the preparation of an environmental report in which significant effects on the environment must be identified, described and evaluated. The plan, together with the environmental report, must be made available to the public and to authorities, and subject to transboundary consultation.

If airport plans are to be evaluated and submitted to a public participation process, it is very possible that their scope, contents and methodology will have to be considered more carefully. It is doubtful whether an airport plan which did not contemplate future spatial impact (especially noise) or did not clearly disclose the basis for all calculations would pass the test with the environmental authorities, and much less with the courts. In this way, implementing strategic evaluation requirements may lead to airport plans which come closer to meeting the three criteria identified above.

It can be concluded, therefore, that the full implementation of Directive 2001/42/EC, requiring evaluation of all airport plans regardless of whether the plans are public or private, regulatory or technical, could advance the usefulness of such plans as a means for improving the long term relationship between airports and their neighbours.

4. REGULATION

4.1. Integration with spatial planning

If airport planning is to provide a basis for spatial conflict resolution, there is little doubt that it needs to have an effect on how the use of space in the surrounding area is regulated. This does not imply that airport plans must become regulatory documents. (This would only add another layer to an already complex process). Rather it implies the need to integrate the spatial contents of airport plans into spatial planning documents. The same, if not better, results can be achieved by integrating the space related elements of airport plans with ordinary spatial planning. In brief, regulating the use of land in the vicinity of airports would not be done via airport plans, but rather by insuring that spatial plans integrate the provisions required to prevent land uses from impinging on airport development.

Regulation need not be established in legally binding terms, but it must conform to the way in which each country manages land use decisions. Regulating the use of space in the vicinity of the airports would be accomplished through spatial plans, and, consequently, would follow the rules commonly applied to such instruments.

4.2. Regulation contents

Whether airport plans regulate or not land use and construction inside the airport grounds may be relevant in setting the political-administrative context of a negotiation, but is not so important when dealing with the airport's hinterland. The contents of the airport plan that ought to be integrated into the spatial plan would **be limited to what concerns the area surrounding the airport** – i.e. to what in this study has been designated as “the spatial impact”:

- Safeguarded areas for obstacle limitation surfaces
- Noise
- Reserve areas for future expansion

Including this information in spatial plans, and regulating land uses accordingly, is what the “Land-use planning and management” element of ICAO's balanced approach to managing aircraft noise is all about. It is one way in which conflicts could be reduced or possibly avoided in the future.

Other elements of the balanced approach have already been implemented in the EU, namely noise abatement operational procedures and operating restrictions, which were the object of Directive 2002/30/CE, on the

establishment of rules and procedures with regard to the introduction of noise related operating restrictions at Community airports.

Table II shows that thirteen of the twenty-five countries examined in this study are already including the aforementioned three information elements in their spatial plans.

The second column illustrates how spatial planning instruments consider airport safeguarded areas in each country. Some include a map showing the obstacle limitation surfaces. In other countries, the spatial planning authorities must take these surfaces into account during the preparation of the plan and consult with the respective aviation authority. This is indicated in the table by the expression “compliance” which indicates that spatial plans must comply with legal provisions on safeguarded areas.

Similarly, the third column, Noise, shows how the same spatial planning instruments consider noise impacts caused by future airport developments.

In most cases spatial plans integrate either the representation of the noise contours or the limits of noise protected areas, but in some instances, like Spain, the law requires only that land uses must comply with noise limits but spatial plans do not necessarily show the noise contours or noise based zoning. In the majority of cases the noise contours or noise zones are represented in local and/or regional plans but in Germany and Poland the more detailed contours are only found, as a rule, in the specific spatial planning instruments adopted for airport development.

In Ireland and the UK noise contours may be represented in spatial plans, but they have an indicative or advisory value, to be taken into consideration at the time of granting planning or building permission.

Finally, the fourth column, Reserve, identifies which spatial planning instruments, if any, include a reserve of land for future airport development in each country.

Table II Spatial Plans

COUNTRY	SAFEGUARD. AREA	NOISE	RESERVE
Austria	-	Integrated	-
Belgium	-	Integrated ²²	Sector Plan
Cyprus			
Czech Republic	Integrated	Integrated	Local Plan
Denmark	Integrated	Integrated	Local Plan
Estonia	Compliance ²³	Integrated	Local Plan
Finland	Compliance	Compliance	Local Plan
France	Integrated, Annex	Integrated, Annex	Local Plan
Germany	Planning decision	Planning decision ²⁴	-
Greece	-	-	-
Hungary	Compliance	Integrated	Local Plan
Ireland	Integrated	Advisory	County Plan
Italy	Integrated	Integrated	-
Latvia	Compliance	Integrated	Local Plan
Lithuania	Integrated	Integrated	Local Plan
Luxembourg	Integrated	Integrated	Airport Spatial Plan
Malta	Integrated	-	Local Plan
Netherlands	Integrated	Integrated	Province/Local Plan
Poland	Planning decision	Planning decision	-
Portugal	Integrated	Integrated	Regional Plan ²⁵
Slovakia	Integrated	Integrated	Local Plan
Slovenia	Compliance	-	Detailed plans
Spain	Compliance	Compliance	Local Plan
Sweden	Compliance	Integrated	-
UK	Compliance	Indicative ²⁶	-

²² Integrated within Sector Plans in Wallonia.

²³ Compliance= Spatial plans must comply with safeguarded or noise areas but do not necessarily show their delimitation.

²⁴ Regional Plans often show noise contours, but this is not a legal requirement.

²⁵ Land reserves for new airports were established by law, and must be complied with by spatial plans

²⁶ Noise Contours are not necessarily represented in spatial plans, but they must be used to guide development decisions.

As summarised in the above table, spatial plans in a number of countries do not integrate the three elements that would improve the relationship with the surrounding area. In some of these countries, the information is not included in spatial plans, but is made available in some other way, for example, with independent noise maps. In other cases, airport plans may be binding for spatial planners even if the content does not have to appear explicitly in spatial planning documents. However, the fact that the information exists, does not mean that it is easily available to citizens. The inclusion of safeguarded areas, noise zones and land reserves in ordinary spatial plans would be, and in some countries is, a way of ensuring that all citizens can be aware of the situation.

Moving towards systems in which spatial plans are required to explicitly incorporate at least the areas affected by obstacle limitation surfaces and noise is another area in which Community action could be effective.

The fact that spatial planning does not fall within the present responsibilities of the EU, does not imply that it can not seek better integration of airport development needs into spatial plans by applying the same indicative approach put forward by the European Spatial Development Policy. The ESDP is not a binding document, but it can have an important influence as it *“will serve as a policy framework for the Member States, their regions and local authorities and the European Commission in their own respective spheres of responsibility”*²⁷. This could be achieved by integrating the spatial planning dimension of the balanced approach to airport development into the Common Transport Policy, the environmental policy, the ESDP and sustainable urban development policies.

As indicated above, transport policy could put forward the requirement that airport development should take place necessarily by means of airport plans meeting the three requisites of being long term oriented, contemplating spatial impacts and submitting to public scrutiny. Environmental policy could set more specific requirements for noise protection zones in the vicinity of airports. And the ESDP and sustainable urban development policies could promote good spatial planning practices taking into account the need to reconcile transport demand and environmental protection.

²⁷ Excerpt from the final conclusion at the close of the Informal Council of EU Ministers responsible for Spatial Planning where the ESDP was adopted.

5. COMMUNICATION

In order to improve relationships among neighbours there is an obvious need to exchange information. Spatial planning can not take airports into consideration unless the relevant information is provided to planners. Residents may oppose any change that they perceive as a threat to their well being. Conversely, airport authorities ought to be aware of what future is being planned for in the vicinity of their airports. Communication may not be enough to solve these issues, but it is one of the prerequisites of any dialog or negotiation.

Access to environmental information and public participation in environmental decision-making are two basic tenets of EU environmental policy. This is evidenced in Directive 2003/4/EC of the European Parliament, and of the Council of 28 January 2003 regarding public access to environmental information²⁸, and Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment.²⁹

Airport plans, and spatial plans in areas where airports are located, may have important environmental repercussions. It is inconceivable that decisions with obvious environmental impacts, like those concerning airport infrastructures, can be made today without some form of public scrutiny, and not made public until essential alternatives have already been chosen, and the Environmental Impact Statement for a project is initiated. As discussed above, strategic environmental assessments should be a requisite for any plan, regardless of its legal status, that sets the basis for future decisions with clear environmental and other consequences for those living and working around airports.

Even though the establishment of safeguarded areas or land reserves for future development may not have direct environmental consequences, there is no denying that such decisions can also have an important impact on the value of land and, consequently, on the economic rights of those affected by the resulting limitations. In most countries, those limitations do not give rise to any compensation; in some, they should be appraised according to the rules applying to expropriation. Although compensation issues may be important for airport operators, and influence their ability to compete in the long run, compensation law and expropriation law fall beyond the scope of this project. What concerns this report is how to ensure that citizens are informed and able to participate in decisions that may impact on their rights as owners, tenants or whatever title they may have to affected land.

²⁸<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32003L0004:EN:HTML>

²⁹http://europa.eu.int/smartapi/cgi/sga_doc?smartapi!celexapi!prod!CELEXnumdoc&lg=EN&numdoc=32003L0035&model=guichett

If airport development has an important impact on the environmental and economic rights of the citizens, it is only logical to conclude that the information included in airport and spatial plans or provided during the planning process should encompass all aspects of its potential spatial impact.

A full disclosure policy regarding noise, safeguarded areas and land reserves would allow for a more transparent relationship and better informed decisions. In as much as this information is directly relevant for the health, well-being and “material assets”³⁰ of residents in affected areas, it falls well within the EU mandate to push for a complete flow of information along the following lines:

- Full spatial impact information should be made available and open for discussion.
- Disclosure policies should also include technical data such as noise index choice and noise mapping methodology.
- Clear and accessible presentation of spatially relevant information.
- Participative planning procedures for both spatial and airport planning.
- Real estate disclosure by integrating specific mentions into Land Registry information.

Communication is not only about exchanging information, but also about building confidence and developing a better understanding of each side’s needs. In some countries or airports, this realization has led to the establishment of specific communication channels usually in the form of special purpose institutions. To mention only a few, this is the case of the “Mediation Service” at Brussels National Airport, the Environmental Consultative Commissions in French airports, the Regional Consultative Committee for Schiphol Airport (CROS), the “Commission for the defence against air traffic noise” in German airports, or the Regional Dialog Forum, created to manage the mediation process for Frankfurt’s airport expansion.

A somewhat different institution warranting special mention is the French “Airport Noise Pollution Control Authority” (ACNUSA), an independent agency with jurisdiction over all major French airports. It not only plays an important role advising government and making technical proposals, but also acts as a mediator and “confidence builder”.

These types of institution may be instrumental in ensuring a fruitful relationship between the airport and the surrounding area and warrant the support of EU policies.

³⁰ Article 4, Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment.

6. COMPLEMENTARY MEASURES

Airport plans, information dissemination, mediation institutions, all coexist in many airports with some complementary measures designed to reduce or mitigate airport related noise. Although they are not directly related to spatial planning, some measures cannot be totally separated from airport and spatial planning.

On the one hand, noise abatement measures are directly linked to noise zoning, and can be an important factor in improving the airport / residents relationship. On the other hand, airport charges are often used to finance mitigation programs, and can also be used to influence fleet composition and time of day choice.

6.1. Noise abatement assistance

In approximately half of the EU countries³¹, residents in neighbouring areas are entitled to some form of assistance to mitigate the effects of noise. In most cases, this takes the form of financial or technical aid to install sound insulation or even ventilation devices. In a few cases, relocation programs exist to assist residents to move to another area. This is achieved either by purchasing their property or by paying an indemnity.

In many cases, these programs are financed with funds from the airport operator, and managed by the operator, by government or by specific institutions. Eligibility is determined by inclusion within one of the noise areas delimited through noise maps.

6.2. Noise Charges

Noise charges, or surcharges, can be found at the majority of the main European airports, and are usually linked to aircraft categorization. Sometimes they are charged only for landings, sometimes for take-offs and sometimes for both. In many instances, they are also dependent on the time of operation: for example, night flights are charged more.

These charges function as a source of funds for noise mitigation measures. They can also be used to influence the choice of fleet and the time of operation at a given airport.

ICAO guidance on the use on noise charges³² states that they should be designed to recoup no more than the costs applied for the alleviation or prevention of noise problems, but this does not mean that they cannot be used

³¹ Austria, Belgium, Czech Republic, Denmark, France, Germany, Hungary, Italy, the Netherlands, Spain, Sweden and the U.K.

³² ICAO's Policies on Charges for Airports and Air Navigation Services (Doc 9082).

to influence fleet composition or operating schedules. Even if the overall noise charge system for a given airport is designed to comply with ICAO guidance, individual amounts can be calculated to promote the use of quieter aircraft and operation according to less obtrusive timetables. Imposing noise surcharges for noisier aircraft and giving rebates to quieter planes has been the policy in many European airports.

Both noise abatement programs and noise related charges, especially when made compulsory by government decisions, can impact on airport operators and influence competence conditions. In the future, both could diminish in importance if adequate preventive measures were taken to improve the relationship between airports and spatial planning.

7. AIR POLLUTION

This study has examined the situation regarding air pollution at European airports on the basis of information gathered during visits to the countries and from publications like the ACI Europe survey on “Air Quality Compliance”³³. The analysis of available information has ratified the findings of the many reports published on this subject in the sense that it is extremely difficult to isolate airport generated air pollution from all other sources.³⁴

Legislation throughout the EU is based on the Air Quality Framework Directive 96/62/EC, and the daughter Directives relating to limit values for NO_x, SO₂, Pb, PM₁₀, benzene and CO (Directives 1999/30/EC and 2000/69/EC). Neither European legislation nor national laws have established separate criteria or values for airport-related pollution. The Netherlands, where national legislation set out specific air quality rules for the Schiphol airport area, constitutes an exception.

Of the twenty-four countries studied, fourteen have provided information on air pollution at, or in the vicinity of, the airport, and of these, only six have reported exceedances over legal values. In three cases, the problem was ozone during the summer months (Athens, Lisbon and Stockholm Arlanda). NO_x levels were exceeded in Dublin, Madrid Barajas and London Heathrow, and Particulate Matters have been a problem in Dublin, Madrid and Lisbon.

In most countries, air quality has not been considered a problem at the airport level. Measurements taken at the airports have most often yielded lower figures than those for the immediate vicinity. This seems to suggest that airports are only part of the problem, and in some cases, a relatively small part. For example, studies at Paris Charles De Gaulle and Schiphol airports have resulted in similar figures which puts the contribution of airport pollution to total NO_x levels in the area at approximately 3% at the most. Air quality considerations are, nevertheless, a major concern for the future development of some airports, as attested in the UK by the White Paper: The Future of Air Transport³⁵, in which the fact that Heathrow might be unable to meet NO₂ requirements in 2010, weighted heavily at the time of deciding on the expansion of this airport and has led to conditioning the building of a new runway to the containment of emissions within legal limits through very strict measures.

³³ Airports Council International: Air Quality Directive Compliance. Survey at European Airports. December 2003.

<http://www.aci-europe.org/upload/Air%20Quality%20Directive%20Compliance.pdf>

³⁴ For an interesting review of the issue see: Rogers, HL and Lee, DS and Raper, DW and Foster, PMD and Wilson, CW and Newton, PJ The impact of aviation on the atmosphere AERONAUTICAL JOURNAL, 2002 , 106 , 521-546

Available at: www.ozone-sec.ch.cam.ac.uk/EORCU/Files/Rogers1.pdf

³⁵ http://www.dft.gov.uk/stellent/groups/dft_aviation/documents/page/dft_aviation_031516.pdf

No spatial planning measures have been identified relating to air quality. Despite the fact that in most countries municipalities are empowered to adopt special measures when air quality is degraded below certain limits, no mention has been found of such plans having an effect on airport operation. Land use planning is supposed to take into account ambient air quality in most countries, but in practice, this does not seem to be translated into special zoning measures.

In two countries in the EU, Sweden and the UK, and in one non EU State, Switzerland, a system of air pollution charges has been introduced at airports. In the same manner as noise charges, this type of measure could play a role in fostering the use of less contaminating aircraft if it is designed to penalize polluters.

Airports can also act to improve local air quality by reducing emissions from ground sources other than aircraft, such as ground vehicles, support equipment, and power plants. A number of European airports, especially those qualifying for ISO 14000 certification, are already working in this direction and have adopted measures such as replacing fuel powered vehicles by electrical ones.

Community action in this field has a clear basis in Environmental Policy, and could be further advanced along several lines. First, by recognizing that up-to-date information on airport air quality is not available for many countries (ten of the countries studied did not provide any information on this issue). Secondly, by continuing support for research aimed at providing a clearer picture of the airport as a source of air contamination. And third, by considering the case for motivating airports to adopt specific measures, both to promote the use of cleaner aircraft, and to organize their internal operations in ways that decrease the total amount of emissions.

Member States can also contribute to the reduction of airport related emissions, for example by helping to support mass transit systems which allow airport users and employees to reduce dependence on private vehicles.

8. LOOKING FORWARD

Analysis of the different ways in which European airports relate to their surrounding territories and how spatial planning does, or does not, take into account airport development perspectives has revealed some examples of good practice, but it has also shown a few areas where there is room for improvement on which future action could concentrate.

8.1. Improvement areas

One area where there is room for improvement can be found in the airports themselves. It is often claimed that airports face encroachment problems because spatial plans do not take the needs resulting from a growing air transport industry into consideration. The reality is that such claims may be true, but that in some instances, the problem may stem from the fact that spatial planners and decision makers are not supplied with the necessary information.

In a majority of countries, the first area for improvement revealed by this study is the **lack of airport plans that provide other administrations and the public with the necessary information on the long range projections concerning not only airport infrastructure and facilities, but also the areas affected by obstacle limitation surfaces or high noise levels.**

Airport planning is not, nevertheless, the only area where improvement is possible, as evidenced by the fact that **only in one half of the countries do spatial plans integrate all the information on airports and their spatial impact.** However, there are also a number of States where the information is available and must be observed by planners or municipalities in granting building permits, but does not appear on spatial maps.

This lack of airport integration into spatial planning is the second area on which action could be considered.

A third area for improvement, very closely linked to the previous two, regards the **availability and quality of information made available to the general public.** The lack of easily available, understandable information on current and future airport impacts is widespread. Wider dissemination of such information could lead to a better informed citizenry. This, in turn, could reduce the number of residents who justly claim that when they moved in they were not aware of what the future situation would be in their areas, and might facilitate negotiations in which all parties had a clear idea of the issues at hand.

8.2. Opportunities for action

If the study has revealed that there is room for improvement in some areas, it is on these areas that action should focus. The suggestions that this report puts forward are oriented towards Community policies, some of which may be implemented via regulatory instruments and some through more indicative approaches depending on the responsibilities that the EU has assumed in each field.

8.2.1. Airport planning

The first line of action could focus on airport planning in order to ensure that airports provide adequate information regarding their long range plans and the spatial impact that they may generate. Such information would include, at a minimum, the delimitation of land to be occupied by airport facilities or connected uses, and the areas affected by obstacle limitation surfaces, noise, and where applicable, third party risk protection.

A practical way to foster the move in this direction would be for the Community to require, or at least promote, the preparation of such plans. This should not be very difficult in as much as a majority of the airports are already preparing long range development projections. This effort should be complemented by a parallel requirement that such plans be subject to the requirements of the SEA Directive, 2001/42/EC. Such a requirements should apply not only to large airports, but to all of them, since it is probably at the smaller and medium size ones where the greatest physical expansion will take place in the future, and where the potential for avoiding future problems for development is greatest.

8.2.2. Spatial planning

The second line of action would focus on the wider territorial context through spatial planning. In order to implement land use policies which foster better integration of airports within their surrounding areas, it seems only logical to require spatial plans to include information about projected airport development and the impact on the surrounding areas.

Spatial plans could include the same spatial contents required of airport plans:

- Safeguarded areas
- Noise protection areas
- Land for airport use

Future refinement and implementation of the European Spatial Development Perspective as well as any efforts towards greater coherence between land management and spatially relevant policies in Europe should move towards

requiring that these issues be treated in such a way that transportation policies are reinforced and airport development constraints are avoided whenever possible.

8.2.3. Access to information

In support of the introduction of some specific requirements concerning both airport and spatial planning, one also has to consider the implications that airport development has for citizens living in affected areas. These citizens are entitled by EU legislation to receive full information on all environmental issues.

Requiring airport plans to be evaluated in addition to the existing requirement concerning spatial planning would provide a clear opportunity for citizens to access and participate in decision-making processes that may impact their environment, their health and their economy.

Providing adequate access to information is another reason why airport plans should be required to be made public and submitted to environmental evaluation. At the same time spatial plans should integrate the spatial impact of airport infrastructures and operations into their land use regulation. By requiring both types of plans, airport plans and spatial plans, to be made public and evaluated, citizens would have the opportunity to ascertain that airport development has been considered in a comprehensive manner and that the interaction between their territory and air transport have been fully taken into consideration.

9. SUMMARY

This Study has focused on Land-Use Planning as a key element of the balanced approach to noise management, and looked at this issue from a broader perspective that contemplates other aspects of the spatial impact of airports.

The information gathered in the different countries has shown that there is ample room for improvement in the way airports relate to their neighbouring areas. To this effect, a double-pronged approach is proposed, stressing the importance of both airport planning and spatial planning in the surrounding area.

Airport plans and spatial plans should both integrate medium and long range provisions concerning:

- Safeguarded areas
- Noise protection areas
- Land for airport use

This can be achieved by promoting the adoption of airport planning instruments in which these three elements should be integrated. Such airport plans would be subject to strategic environmental impact analysis to ensure public information and participation.

At the same time, spatial plans should be required to integrate the provisions of airport plans concerning the area around the airport, and, in general, the territorial impact of such infrastructures.

Requiring both airport plans and spatial plans to be made public and their environmental and territorial impact evaluated, will provide the opportunity to make sure that the interaction between airport and territory has been analysed and taken into consideration in a comprehensive manner.

Community action regarding airport planning would be based on both transportation and environmental policies since there is an objective need for increased airport capacity in Europe, and this has to be provided without compromising the environmental goals of the EU.

Implementing the proposals regarding spatial planning could not only be based on the need to reconcile transport and environmental policies in general, but more specifically on the need to consider the territorial impact of EU policies and to promote sustainable urban development, as put forward by the European Spatial Development Perspective and the Thematic Strategy on the Urban Environment.

GLOSSARY

Airport (Master) Plan

“An airport master plan presents the planner’s conception of the ultimate development of a specific airport” ... “In the context of this definition, the term “development” is taken to mean inclusion of the entire area of the airport - both aviation and non-aviation uses. It also includes suggested land use on land adjacent to the airport”

Source: ICAO’s “Airport Planning Manual” (Doc. 9184-AN/902) Part 1 “Master Planning”, Section One, article “Definition and planning considerations”

Obstacle limitation surfaces

Set of surfaces defined by the ICAO’s Annex 14 (aerodromes) to the Convention on International Civil Aviation.

These surfaces define the limits to which objects may project into the airspace around an airport to permit the intended aeroplane operations at the aerodromes to be conducted safely and to prevent the aerodromes of becoming unusable by the growth of obstacles around the aerodromes

Spatial impact

In this context, we refer to the impact of aerodromes on their surrounding areas, mainly in terms of noise, obstacle clearance, third party risk and land reserves for future airport development.

General terms (from “The EU Compendium of spatial planning systems and policies”³⁶)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.

³⁶ European Commission, 1997. HT395 E85E9

Regional policy	Policy intended to bring forward measures to address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.
Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31985L0337:EN:HTML
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31996L0061:EN:HTML
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31996L0062:EN:HTML
1 st daughter directive relating to limit values for NO _x , SO ₂ , PM _{2.5} , PM ₁₀ and Pb in ambient air	Council Directive 1999/30/EC of 22 April 1999 relating to limit values for sulphur dioxide, nitrogen dioxide and oxides of nitrogen, particulate matter and lead in ambient air http://europa.eu.int/eur-lex/pri/en/oj/dat/1999/l_163/l_16319990629en00410060.pdf
2 nd daughter directive relating to benzene and carbon monoxide in ambient air	Directive 2000/69/EC of the European Parliament and of the Council of 16 November 2000 relating to limit values for benzene and carbon monoxide in ambient air http://europa.eu.int/eur-lex/pri/en/oj/dat/2000/l_313/l_31320001213en00120021.pdf
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31996L0082:EN:HTML
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML

The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
Directive on “public access to environmental information”	Directive 2003/4/EC of the European Parliament, and of the Council of 28 January 2003 on public access to environmental information http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32003L0004:EN:HTML
Amendment to the “IPPC” Directive	Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_156/l_15620030625en00170024.pdf

ANNEX - SUMMARIES OF THE COUNTRY REPORTS

AUSTRIA

SPATIAL PLANNING SYSTEM

Spatial planning systems are defined in accord with *Land* legislation. However, this does not mean that there is a variety of plan types. Most laws define similar planning documents at the supra-local (*Land*) and local (*Gemeinde*) levels.

The Federal Government has no explicit spatial planning competence, so there are no spatial plans as such at the national (federal) level. However, there are some plans and policies at this level which impact on spatial planning: for example, the Austrian “Spatial Development Concept” developed by the ÖROK (which mentions airports only with regard to the need for guaranteeing good accessibility from all regions in the country) and some sectoral plans.

Each *land* is responsible for the “regional development scheme” and “spatial planning schemes and concepts”. The schemes are approved through a binding decree of the *Land* government, but the concepts are non-binding recommendations.

Local development concepts, local land use plans and building regulation plans are regulatory, detailed planning instruments.

As aviation is a competence of the national (federal) level, the integration of airport plans into the spatial planning system defined by each *Land* requires negotiation.

REGULATIONS AND PERMITS

Construction permits

All construction activities require a building permit from the relevant building authority. Different procedures are established by each *Land*. Depending on the *Land*, the only exemptions are minor construction activities. The municipalities are the relevant building authorities for urban development in general. The relevant federal ministry, or agencies under their umbrella such as the Civil Aviation Authority, are the building authorities for construction activities within their area of interest.

Environmental permits

Regulations on assessment of the impact of projects, plans and programs on the environment reflect the guidelines of EU Directives on the subject. Some additions exist, for example, the simplified EIA required for some specific projects, and the requirement for a mediation procedure in cases where conflicts are revealed during the EIA process.

Specific conditions may be established with regard to water management and air pollution.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The “General Transport Plan” (GVP-Ö 2002) includes some general provisions related to the development of the Vienna airport as the international gateway to Austria, its third runway and the connection to the railway network.

- Airport

Airport development plans are prepared by the airport companies as internal planning documents to serve as a basis for their investment plans. Sometimes, they are sent to the *Land* governments or to the municipalities, when the latter are updating their planning instruments.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Maps showing the obstacle clearance areas around each international airport are prepared by the CAA and sent to the affected *Länder* and *Gemeinden* for their consideration. In addition to the building permits granted by the local authorities, a permit from the CAA is required within these areas.

- Noise Impact

Noise contours must be calculated by the airport companies and may be sent to the relevant *Land* and surrounding municipalities for their consideration in their planning instruments. However, there is no common legislation or common practice on this matter in Austria.

- Risk prevention

There are no third-party risk surfaces around Austrian airports. Nevertheless, some risk assessment studies not strictly related to aircraft operation have been undertaken for specific areas around the Vienna airport.

- Land reserve for future construction

In those cases where the airport companies are the owners of the terrain, they may include land reserves in spatial planning instruments.

Construction

Airport construction requires several permissions from the Civil Aviation Authority.

All environmental permits and conditions are integrated into the EIA procedures. Building permits and the execution of construction activities must comply with any agreements reached during the mediation procedures and with the conditions established by the environmental impact statement.

Operation

An aerodrome operating permit is updated by the CAA whenever any new airport development takes place. Airport certification is regulated by the latest amendments to the Aviation Act, including some environmental matters, such as the definition of airport operating hours.

AIRPORT NOISE AND AIR QUALITY

Each *Land* is responsible for implementing the provisions regarding noise levels and air pollution included in its Spatial Planning Act or related ordinances. Once the *Land* has integrated noise and air quality provisions into its planning instrument, they will be binding on all municipalities located within its territory.

In that way, *Gemeinden* will be responsible for the execution of the provisions regarding noise and air quality, and limit urban developments in accordance with the restrictions imposed by the *Länder*.

Land use restrictions can also be imposed on municipalities through agreements reached as a result of mediation procedures. Compensation measures may be included in those agreements.

BELGIUM

SPATIAL PLANNING SYSTEM

The federal Government in Belgium does not have any competences in the field of spatial planning. Regional systems are fairly similar since they have evolved from a common trunk.

Both Flanders and Wallonia have Regional Structure Plans providing a basic framework for economic development and spatial organization for the region. In Flanders there is a provincial level of planning while in Wallonia there are no intermediate plans between regional and local level.

Regulatory plans can be adopted at all levels of government. In Wallonia a regional "Sector Plan" was used to regulate airport development, covering not only the airport but also the areas where land use restrictions are imposed as a result of noise exposure. In the Flanders region a regional implementation plan has been adopted to allow for the construction of a rapid rail link as well as to change current land uses permitted within the Brussels National airport.

All Flemish spatial plans which have an impact on the Brussels National airport or on air traffic must be submitted to the Aviation Administration of the Federal Ministry for Communications and Infrastructures.

REGULATIONS AND PERMITS

Construction permits

All activities involving construction, demolition, excavation, tree cutting, changes in use, etc. require a construction permit in both Flanders and Wallonia.

Major infrastructure works such as airports are also required to obtain construction permits regardless of whether they are undertaken by the public or the private sectors.

Construction permits are issued by municipalities as a rule, but in Flanders the Regional Government is responsible for issuing building permits for airport construction or development and air navigation facilities.

Environmental permits

All competences regarding environmental permits, including Environmental Impact Assessments (EIA) have been devolved to the regions, regardless of whether the project is undertaken by the Federal Government.

In Wallonia all projects and economic activities must undergo environmental evaluation either an EIA, in line with EU requirements, or a simplified process leading to an integrated building/environmental permit.

Flanders also regulates EIA according to EU legislation, although it may require an evaluation for runways over 800 m. Environmental permits are required for activities which may have an adverse impact on the environment or may be considered a safety hazard.

Airports are required to obtain environmental permits and authorizations for operation in both regions. Environmental permits are granted for a number of years and must be renewed periodically.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no national planning concerning airports. Regional spatial plans include some considerations about airports.

- Airport

There are no statutory airport plans. Airports prepare development plans as internal documents. A long-term development plan is prepared by the Regional Government for each airport in Wallonia in order to determine noise exposure levels.

The Walloon region adopted a regional implementation plan for Liège airport and the surrounding area.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Safeguarded areas were regulated in a 1930 Act which has not been updated. The areas must be integrated into land use plans and the restrictions are binding on municipalities at the time of issuing building permits.

- Noise Impact

Both Flanders and Wallonia require the preparation of noise exposure maps in the vicinity of airports.

Noise contours and the resultant land use restrictions must be integrated into spatial planning.

- Risk prevention

Third-party risk is not considered in Belgium's national or regional legislation.

- Land reserve for future construction

Spatial planning has been used on occasions to reserve land for future airport expansion, taking into account future noise estimates.

Construction

Airport construction and development requires a building permit.

New aerodromes require an authorization from the Regional Minister in charge of civil aviation. Modifications must be notified to the competent Minister and to the air navigation authority.

In Brussels National airport, any new construction within the airport perimeter shall be decided by the Federal government but a construction permit must be obtained from the Flemish Government.

Operation

Airport operators must obtain an operation license for Brussels National airport. Such licenses are granted by the Federal Government. No similar requirement is established for other airports.

Airports are required to obtain an environmental permit in order to operate.

The Federal Government is in charge of airport certification.

AIRPORT NOISE AND AIR QUALITY

Noise

Regions have adopted their own legislation on noise pollution. The Brussels Region (which has no airport within its territory) has adopted strict noise regulations concerning aircraft noise.

Noise exposure plans and noise abatement plans have been adopted in Wallonia and insulation or relocation aid is provided to residents.

In Flanders, the airport operators must prepare the noise contours which, in the case of Brussels National airport are reviewed every year.

The environmental permits required to operate airports set detailed regulations regarding noise abatement measures.

Air quality

There is no specific legislation regarding airport-related air quality.

Monitoring has not evidenced air quality levels in excess of legal standards.

CZECH REPUBLIC

SPATIAL PLANNING SYSTEM

The National Development Plan 2004-2006, approved by the Cabinet, sets the national development policy including a definition of planning priorities according to the requirements of sustainable development. Specific public investment projects and national importance objectives are included in justified cases.

Regional plans, prepared for the territory of the administrative regions, are strategy documents with a similar character to the national development plan. They shall define the most relevant areas for development within the territory of the administrative region, including the location of the most important investment projects, the main transport corridors and the requirements for a sustainable development.

Local and regulatory plans drawn up by the municipalities will finally establish the specific conditions and regulations for the development of certain areas.

These plans are organised in a hierarchical structure, in which lower levels must always be in conformity with higher levels.

All spatial plans have a binding part applicable both to public and private parties. The binding parts of planning documentation shall be declared by the responsible planning authority through a binding decree.

Airport planning must be integrated into the general spatial planning system.

REGULATIONS AND PERMITS

Construction permits

All construction activities need to obtain planning permission ("territorial decision"), and a building permit from a competent building office. Both types of permission may be combined for minor constructions but, in general, it is necessary to obtain them separately, following independent procedures. Only minor construction activities are exempted or simply require a notification to the building authority.

In general, the building offices form part of the local governments, but there are special building offices responsible for granting the building permits for transport infrastructures (the CAA in the case of airports). In any case, the planning permission must be obtained from the relevant local government.

Environmental permits

The EIA and SEA are regulated according to EU Directives. The relevant legislation splits assessment of the environmental impact into two parts: assessment of the impact of buildings, activities and technologies and assessment of the impact of drawing up policies and plans. In the field of transport, several national strategic plans have already been subject to a Strategic Environmental Assessment.

Other environmental permits, required for water treatment and waste management, must be obtained separately from the municipality.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

A new “National Transport Policy 2005-2013” has been recently approved by the Government. It includes a proposal for the development of Prague airport, the only airport currently under state ownership, with the construction of a new parallel runway.

- Airport

There are no specific airport development plans officially approved in the Czech Republic. Airport planning takes place through integration of internal airport plans into general spatial planning instruments, responsibility for which lies with the local and regional authorities.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Airport operators are responsible for preparing maps showing obstacle limitation surfaces. Those maps are part of the airport plans sent to local authorities for their integration into the spatial planning system. The relevant building offices are responsible for the definition of protective zones around the airports in accordance with those maps.

- Noise Impact

Noise contours, calculated on the basis of mathematical modelling, are included in airport plans submitted to the municipalities. The relevant building offices are responsible for the definition of protective zones around the airports in accordance with those plans.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

The only way to reserve land for future airport developments is by including those terrains as part of the airport in a general spatial planning instrument, so that no other use can be proposed in those areas. Such proposals must be included in the binding parts of the plan.

Construction

Construction activities within airport boundaries require a “territorial decision” from the relevant local building office and a building permit issued by the CAA.

Most environmental permits would be included in the approval following an EIA process. Where an EIA has not been necessary, the “administrative body of environment”, part of the local building office, will issue a statement with conditions related to the potential impacts on the environment. In other cases, the permits for waste management and water treatment should be obtained from the municipality.

Operation

The CAA is responsible for granting the operating permit for a new infrastructure.

Airport certification is not yet fully regulated in the Czech Republic, although the legal system already accepts ICAO Annexes as Czech regulations.

AIRPORT NOISE AND AIR QUALITY

Noise

Aviation noise is considered by the general regulations on public health, including maximum noise levels. The “noise” Directive 2002/49/EC has not yet been transposed, although it has been discussed twice in the Parliament.

Land use restrictions are imposed through noise protective zones proposed by the airport companies and adopted by the building offices. Compensation measures are negotiated within those protective zones.

Air quality

There are no specific provisions for airport-related air pollution.

DENMARK

SPATIAL PLANNING SYSTEM

National spatial planning policy is stated by means of a “national planning report” submitted by the Minister of the Environment to Parliament after each election.

The Ministry of the Environment may also issue general guidelines and “national planning directives” on particular issues or adopt specific orders and circulars establishing binding rules on the content of regional, municipal or local plans.

County councils (plus Greater Copenhagen Authority and Bronholm Municipal Council) must prepare a regional plan with guidelines for the location of major projects with a potential impact on the environment, such as airports. Regional planning authorities may also adopt “regional plan supplements” in order to complement or modify the regional plan with provisions regarding specific topics or projects. Regional plans may include the delimitation of noise zones.

Municipalities are required to prepare a “strategy for municipal planning” and a “municipal plan” establishing the general structure for land use, transport, services and recreational areas within the municipality. These plans are implemented by means of “local plans” for specific areas providing specific regulations.

The system operates in a hierarchic way and regional or local plans can not run counter to national policy.

The CAA must be consulted prior to the adoption of any spatial plan.

REGULATIONS AND PERMITS

Construction permits

All construction, subdivision or change of use of existing buildings and undeveloped areas require a permit from the municipal council. Permits for areas outside the built-up areas designated in the municipal plan and in areas not covered by a local plan also require consultation with the regional planning authority.

For projects requiring Environmental Impact Assessment it may also be necessary to adopt specific guidelines in the regional plan or a supplement to the plan. They may also require a permit from the regional planning authority.

There are no exceptions for large infrastructures or public projects, but the Minister for the Environment may adopt regulations that take the place of regional plans and allow some projects to be initiated without a municipal or local plan or without a building permit.

Environmental permits

EIA is regulated according to EU legislation, with a added requirement that for large projects it is necessary to prepare a supplement to the regional plan which provides guidelines on location and design.

There is a list of “heavily polluting enterprises, plants and activities” which shall not be extended or modified without environmental approval from a “competent permit authority”. This list includes airports in general. The permits are issued by regional or municipal authorities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National:

There is no national airport planning document.

- Airport:

Airport development plans are drafted by the airport operator but they are not statutory documents. In the case of Copenhagen airport, development is part of the Business Plan required by company law from the operator.

Airport development plans are implemented through regional planning directives and a local spatial plans. In Copenhagen they are prepared and adopted by the Ministry of the Environment.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

The Air Navigation Act defines safeguarded areas which are represented in a plan showing the area covered by obstacle limitation surfaces and the height limitations. The Ministry of Transport and Energy adopt one such plan for each airport.

In areas where building heights apply to constructions under 25 m, the safeguarded zone is protected by an easement. In the remaining safeguarded area any construction above 25 m requires prior consultation with the CAA.

Safeguarded areas are integrated into spatial plans and recorded in the land registry.

- Noise Impact

The Environmental Impact Statement for airport projects includes all the noise-related requirements, including the noise contours for the surrounding area. Spatial plans must integrate the contours and prohibit any incompatible development.

In Copenhagen Airport the decision to expand the airport included a commitment not to exceed the noise values of 1976. A TDENL (Total Day-Evening-Night Level) value is calculated every year to describe the noise impact of the airport and ensure that it will never exceed the value for 1976.

- Risk prevention

There are no legal requirements for third-party risk areas.

- Land reserve for future construction

Land for future expansion has to be included in regional and local spatial plans.

Construction

New airport facilities require a building permit from the Municipality.

Airport development must also be approved by the Ministry of Transport and Energy.

Operation

Airport operation requires a permit from the Ministry of Transport and Energy.

In general, airports are required to obtain an environmental permit from the county, but Copenhagen Airport is a special case, where environmental permits for water, sewage, run-off and waste are issued by the Greater Copenhagen authority and permits in relation to aviation (air quality and noise) are within the competence of the Danish Environmental Protection Agency.

AIRPORT NOISE AND AIR QUALITY

Noise

Danish legislation establishes recommended values for noise limits according to land uses in the vicinity of airports. These values must be taken into account in the preparation of the spatial plans for these areas and whenever the Environmental Impact Assessment of the airport is carried out.

In the case of Copenhagen, noise and air pollution are regulated by the “Copenhagen Airport Expansion Act”, under which all night flights must obtain prior approval from the airport, and no aircraft may emit more than 80 dB during the night hours. The Act requires also that the runway creating most noise problems be closed between 23:00 and 06:00.

The Copenhagen Act also includes a noise abatement plan dividing the area affected by noise into three zones where homeowners could receive financial assistance for soundproofing.

The regional planning directive adopted for Copenhagen airport defined noise areas where land uses are restricted.

Air quality

Results from the monitoring stations do not evidence air pollution problems as a result of air traffic.

ESTONIA

SPATIAL PLANNING SYSTEM

The spatial system is hierarchically organized in a pyramid with the “National Plan” (adopted in 2000) at the top, then the “county comprehensive plans” and, finally, comprehensive and detailed local plans. Local plans shall determine the location of new infrastructure and other projects falling under the category of “objects of significant spatial impact”.

Municipalities can also prepare thematic plans. That is the case, for instance, for the city of Tallinn with the “Skyscrapers plan” in areas around the airport, where the maximum heights in each area are established.

Local plans are prepared to regulate development and building conditions in detail in a portion of the municipal territory, and are the instrument prescribed by the law for the construction of new airports.

REGULATIONS AND PERMITS

Construction permits

All construction, demolition, or reconstruction activities require a “building permit” before the works begin and a “permit of use” for the utilization of the building.

There are no exceptions for large infrastructures or public projects.

Environmental permits

Environmental Impact Assessment regulation follows the provisions of EU legislation closely, both for projects as well as for plans and programs.

Separate permits are required for water use, air emissions and waste management.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

A Transport Development Plan for the period 2007-2013 is being drawn up by the Ministry of Economic Affairs and Communications, although it has not yet been adopted. It focuses mainly on the allocation of funds and investment.

The current National Spatial Plan includes some very general strategic guidelines for the development of the transport network in Estonia. It originally proposed the expansion of a military airport, but this proposal was abandoned.

- Airport

Airport operators prepare “master plans” as internal documents for technical and budgetary purposes. However, these plans have no other value. Airport construction and development require a “detailed plan” approved by the CAA.

According to the Planning Act, international civil airports are considered (to be) objects of national importance. This fact allows central Government to make proposals for their location and open a special negotiation procedure with local authorities in order to include them in the spatial plans. It also allows the State to act unilaterally when an agreement can not be reached, forcing modification of the spatial plan in order to accommodate the proposed development.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

A ministerial Regulation defines the obstacle limitation surfaces following Annex 14 and requires aerodrome owners to have a map of the vicinity of the airport in a scale of 1:50 000 approved by the CAA, who will check the conformity of the measurement and other parameters and forward the map to the relevant local governments, who shall then take it into account when preparing spatial plans.

In addition to the obstacle navigation surfaces, the law requires all construction works exceeding 45 m of height to be approved by the Civil Aviation Administration before the local government grants a building permit. In the case of constructions exceeding 100 m, the written consent of the CAA is required before the use permit can be issued. These restrictions apply to the entire territory of the country.

- Noise Impact

Noise impact should be taken into consideration by integrating noise contours into comprehensive and detailed plans adopted by the local governments.

- Risk prevention

Third-party risk areas are not defined in Estonian legislation. However, there is a Risk Plan for the entire territory of the country coordinated by the Ministry of Internal Affairs, in which the CAA wishes to include some provisions about airport vicinity.

- Land reserve for future construction

Land reserves for all major infrastructures such as airports can only be established in spatial plans. This was the case with the Detailed Plan for Tallinn Airport.

Construction

Airport construction, as well as any construction works within an airport, are subject to the general provisions of the Building Act and must therefore obtain a building permit from the local government, once the building design documentation is approved by the CAA.

The same applies to environmental permits, which obtain environmental permits with regard to ambient air pollution, waste management and water treatment.

Operation

A permit of use is required before any building can be put into operation. This permit is issued by the Municipality with the written consent of the CAA.

The CAA considers that the operating license is included within the certification procedure.

AIRPORT NOISE AND AIR QUALITY

A Ministerial Regulation sets the limit values of aircraft noise at 85 and 75 dB L_{Amax} during day and night, respectively. The critical values are 90 and 80 dB L_{Amax} during day and night, respectively. The same Regulation prescribes noise limits of 60 dB L_{day} and 55 dB L_{night} for residential areas, with critical limits of 70 dB L_{day} and 65 dB L_{night} .

Local governments are empowered to establish standard levels for ambient noise which are up to 50 per cent more stringent than the standards set by the Ministry of Social Affairs.

There are no land restrictions or protection zones on the basis of noise or air quality issues, but local authorities submit detailed plans to the Health administration for consultation. In Tallinn the city administration takes noise contours into consideration when issuing building permits.

FINLAND

SPATIAL PLANNING SYSTEM

The current “National Land Use Guidelines”, adopted on 30 November 2000, direct spatial plans to take into account building height restrictions and noise in the vicinity of airports while at the same time safeguarding the possibilities to develop airports of national importance.

Regional plans are binding on local plans and may contain provisions about transport systems. In some cases they include airport grounds and noise affected areas. Local framework plans (master plans) do not regulate building conditions directly but contemplate airport development in accordance with what the operator indicates. They now, in some cases, include the delimitation of noise contours.

Spatial plans are not generally used for airport planning purposes but do reflect airport future growth as a result of a negotiation process. Detailed land use plans are sometimes used for the development of specific portions of an airport.

REGULATIONS AND PERMITS

Construction permits

All constructions require a building permit issued by the municipality.

There are no exceptions or exemptions for airports.

Building permits must be in accordance with land use plans.

Environmental permits

EIA is regulated following closely on the EU legislation. Plans and programs have been evaluated since 1994.

All environmental permits are now integrated within one single environmental permit. Airport environmental permits are issued by the regional environmental administration.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There are no national plans concerning airport planning other than the above-mentioned “National Land Use Guidelines”.

- Airport

Airport plans are internal documents without any legal force but which are submitted to regional and local planning authorities for information purposes.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Obstacle limitations maps are drafted and approved by the CAA. Draft land use plans are reviewed by CAA, who must be consulted before any building permit can be issued within height restriction areas.

- Noise Impact

Airport planning should take into account noise level guidelines approved by Government. Airport development plans include noise contours calculated for future traffic, which may be integrated into spatial plans.

- Risk prevention

There are no specific risk provisions in Finland.

- Land reserve for future construction

Land reserves are included in spatial plans and acquired by the FCAA, who could be the beneficiary of expropriation.

Construction

Airport construction requires a building permit issued by local authorities.

The CAA must authorize airport construction.

Operation

Besides the conditions established in the EIA required for construction, operation of new airports requires an environmental permit, which may also be necessary in the future for existing airports.

The CAA must authorize the operation to ensure compliance with aviation regulations.

Airport certification is already regulated and most airports have been certified by the CAA.

AIRPORT NOISE AND AIR QUALITY

Noise

Noise level guidelines to be applied in land use for different activities were approved by the Finnish Government in 1992. The Finnish policy in this area is to reduce the number of people living in areas affected by noise levels above 55 dB L_{den} , and spatial plans use these guidelines for zoning purposes.

Environmental permits may include specific conditions regarding noise mitigation.

The “noise” Directive 2002/49/EC has not been transposed yet.

Air quality

There are no specific provisions regarding air pollution in the vicinity of airports.

FRANCE

SPATIAL PLANNING SYSTEM

There are no national spatial plans. At regional level the *Ile de France* Region has had spatial planning instruments for many years. These regional plans have contemplated airport development.

Framework plans are prepared at supra-municipal level and do not regulate airport development.

Local regulatory plans are adopted by all municipalities. Local plans are not used to direct airport development but could be used to regulate building within the airport grounds. Safeguarded areas (*Plans de Servitudes Aéronautiques*) and noise exposure plans (*Plan d'Exposition au Bruit*) must be included as an annex.

REGULATIONS AND PERMITS

Construction permits

In principle all constructions must obtain a building permit, regardless of whether they are public or private. Airport infrastructures are, nevertheless, not subject to this requirement.

Environmental permits

Environmental Impact Assessment is regulated along the lines of EU legislation, with the peculiarity that in addition to the list of projects that are always subject to this procedure, the law also establishes a monetary criterion whereby all projects budgeted over 1,900,000 € must be evaluated.

Both spatial plans and airport development plans must undergo an environmental impact assessment.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no transportation or airport planning at national level, but some policy documents have been prepared in which the role of different airports is contemplated.

- Airport

Airport development plans (*Avant projet de plan de masse*) are not statutory documents and have no binding effect but many airports have adopted them and they are used as a basis to preordain the extension of safeguarded areas and noise exposure zones. Airport plans are internal administrative documents approved by the aviation authority without public participation.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Safeguarded areas comply with ICAO's Annex 14 requirements and are protected by "aeronautical servitudes". These areas are defined for each airport in a plan (*Plan de servitudes aéronautiques de dégagement* or *PSA*) adopted after consultation with local authorities and public participation. The PSA becomes part of the local land use plan. Constructions or installations which do not require a building permit must be authorized by the CAA.

- Noise Impact

Noise Exposure Plans (*Plan d'Exposition au Bruit, PEB*) must be established for most French airports on the basis of projected airport development in the long, short and medium term.

PEBs are prepared by the aviation administration and approved by the Prefect after a public enquiry, and consultations with the local authorities and the airport's environmental consultative commission. The plans for the 10 most important airports are also submitted to the airport noise authority, ACNUSA (*Autorité de contrôle des nuisances sonores aéroportuaires*).

PEBs delimit noise exposure zones which establish permissible land uses. The plan is legally binding and must be annexed to local land use plans.

- Risk prevention

There are no provisions for third-party risk in the vicinity of airports.

- Land reserve for future construction

Land reserves for the construction of airports may be included in spatial planning documents, as local authorities are legally bound to take into consideration the information provided by the representatives of central government on future projects.

Construction

No building permit is required for the construction of airport infrastructures. Installations require a simplified permit (*déclaration*) and all other buildings and constructions are subject to ordinary building permit requisites and procedure.

Construction permits and declarations must be in accordance with spatial plans. Non-State airports require prior authorization or a signed agreement between the operator and the Ministry responsible for aviation.

Operation

Airports as such are not required to obtain an environmental permit for operation, but specific facilities may need a permit if they are not included within a broader EIA.

Flight path modifications are also required to undergo a similar evaluation procedure under certain circumstances.

Airports may not commence operations without an authorization from the Minister in charge of aviation.

AIRPORT NOISE AND AIR QUALITY

Noise

The Airport Noise Control Authority (*Autorité de contrôle des nuisances sonores aéroportuaires, ACNUSA*) is an independent authority performing advisory and control functions regarding airport related noise. The authority must be heard prior to the adoption of noise plans, noise regulations or procedural modifications, and provides independent advice on many subjects such as noise indexes or measuring methods. It also develops the specifications for noise monitoring stations and acts as a mediator between different levels of government, industry and citizens. The Authority has also been given the power to impose fines for violations of airport and aviation noise regulations.

Noise Nuisance Plans (*Plans de Gêne Sonore, PGS*) establish the limits of the areas affected by noise disturbances in the vicinity of the airport whose residents are entitled to receive financial aid for the installation of sound insulation. All financial assistance related to airport noise is based on these plans.

Sound insulation programmes are managed by airport operators with the resources obtained from a noise tax levied on airlines for each take-off. Night

bans and limits to the total number of flights as well as flight path restrictions apply at all Paris airports.

Noise zoning is established in the noise exposure plans PEB.

Air quality

There is no specific legislation on airport air quality.

No specific measures are adopted to limit air pollution in airports. Monitoring results do not indicate any specific problem at or near the airports arising from air traffic.

GERMANY

SPATIAL PLANNING SYSTEM

Despite the federal nature of the country spatial planning systems are fairly uniform. At the local level the “Federal Building Code” (*Baugesetzbuch, BauGB*) and the “Federal land use Ordinance” (*Baunutzungsverordnung, BauNVO*) apply in all Germany, making detailed land use planning very homogeneous.

Länder (except city states) have adopted “statewide” spatial plans where airports are outlined but not regulated. “Regional Plans” covering several districts are adopted in many of the *Länder*. These plans include a more detailed delimitation of the airport grounds and may define “settlement restriction areas” based on noise, but do not regulate airport uses.

Local framework plans and regulatory plans, covering only part of a municipality, are adopted by local authorities or local planning associations but must be approved by a higher administrative authority, usually the district.

Regular spatial plans are not used to regulate airport creation or development. The spatial planning legislation provides for special planning instruments to plan and implement large infrastructural projects, including airports.

REGULATIONS AND PERMITS

Construction permits

In principle all construction works require a building permit issued by the local authorities. There is no generalized exclusion of infrastructure projects from the building permit requirement.

Large infrastructural projects, however, usually follow special planning procedures which do not lead to an ordinary “building permit”, and are not handled by the local authorities.

Environmental permits

EIA is regulated in accordance with EU legislation, including the evaluation of plans and programs, but applies to a larger number of projects. Airports require an EIA when runway length exceeds 1,500m.

A specific evaluation is conducted for projects which may affect protected areas.

All potentially contaminating activities require either an EIA or an environmental permit, but airports are excluded from this requisite.

Environmental permits are integrated with the building permit. Regional authorities in charge of environmental permits issues this integrated permission after consultation with the local authority. Water related permits are processed separately.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

The Federal government has a general competence regarding aviation but all competences with respect to airports are in the hands of the *Länder*.

- National

The “Federal Transport Infrastructure Plan” (*BundesverkehrswegePlan, BVWP*), which is adopted by Parliament, is basically an infrastructure investment program oriented essentially towards rail, road and waterways, but does not include airport projects since these are not within the competence of the federation. It includes only some very broad statements about enhancing the competitiveness of German airports.

The “Airport Concept of the Federal Government” (*Flughafenkonzept der Bundesregierung*) adopted in 2000 analyses investment requirements needed to accommodate demand, lists proposed actions, including the modification of noise legislation, and puts air transport in perspective with other modes but does not go into details.

- Airport

There are no statutory airport plans. Each airport may prepare its own internal development strategy but in order to create a new airport or expand an existing one it is necessary to go through a special “planning decision procedure” (*Planfeststellung*) and will often require a “spatial planning procedure” (*Raumordnungsverfahren*) in order to determine the impact on spatial plans and define the spatial framework for the new project.

Both procedures require an environmental impact assessment.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Safeguarded areas are implemented by defining a construction restricted area (*bauschutzbereich*) formed by a series of concentric circles and a widening inclined plane beginning 500m from the ends of the runways. In the inner areas (1.5 km radius) all constructions, trees, power lines, etc. must be authorized by

the aviation authority, in the outer areas such authorization is only necessary when building heights exceed between 25m and 100m depending on the distance.

All constructions within these areas must be authorized by the Land's aviation administration.

The limits of safeguarded areas are made public but not integrated into spatial plans. Affected property owners are notified.

- Noise Impact

The noise impact of airports is regulated in a 1971 Act which is now considered obsolete. The Act defines 2 land use restriction areas where residential, uses, hospitals, schools, and the like are restricted.

- Risk prevention

There are no legal provisions concerning risk analysis, but in certain cases, like Frankfurt or Hamburg risk has been the object of specific evaluations.

- Land reserve for future construction

Land for future construction can be reserved in ordinary spatial planning documents or by means of the specific planning instruments (*Planfeststellung*) which must be used for airport development.

Construction

All new airports, or substantial modifications, must be authorized following a "planning decision procedure" (*Planfeststellungsverfahren*) which serves both as planning and building permission. The permit is issued by the aviation authorities in each Land.

The "planning decision" replaces all permits, authorization or licenses that may be required by law, it covers both airport construction and operation.

A regular building permit is needed for airport buildings, since the "planning decision" covers only the infrastructure.

Operation

No specific operation permit is required.

AIRPORT NOISE AND AIR QUALITY

Noise

Air traffic noise is regulated under specific legislation, requiring the delimitation of noise protection zones where land use restrictions are posed and some insulation measures receive financial assistance.

Night curfews, quota count systems and noise charges are used in many airports to contain airport noise.

Air quality

Clean Air Plans and Action plans must be adopted when certain levels are attained for a number of days. Polluting activities may be restricted or banned in contaminated areas.

Air pollution is take into account in the special planning procedures used for the construction or enlargement of airports.

Information from monitoring stations does not evidence aviation related problems with air quality in or around airports.

GREECE

SPATIAL PLANNING SYSTEM

Spatial planning is centralized in the National Government. The regional plans prepared for the prefectures (*nomoi*) in the 1980s are now obsolete, but the new regional plans have yet to be adopted. Athens and Thessaloniki have metropolitan “Master Plans” dating from 1985 which are currently under revision. The Athens Plan was modified in 1992 to accommodate the new Eleftherios Venizelos Airport.

Until now, land use plans only covered the built-up part of the municipality. A new generation of plans is being prepared which will regulate the entire municipal territory. The area near Athens Airport was regulated by a “*Special Spatial Plan*” which established a “*Zone of Urban Development Control*” in order to regulate development in the vicinity of the new infrastructure and minimize the impacts caused by the operation of the airport.

The actual regulation of land uses in and around the new Athens Airport was included in the Airport Development Agreement signed for the operation licence.

REGULATIONS AND PERMITS

Construction permits

According to the law, building permits are required for all construction activities, although there are some problems with development control in some parts of the country.

Public infrastructures, including airports, do not require construction permits, as they are deemed authorized by the decision approving the project.

Environmental permits

EIA legislation adheres to EU legislation with some peculiarities such as requiring a “*Preliminary Approval of Site Allocation*” (PASA) for projects subject to an EIA located in areas not specifically designated by spatial plans for that purpose. The environmental terms resulting from the new Athens airport were included in the Act which approved the Airport Development Agreement which governs the licence.

All activities within the airport are covered by the EIA of the project, and in the case of the Eleftherios Venizelos Airport, by the Airport Development Agreement.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There are no national airport plans.

- Airport

For all airports except Athens, airport plans are only technical documents drafted and adopted by the Hellenic CAA.

In the case of Athens the licence was based on a Master Plan which has been integrated into the Airport Development Agreement.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The Hellenic Civil Aviation Authority is responsible for establishing the limits of the areas where building height is controlled in compliance with the obstacle limitation surfaces provided for in ICAO Annex 14.

The maps showing the location of these zones are sent to affected municipalities and prefectures and all construction in these areas has to be approved by the HCAA before a building permit may be issued

- Noise Impact

The noise impact of airport operation is taken into consideration at the time of the assessment of the environmental impact, but there are no mechanisms to ensure future land use compatibility or to prevent residential uses from occupying high noise level areas.

- Risk prevention

Third-party risk prevention is not provided for in Greek legislation.

- Land reserve for future construction

There are no mechanisms designed to allow the establishment of land reserves for future needs.

Construction

No building permit is required for airport construction or for buildings inside airports. Airport construction is authorized solely by the HCAA.

No environmental permits are required in addition to the Environmental Impact Assessment.

Operation

Operation permits are not contemplated in the law, since the HCAA is directly responsible for the operation of all airports other than Athens Airport, whose operation was authorized under the terms of the Development Agreement.

AIRPORT NOISE AND AIR QUALITY

There are no specific plans in relation to noise or air quality.

No land use restrictions are established in relation to noise or air quality. Spatial plans may, and sometimes do, take these considerations into account but there is no legal obligation in that respect.

In the case of the new airport in Athens, the Environmental Terms integrated into the Airport Development Agreement included many provisions regarding noise and air quality, and compliance is continuously monitored with reports every 6 months.

HUNGARY

SPATIAL PLANNING SYSTEM

The “National Regional Development Concept”, adopted by Parliament on March 1998, sets very general strategic options, defines principles and guidelines aimed at the spatial structure of the country, regional disparities, mobilization of regional resources and coordination of different sectors and administrations.

The “National Development Plan” focuses essentially on socio-economic development, rather than on territorial issues, but has a strong spatial component and includes a small chapter entitled “Expanding airport capacity”.

Regional plans follow the same orientation, aimed at the reduction of inter-territorial disparities, but have not yet been adopted.

Local “structure plans” set the boundary between the areas that can be developed and those where building is not allowed, define the main infrastructures and other structural elements (arterial roads, large public parks, etc.) and regulate the types of land uses allowed. These plans are only binding on the municipal administration.

“Regulatory plans” and “zoning and building ordinances” are mandatory in areas designated for new development or for urban renewal, as well as in areas that require special attention.

Both “structure plans” and “regulatory plans” shall include the delimitation of areas affected by the spatial impact of airports, but these instruments do not regulate land uses within the airport.

REGULATIONS AND PERMITS

Construction permits

All construction activities, including demolition, renovation and changes of use, require a building permit. Permits are issued by the municipalities, except in cases where special legislation dictates otherwise, as is the case of airports, where the CAA acts as building authority.

There are no specific exemptions or exceptions for airports or infrastructures in general.

Environmental permits

EIA is regulated according to EU legislation, both for projects and for plans or programmes, but the procedure is divided into a preliminary evaluation which most projects and economic activities must undergo, and a detailed assessment which is reserved for projects included in a list.

All environmental permits required for operation, except those relating to water, are integrated either in the EIA or in a “consolidated environmental use permit”, issued by regional authorities

Activities of little or no environmental consequence require a Business Site License, issued by municipalities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The “Hungarian Transport Policy 2003-2015” sets priority objectives and strategic goals for the transport system and defines the intended development according to the mode of transportation. It declares Budapest Ferihegy International Airport “the number one priority” which should be improved and linked to the city by rail, and mentions more airports of regional significance.

- Airport

There are no statutory airport plans. In Ferihegy International Airport the operator has prepared a long-term strategic plan as an internal document designed basically for corporate purposes. The scope and contents are not regulated and do not have legal repercussions, but rather are used as a basis for the preparation of projects and discussion with local authorities.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Obstacle limitation surfaces are implemented as defined in Annex 14. The affected areas are defined on the basis of the distance of the airport to the border. Municipalities are notified but these areas are not represented in spatial planning documents.

Construction within this area must be authorized by the CAA, which examines each case and determines if, and under what conditions, the construction can be allowed.

- Noise Impact

Airports must calculate noise contours based on ten-year projections taking the 6 busiest months of the year. The contours are used to delineate 5 noise protection zones in which land use restrictions are applied on the basis of noise exposure. The calculations are validated by the CAA which approves the resulting noise maps after consultation with local authorities and public participation.

The noise mitigation zones must be integrated into the spatial planning documents and are also made public by including them in the land registry records.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

Land reserves for future airport development can be established by including the necessary provisions in the spatial planning instruments.

Construction

A building permit issued by the local authority is required for the construction of airport buildings (i.e.: a terminal). Airport infrastructures, such as runways, taxiways, etc., do not require such local permit but must be authorized by the aviation authority, subsequent to hearing the opinion of the municipality.

Operation

Airports are required to obtain all environmental permits in the same terms as other activities. In the case of projects requiring EIA, the final decision will cover all the environmental permits, except those related to water, which must always follow their specific procedure. Ferihegy International Airport is in the process of obtaining a “consolidated environmental use permit”.

Before buildings may be put to use an “occupation permit” must be obtained from the municipality. In addition, airports are required to obtain a licence from the CAA before they can begin operation.

Airport certification is required by the CAA according to ICAO provisions.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise has been regulated in several Decrees dealing with noise protected zones, limit values and calculation methodology.

Spatial plans must reproduce the noise contours maps and regulate land use accordingly.

Homeowners within noise protection areas are entitled to financial assistance for soundproofing purposes.

In Ferihegy International Airport night operations have been restricted and airlines must pay a noise surcharge on all movements.

Air quality

There are no specific regulations concerning air quality at or around airports.

IRELAND

SPATIAL PLANNING SYSTEM

The National Spatial Strategy (NSS) is a coherent national planning framework for Ireland up to 2022. Key to the strategy is the concept of balanced regional development.

The primary bodies responsible for spatial planning in Ireland are 88 Local Authorities (29 County Councils and 59 City or Town Councils). Every Local Authority is required to prepare a Development Plan. In general, the Plan shows the authority's objectives for the sole or primary use of particular areas (e.g. residential, commercial, industrial, agricultural), for road improvements, for development and renewal of obsolete areas, and for preserving, improving and extending amenities.

Detailed plans are made on an individual project basis.

REGULATIONS AND PERMITS

Construction permits

All material developments or material changes of use of lands or property, unless specifically exempted, need planning permission. In deciding applications, authorities consider the proper planning and development of the area concerned, the development plan, and any valid, written submissions or observations made on a proposed development.

Exemptions include taxiways and navigation aids at licensed aerodromes.

All applications for development must be made initially to the Local Authority. Any Local Authority decisions can be appealed to the independent national appeals body, *An Bord Pleanála*.

Environmental permits

The regulation of EIA, both for projects as well as for plans and programs, follow closely along the lines of EU Directives on the subject.

Certain industrial processes require a licence from the Environmental Protection Agency, but Aerodromes and aviation are not included among them.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no central strategic aviation planning body in Ireland.

- Airport

The airport operator is responsible for the planning and development of the airport. There are no specific instruments for airport planning. Each airport operator must liaise with the relevant Local Authority and have the development of the airport incorporated into the local Development Plan.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

The Irish Aviation Authority has issued a Notice to the public Licensed Aerodromes to prepare a safeguarding map, showing approach surfaces and other areas of concern to aviation such as bird hazard areas. The aerodrome operator is responsible for monitoring any proposals for developments which may penetrate the Obstacle limitation surfaces for the aerodrome. The Irish Aviation Authority is also issued with copies of any development proposals which may effect the safe navigation of aircraft. There is a statutory period of five weeks for any interested parties to comment on any planning application to the local Authority.

- Noise Impact

There are presently no noise restrictions at airports. Advisory noise contours are on the safeguarding maps for some of the airports. Where an application is located within this noise intensive area, the local authority is informed that the occupants of the proposed development could be subject to the effects of intrusive aircraft noise. The final decision on the granting of planning permission lies with the Local Authority, subject to appeal to *An Bord Pleanála*.

- Risk prevention

A recent consultants report commissioned by the Department of Transport and the Department of Environment and Local Government established risk contours around the State Airports at Dublin, Cork and Shannon. These risk contours have been incorporated into the Fingal County Development Plan (the Local Authority responsible for Dublin Airport).

- Land reserve for future construction

The long-term needs of Dublin Airport's infrastructure have been included in local development plans for a number of years,

Construction

Before any development can proceed it must have Planning Permission from the Local Authority. No permit is required for extensions of an existing airport operational buildings, aprons, taxiways, airside roads, fences, ground signals and navigation aids.

Depending on the size and nature of the development, it may require an Environmental Impact Statement and/or licenses from the Environmental Protection Agency.

All construction works require approval from the Irish Aviation Authority to ensure safety and regulatory standards are maintained.

Operation

All commercial airports must be licensed by the Irish Aviation Authority, which ensures that all ICAO standards are met.

AIRPORT NOISE AND AIR QUALITY

Aviation activities are not included within current Irish environmental legislation. In effect, there are no regulations integrating noise or air quality with spatial planning in the vicinity of airports.

Local Authorities may impose conditions on the Granting of Planning Permission for a new development, such as restricting the hours of operation or equivalent.

At present the Dublin Airport Authority is in the process of commissioning a Noise Monitoring System in the environs of Dublin Airport. The purpose of this is to establish a baseline noise level record for any future environmental obligations. There is no other aerodrome with this facility.

Local authorities operate air pollution stations, concentrating usually on urban areas.

ITALY

SPATIAL PLANNING SYSTEM

Spatial planning is entirely a regional competence. Each region has its own planning legislation. Initially all regional planning systems were very similar but they are gradually diverging.

All regions have strategic plans covering the entire region and these normally define major developments, protected areas and the main infrastructures. The provinces are the basis of rather more detailed planning which can set specific reservations regarding future infrastructures. Provincial plans are binding on local plans and can have a direct effect on property owners when setting land reservation.

Strategic planning for an airport area has taken place at Milano-Malpensa independently of the normal spatial planning system.

Local plans usually leave the airport areas as a blank to be defined by means of their own planning instruments, but the perimeter cannot be expanded unless this is in accordance with the local plan or follows a special procedure. Local plans are required by law to include noise contours and the resulting zones, as well as the areas in which building restrictions are established in order to protect obstacle limitation surfaces.

Local land use plans are not used for airport planning purposes.

REGULATIONS AND PERMITS

Construction permits

In principle, all construction activities, except some minor work, require a building permit. However, public works undertaken by the State or its concessionaries are not subject to the building permit requirement stipulated by law, but to a special procedure required to ascertain the conformity of the project with spatial planning.

These procedures are based on negotiations aimed at reaching a consensus within a certain period of time, if this is not possible an “inter-administrative conference” (*conferenza di servizi*) which brings together all the representatives from departments in the affected Region and local authorities are convened for a period of another 60 days. If an agreement is not reached, the decision will be taken by the Central Government.

Environmental permits

EIA is regulated according to EU legislation, but airports require evaluation when runways over 1,500 m in length are involved. EIA decisions in these cases are taken at central level. As regards smaller airports the evaluation is carried out by the regional authorities. The evaluation of plans and programs has not yet been regulated by the State but several regions have already legislated on this matter.

Separate permits are often required as regards water, waste, or air pollution.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The 2001 National Transport Plan defines an “Integrated National Infrastructure System” including 23 airports for which some general policy guidelines are provided. The Italian CAA is preparing a National Airports Plan.

- Airport

“Airport Development Plans”, (*Piano di Sviluppo Aeroportuale*) are prepared for each major airport as approved by the CAA. These plans are not compulsory but if there are no plans, the airport must obtain CAA approval for each project. If the airport development plan is not in conformity with spatial planning the aviation authorities will endeavour to reach an agreement with the local and regional authorities. If this is not possible, the “*conferenza di servizi*” procedure will be followed.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The Regulation for the Construction and Operation of Airports (*Regolamento per la Costruzione e l'Esercizio degli Aeroporti*) defines obstacle limitation surfaces and obstacle evaluation, in accordance with Annex 14 of the ICAO. These surfaces, as well as the operation of navigation aids, are protected by delimiting safeguarded areas where building restrictions apply. Safeguarded area maps are made public through the municipalities and should be reproduced in land use plans.

- Noise Impact

Noise contour maps must be approved by an airport commission where all affected municipalities are represented. The maps define 3 noise protected zones where land use is restricted on the basis of noise exposure levels.

The resulting zones and zoning regulation must be included in land use plans.

- Risk prevention

The Navigation code adopted in May 2005 introduces a so called “risk impact assessment” to be taken into consideration in spatial planning and management. The concept has not been developed and needs specific implementation regulations.

- Land reserve for future construction

Current airport development plans do not include land for long term development but only for those expansions that may be needed to carry out the projects already defined in the plan.

Some spatial plans have included areas for future airport development.

Construction

Airport construction does not require a building permit, but must be subjected to a special procedure to ascertain whether it is in accordance with spatial planning. When no consensus is reached within a given term, the decision may be referred to the Cabinet of Ministers.

The environmental impact assessment procedure will usually cover all the permits required within the airport. If a facility is not included in the development plan it may be necessary to obtain permits for waste disposal or sewage discharge.

All airports must be authorized by the CAA. Individual projects not included within an airport master plan or not conforming to such a plan also require the authorization of the Italian CAA.

Operation

No environmental permit is required for operation.

No operation license is required, but the CAA must certify new airports or developments.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise has been regulated at national level. Regions can adopt more demanding standards on noise in general but not regarding airport noise.

Municipalities must adopt noise abatement plans to contain and mitigate noise pollution. In the vicinity of airports. The airport operator must prepare the plan and submit it to the regional and local authorities.

Noise maps are of use both as regards establishing restriction areas and determining eligibility for insulation aid. Airports must reserve 7% of their maintenance budget for noise insulation purposes.

Air quality

There is no specific legislation on air quality for airports.

Air quality must be taken into consideration in spatial planning instruments in order to prevent activities which would decrease air quality below the approved standards.

Air quality monitoring in the vicinity of the major Italian airports has not yielded any evidence of pollution levels above legal standards.

LATVIA

SPATIAL PLANNING SYSTEM

The National Spatial Plan, to be drawn up by the Ministry of Regional Development and Local Government in accordance with the recent legislation in this area, shall set out all national interests and requirements for the utilisation and development of the territory of the State.

Spatial plans and development programmes to be drawn up by the planning region agencies and by the two levels of local governments (district and territorial) shall define the land uses permitted in each area.

Detailed plans drawn up by the territorial local governments will specify the spatial utilisation and building conditions of a particular piece of land.

These plans are organised in a hierarchical structure in which lower levels must always be in conformity with higher levels.

REGULATIONS AND PERMITS

Construction permits

A construction permit issued by the relevant building authority is required for any construction work in Latvia. Only small individual buildings in rural areas are exempted. In general, construction permits are granted by the local governments. However, the Cabinet of Ministries may specify special procedures, including a different building authority, for the construction of transport infrastructures. In any case, those special construction permits must always be registered by the building authority of the local government where the structure will be located.

Environmental permits

EIA and SEA are regulated according to EU Directives. They will integrate most of the environmental permits. Airport plans are not included in the list of planning documents requiring SEA. Solely in cases where an EIA is not required, the respective Regional Environmental Board shall issue technical provisions regarding environment protection.

Separate environmental permits are required for waste management activities and emission of pollutants.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

A National Programme for Transport Development has been recently adopted by the Cabinet of Ministries, establishing the general guidelines for the expansion of the transport infrastructures in Latvia until 2010. This is a national sectoral programme to be considered by any spatial plan drawn up at the planning region or local government levels. This plan was prepared by the Ministry of Transport. Although it was not subject to public participation, all the institutions and stakeholders involved in transport, including the airport operators, were consulted.

- Airport

There are no statutory airport development plans as such in Latvia. Airport planning takes place through integration of airport plans into the spatial plans of the towns and municipalities where they are located. Detailed plans could also be drawn up by the airport operators for certain areas of the aerodrome, and submitted to the local government for their adoption.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The airport companies and the CAA are responsible for keeping maps with “obstacle protection zones”, based on the ICAO obstacle limitation surfaces, up to date. These maps are sent to the affected municipalities. A separate construction permit from the CAA is required within those areas.

- Noise Impact

Noise contours are only calculated for Riga airport. They are integrated into the spatial plans of the affected municipalities.

- Risk prevention

There are no third party risks considerations in Latvia.

- Land reserve for future construction

Land reserves for future airport developments must be included in spatial plans of the town and municipalities where the airports are located.

Construction

Any construction activity at an airport requires a construction permit from the building authority of the local government where the airport is located. In the case of large airport developments, public consultation will take place before the permit is granted. Environmental permits, in accordance with the EIA or the Regional Environmental Board conditions, and CAA agreement are also required.

Operation

The CAA must update the airport license granted to the airport operator for the whole aerodrome once any development has taken place. Airport certification is already regulated in Latvia.

AIRPORT NOISE AND AIR QUALITY

Noise

There are no maximum noise levels determined by legislation around Latvian airports. The “noise” Directive 2002/49/EC has already been transposed but there are no “major airports” in the country. Although there are no land use restrictions determined by the legislation, the noise levels caused by the operation of Riga airport, including those forecast after the expansion of the runway, are included in the spatial plan of Marupe municipality, whose building authority takes them into consideration when granting construction permits.

Air quality

There are no specific provisions on airport related air pollution.

LITHUANIA

SPATIAL PLANNING SYSTEM

The “Comprehensive Plan for the Republic of Lithuania” adopted by the National Parliament is a strategic plan with little detail, which provides the basis for local planning.

All municipalities are required to adopt a “Comprehensive Municipal Plan”. These plans include not only existing major infrastructures such as airports, but also projects for new ones and areas where land uses or constructions are limited or subject to special regulations, as is the case with areas affected by noise or airport-related height restrictions.

Comprehensive plans are implemented by Special plans or Detailed plans. The former can be adopted in order to undertake the creation of large infrastructures, encompassing usually more than one municipality, or to establish special land use regulations.

REGULATIONS AND PERMITS

Construction permits

All construction, demolition or reconstruction activities require a building permit issued by the local administration.

There are no exceptions for infrastructures or civilian public projects.

Environmental permits

The EIA system follows EU legislation closely, although it also requires a preliminary evaluation for a very large number of projects. Evaluation is also required for plans and programmes although there is still no practical experience in this respect.

Most environmental authorizations, except those related to water and sanitation, are integrated into the “permit for the use of natural resources” required for all potentially contaminating activities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There are no national airport plans but the Ministry of Transport and Communications commissioned a study on the “Business strategy of civil aviation in the liberalized market” in which the capacity of current airports is analysed, putting forward a proposal for a new airport .

- Airport

There are no statutory plans for airport construction or development, but the Aviation Act requires civil aerodrome sites to be included in spatial planning documents.

In Vilnius, the airport operator has a Development Program 2002 – 2012, where investments are listed and quantified. This is only a technical and budgetary internal document, not subject to participation or coordination. There is also a scheme for future development which includes the construction of a new runway and contemplates projected protection zones and noise contours. This document would have to be adopted as a spatial plan (either a Detailed Plan or a Special Plan).

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Safeguarded areas are defined in accordance with the requirements of the ICAO and must be integrated into spatial plans. All developments within these areas must be submitted to the CAA for approval before a building permit may be issued. Navigation facilities are also protected by circular safeguarded areas.

These limitations are also recorded in the land registry.

- Noise Impact

Noise impact is taken into consideration by establishing a “Sanitary Zone” based on noise contours where development is regulated in order to prevent unsuitable land uses. Building permit applications in this zone must be cleared with the CAA before they can be issued.

- Risk prevention

There are no provisions for risk prevention in the vicinity of airports.

- Land reserve for future construction

Land reserves for all major infrastructures can be established in spatial plans.

Construction

All airport construction, including any construction within the airport, must obtain a building permit.

All airport related construction projects must be approved by the CAA.

Operation

Environmental permits (water, waste, air, etc.): Airports are subject to the same legislation and requirements as any other activity and must obtain the required environmental permits for activities not covered by an EIA.

Airport operations must be authorized by the CAA.

Airport certification is required in accordance with ICAO provisions.

AIRPORT NOISE AND AIR QUALITY

Noise

Noise protection in the vicinity of airports is implemented by means of the establishment of “Sanitary Protection Zones” where 4 sub-zones are delimited according to noise levels. These zones can be established by means of a “Special Plan” or integrated into the Comprehensive Municipal Plan.

All applications for building or activity permits within the sanitary protection zone are sent to the County Health Department which must approve the project and can establish specific requirements in each case. All permits within the areas affected by noise must also be cleared with the Civil Aviation Authority.

There are no noise abatement plans for existing buildings.

Air quality

Air quality is also taken into account for the establishment of sanitary protection zones, but in the case of Vilnius airport the main factor has been noise, since there are no air pollution problems arising from airport operations.

LUXEMBOURG

SPATIAL PLANNING SYSTEM

The current “Spatial Planning Program” (*Programme Directeur d’Aménagement du Territoire*) was adopted in 2003 and includes some very general goals regarding air transport. A Sector Plan (*Plans Directeur Sectoriels*) is being drafted for transportation and one Regional Director Plan (*Plan Directeur Régional*) out of 6 is now being drafted.

National strategies can be implemented with “Land Use Plans” (*Plans d’Occupation du Sol, POS*), prepared and adopted by the national Government. This is the case of the Luxembourg Airport where a POS is now pending final approval. Once adopted the POS will be binding on all parties, including local planning authorities.

All municipalities are required to adopt a “General Spatial Plan” (*Plan d’Aménagement Général, PAG*) covering the entire municipality to define general land use in new development areas, land reservations for public facilities and infrastructures as well as free spaces. PAGs are approved by the Ministry of the Interior and are binding on all parties. These plans regulate land use outside the airport perimeter and include Noise Zones where some land uses are restricted.

Specific areas within a municipality can be developed with “Particular Spatial Plans” (*Plan d’Aménagement Particulier PAP*) which is the instrument used until now to regulate land use in and around the airport.

REGULATIONS AND PERMITS

Construction permits

All construction or demolition activities require a building permit issued by the municipality. There are no general exceptions or specific exemptions.

Environmental permits

Airport projects are subject to Environmental Impact Assessment in the terms prescribed by EU legislation. The regulation of environmental impact assessment is integrated within the legislation on environmental permits in general which includes all necessary authorizations within a unified procedure.

Airports are considered “classified establishments” and must obtain an environmental permit for operation.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The national “Sector Plan” on transportation has not been finalized yet. The country has only one airport for which specific planning is already in place.

- Airport

The airport and surrounding area are included in a specific land use plan (*Plan d’Occupation du Sol, POS*) where long term development is contemplated. The Plan provides detailed regulation of land use in some areas within the airport perimeter and sets more general criteria for the areas outside the airport. Further detailed plans may be prepared for specific parts of the airport.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The POS for the airport and surrounding area includes a map indicating the obstacle limitation surfaces and prohibits any construction which involves such surfaces unless an aeronautical study demonstrates that there are no risks involved. All constructions within the perimeter of the area affected by obstacle limitation surfaces must be approved by the Airport Administration.

- Noise Impact

The POS area is based on a prior delimitation of forecasted noise contours, and includes all the area affected by aircraft noise above a certain level. Land use is regulated in the airport plan in order to take noise into consideration and these provisions become binding for local plans, which can only define more stringent land use restrictions.

- Risk prevention

Third party risk is not considered.

- Land reservation for future construction

The POS area includes the land reserved for future airport development, as well as reservations for major rail and highway links.

Construction

Construction and operation of the airport and airport facilities are subject to ordinary building and environmental permit requirements and may be the object

of an Environmental Impact Assessment depending on the nature and characteristics of each project.

Operation

The only operating permit required is the environmental permit.

There is no airport certification legislation.

AIRPORT NOISE AND AIR QUALITY

There is no specific legislation on airport noise.

There are no plans regarding noise or air quality, but the spatial plan for the airport and its surroundings is based on projected noise contours in order to make land use compatible with noise nuisance.

There are no noise abatement plans and no mitigation measures have been taken into account.

Operating restrictions impose some limits on night flights.

MALTA

SPATIAL PLANNING SYSTEM

Spatial planning is highly centralized, in the hands of the Environment and Planning Authority (MEPA), responsible for both spatial planning and environmental protection.

The “Structure Plan” presents a 20-year strategy for the development of the Maltese Islands, including a section on aviation policy. The Structure Plan can be implemented with “Subject Plans” focusing on one subject, such as transport, or a geographical area.

The country is divided into 7 planning areas for which MEPA prepares “Local Plans” in order to regulate land use within their territories. The Local Plan for the area where the airport is located regulates land uses around the airport and reserves land for future development. It also calls for the adoption of an airport master plan to regulate land uses within the airport boundaries.

“Action Plans” and “Development Briefs”, are the instruments used to implement Local Plans in areas where public projects or private development is to take place.

REGULATIONS AND PERMITS

Construction permits

All development activities require a “development permission” issued by MEPA.

Some exceptions exist but only for minor developments.

Environmental permits

EIA is regulated in line with EU legislation, although the regulations for the evaluation of plans and programs have not yet been completed.

The environmental assessment is fully integrated into the development permission process, as a previous approval to be obtained before the permission is granted.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The Structure Plan includes a section on Aviation with four strategies: identification of a development area for aircraft maintenance; the need for a comprehensive plan for the use of land, including future forecasts; the establishment of safety zones, noise contours and flight paths; and a study for the introduction of fixed-wing services to Gozo.

- Airport

There are no statutory airport development plans, and airport planning takes place through the general spatial planning instruments. Technical plans are prepared as an expression of the airport's requests to be included in spatial plans.

The airport operator has been preparing policy documents on the relationship with the surrounding area and on future infrastructural needs, in response to the requirements of the Structure Plan. These documents and a continuous relationship with the planning authority have allowed the Local Plan for the South Malta planning area to take into consideration airport development.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The airport operator prepares obstacle limitation maps for safeguarded areas to be taken into consideration in spatial planning and in issuing building permits.

Prior to issuing a building permit within these areas, MEPA consults with the operator.

- Noise Impact

Noise contours have not yet been prepared for Luqa airport.

- Risk prevention

Third-party risks are considered in Malta, although they are not officially defined by any regulation.

Public Safety Zones are defined by the Department of Civil Aviation in an internal document, and are considered by MEPA when preparing or reviewing any development plan. New developments are not permitted within those areas.

- Land reserve for future construction

Land for future airport developments is reserved by the general spatial planning instruments.

Construction

Construction activities within the airport require a development permit from MEPA.

Airport development must be approved by the Department of Civil Aviation.

Operation

Airports need a license issued by the Ministry of Competitiveness and Communications. The airport has been certified according to ICAO's requirements.

An environmental permit for waste management will be required in the future.

AIRPORT NOISE AND AIR QUALITY

There is no specific legislation on airport noise or air pollution in Malta.

There are no land use restrictions on the basis of noise or air pollution. These matters are considered on a case-by-case basis when analysing applications for development permissions.

Noise

Both the "noise" Directive 2002/49/EC and the "noise-related operating restrictions" Directive 2002/30/EC have been transposed.

Noise contours will be prepared in the future, but noise maps are not required since the airport does not reach the dimensions set by EU legislation.

Air quality

National emission ceilings and air quality standards are applied in the airport.

NETHERLANDS

SPATIAL PLANNING SYSTEM

National spatial policy can be adopted through a comprehensive document, the “National Spatial Strategy” (*Nota Ruimte*), or “key planning decisions” (*planologische kernbeslissing* (PKB)), addressing specific topics with spatial relevance. Schiphol airport, for example, has been considered in the National Spatial Strategy in broad terms, but has been regulated in detail with an amendment to the Aviation Act which was adopted following the specific procedures required for PKBs. Spatial policy may also be included within sector policy documents such as the “Mobility Policy Document” (*Nota Mobiliteit*) which not only sets out the policy on traffic and transport, but also develops in greater detail the National Spatial Strategy (*Nota Ruimte*). Key planning decisions are binding on all levels of government.

“Regional Plans” (*Streekplan*), adopted by the Provinces, include not only the airport perimeter, but also land which may be used for future expansion and areas subject to land use restrictions for security or environmental purposes.

Municipal “structure plans” (*Structuurplan*) do not regulate land uses in detail, but formulate strategies for future development. Detailed regulations are set out in the “local land use plans” (*bestemmingsplannen*), prepared for parts of the municipality outside the built-up area or where urban renewal is to take place.

In the case of airports these plans include a detailed regulation of land uses inside the airport grounds and reproduce in detail all land use and construction restrictions established for security or environmental purposes in the surrounding areas. Nevertheless, the plan in itself should not be considered as an “airport plan”, but rather a confirmation of what has already been decided in other documents with respect to the development of the airport.

REGULATIONS AND PERMITS

Construction permits

All building or construction activities are required to obtain a building permit issued by the municipal government.

There are no exemptions or general exceptions for public projects like airports, but Central and Provincial Governments can direct municipalities to revise local plans or grant exemptions when required in order to allow the implementation of a project of national or provincial interest. National projects approved following the KPB procedure can not be refused the building permit, since the decision is binding on all Administrations.

Environmental permits

Environmental Impact Assessment has a long tradition in the Netherlands, including the evaluation of plans and programmes, although not always strictly in line with EU legislation. The legislation regulating Schiphol airport and the surrounding area was subject to formal EIA procedures.

All activities which may generate pollution of any sort must obtain an “Integral Environmental Permit” (*Geïntegreerde milieuvergunning*). These permits are issued by municipalities or in more important cases, like Schiphol airport, by the provinces.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

Both the “National Spatial Strategy” and the “Mobility Policy Document”, dealt with transportation needs and airport policy in specific chapters, defining what are known as the “mainports” (Schiphol Airport and the Port of Rotterdam) which play a central role in the economic development of the country. The “*Nota Mobiliteit*” devoted an entire chapter to aviation analysing the situation and setting out the national policy on the subject, oriented towards the consolidation of Schiphol while maintaining compatibility with safety and the environment, and fostering the development of regional airports in order to promote accessibility and growth in the regions.

- Airport

There are no statutory airport plans, operators prepare their own internal documents as a basis for future proposals and discussions. Schiphol was regulated in detail by means of Decrees implementing the Aviation Act

Spatial impact

- Implementation of ICAO Annex 14 requirements

The Airport Zoning Decree Schiphol (LIB) regulates all building and land use restrictions arising from the implementation of Annex 14. The Decree is accompanied by a set of maps in which the construction limitations derived from the obstacle limitation surfaces are shown in detail. Building limitations are also applied in order to protect the operation of the ILS system and there are land use restrictions aimed at preventing the location of activities that may attract birds and generate a bird-strike hazard.

These maps must be reproduced in spatial plans and are binding on planning authorities.

- Noise Impact

Noise impact is also contemplated in the LIB Decree and the corresponding maps. Provincial Structure Plans and Local Land Use Plans reproduce the contours of the areas where building restrictions apply due to noise. The area where no new housing is allowed is now being revised.

In addition to restrictions for future land uses, the implementation of noise protection areas has required the demolition of some buildings.

- Risk prevention

Risk prevention areas are delimited by establishing the contours within which the population would be subject to certain risk levels. The Airport Zoning Decree (LIB) also provides the criteria and delimits the areas where construction can not take place or land uses are regulated on account of risk. In some areas the limitations go as far as to require the demolition of existing buildings.

Individual Risk contours have been estimated for 10-5 and 10-6 probabilities. Group risk has also been estimated and spatial plans must take it into account in order to avoid large concentrations of people.

Schiphol also has a ceiling (total risk weight) on the maximum number of dwellings that may be subject to a risk level of 10-6.

Third-party risk contours are integrated into spatial planning.

- Land reserve for future construction

Legislation specific to Schiphol included some land for future expansion. Spatial plans have already designated some areas for possible airport development.

Construction

Construction within the airport requires a building permit issued by the Municipality, but infrastructure development in Schiphol is regulated specifically by the Aviation Act.

In Schiphol, some environmental permits, i.e. noise, are included in the Government decision to build the airport, and embodied in the result of the EIA process. Other permits, i.e. regarding water and waste, are required under the same conditions as any other economic activity.

Operation

Airports must be licensed by the aviation authority. Dutch law also requires certification according to ICAO.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise is specifically regulated in the Aviation Act and the implementation Decrees which set out the requirements for Schiphol Airport. The system in place for this airport combines noise abatement procedures and preferential runways, routes, operational restrictions and noise limits, a “Total Volume of Noise Load” for the entire airport, and individual limits for 35 points considered over a 24-hour period and 25 points for the night-time period (23:00-07:00h).

An extensive home insulation programme has been in place since 1984, financed by a noise surcharge levied by the airport.

Air quality

In Schiphol, the Aviation Act sets emission limit values for five different substances (CO, NO_x, VOC, SO₂ and PM₁₀) per weighted aircraft movement. These limits are not dependent on the number of movements but rather on the composition of the fleet. If emissions of one or more substances are calculated to exceed the legal limit, then the airport can be constrained to remain below an absolute limit based on the total emissions allowed in the previous year.

POLAND

SPATIAL PLANNING SYSTEM

The “National Development Plan” provides the socio-economic guidelines for the development of the country and is the basis for the utilization of EU structural funds. The “Concept of National Spatial Policy” is more spatially oriented and defines a series of strategic objectives regarding the spatial structure.

Regional planning reproduces the same division between development planning and spatial planning. All regions prepare Spatial Development Plans in order to define the basic spatial structure, allocate infrastructures and services and set requirements for the protection of the natural environment and cultural heritage.

Municipalities are required to adopt non-binding “Planning Studies” (*Studium Uwarunkowań*) covering their entire territory, to establish the local planning policy, identify potential areas for public services, and define detailed planning priorities.

“Local Spatial Development Plans” are prepared for specific areas to regulate land uses in detail and to establish development parameters, including building alignment and overall dimensions, development intensity indexes, etc.

Central and regional government projects must necessarily be included within local land use plans.

REGULATIONS AND PERMITS

Construction permits

All building and construction activities require a building permit, issued by different authorities depending on the project.

There are some activities excluded from this requisite but airports are not among them.

In areas not covered by a regulatory plan it is necessary to obtain a “planning decision” before any construction work or land use can be authorized. In the case of public projects this is known as “Decision on Localization”, for private developments it is a “Decision on Building Conditions”.

Environmental permits

Environmental Impact Assessments are required both for projects and plans or programs, in line with EU legislation. The evaluation is required at the “planning decision” stage when there is no regulatory plan, but this does not preclude further evaluation at the project phase.

Separate permits are required with regard to water, waste, air pollution and the operation of contaminating industries and activities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no national airport planning. The Ministry of Infrastructure appointed a commission to review possible locations for a new airport for central Poland. The Commission chose 2 locations in January 2004 but the final decision will probably not be made until 2006.

- Airport

There are no statutory master plans, although some airports, i.e. Katowice, are beginning to prepare this kind of document to guide future development. Airports prepare an outline or “concept” for future development which is submitted to the Civil Aviation Authority.

Spatial impact

- Implementation of ICAO Annex 14 requirements)

ICAO Annex 14 standards are considered binding and apply in the vicinity of the airports.

Planning decisions to build a new airport would include a “restricted area” where the resultant safeguarded areas would be represented.

- Noise Impact

Noise contours are taken into account to establish the “restricted area” in the vicinity of the airport.

- Risk prevention

There are no risk prevention provisions.

- Land reserve for future construction

Land reserves can be established in the local plan, but are not required by law.

Construction

Airports require construction permits, as well as a “Decision on Localization” when not included in a local land use plan. They are issued by the regional deconcentrated offices of the central administration.

Operation

Airports require an operating license issued by the CAA. A “use permit” may be necessary for new airport buildings, but infrastructures are clearly excluded from this requirement.

AIRPORT NOISE AND AIR QUALITY

Noise

There is no specific noise legislation concerning airports other than that which applies to aircraft operation. Noise and air quality considerations have been built into the EIAs of recent airport projects.

The EIA for the enlargement of the airport of Warsaw established a set of noise contours together with monitoring systems, a quarterly report to be submitted to the regional representative of the central government, sound insulation programs for affected homes and, in some cases, compensation to homeowners.

Noise contours have been used as the basis to define the “restricted area” included in spatial plans near the airport.

Spatial plans must take noise pollution into consideration and shall prohibit the location of residential development, hospitals, schools or cultural uses in areas that do not meet the noise standards established for different land uses.

Air Quality

There are no special provisions concerning airport operation since these infrastructures are not included in the list of potential air polluters.

Air quality regulations are basically aimed at controlling emissions, and spatial plans do not, as a rule, consider contamination issues other than to separate industrial uses from other non-polluting uses.

PORTUGAL

SPATIAL PLANNING SYSTEM

Instruments

The National Program for Spatial Policy (*Programa Nacional da Política de Ordenamento do Território*) sets very broad goals, including the definition of the quantitative and qualitative objectives to be attained with respect to the creation of strategic infrastructures. (Under preparation)

Regional Spatial Plans (*Planos Regionais de Ordenamento do Território*): Define regional infrastructure networks. Can include land reserves for future airports or expansion as well as for connection infrastructures.

At local level, the “Municipal Director Plans” (*Plano Director Municipal, PDM*) cover the entire municipality, must include the transportation network and infrastructures or land reserves serving the municipality or contemplated in a higher level instrument, as well as safeguarded areas for airports. PDMs must be ratified by the Council of Ministers and are binding on all parties.

Spatial plans do not regulate airport uses in detail and are not used for airport planning.

Coordination and Integration

Portuguese spatial plans are well coordinated due to the hierarchic organization of the planning instruments. The system is designed to provide a high level of coordination. In Portugal, the law requires a specific coordination institution for each planning instrument. Problems arise from the difficulties in achieving consensus and the lengthy timescales needed to adopt the plans.

Airports only take part in Coordination Commissions for municipal plans.

There is no mandatory integration of airport policies into land use planning.

REGULATIONS AND PERMITS

Construction permits

In principle all construction and urbanization activities must obtain a building permit from the municipality.

The law establishes an exemption in favour of building or demolition works undertaken by public entities and concessionaires in charge of airport administration or operations when such works are directly related to their public mission. Projects must be submitted to the municipality for a non-binding opinion.

Construction works must be in accordance with spatial planning (even though no permit is required).

Environmental permits

EIA is regulated according to EU legislation.

The “SEA” Directive 2001/42/CE has not yet been transposed into Portuguese legislation, but the decision to build a new airport in the Lisbon area was evaluated at the planning stage in order to define the best location alternative.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The Portuguese government adopted in July 2005 a document entitled “Major Plan Options 2005-2009” (*Grandes Opções do Plano 2005-2009*) defining budgeting priorities in which made the decision to go ahead with the new airport at OTA and to improve infrastructures at all other locations, at the same time as the current development programme at Lisbon airport. The document lists a series of improvements to be implemented in all airports in general.

- Airport

Airport master plans are only drafted for internal use. Master plans are not subject to any statutory planning instrument. The integration of airports into their territorial context could take place through Special Plans.

Spatial impact

- Implementation of ICAO Annex 14 requirements

In order to protect the operation of airports and air navigation facilities, the law has established “aeronautical servitudes” which define safeguarded areas where building restrictions apply. The CAA must be notified of any building permit which is issued in these areas.

Noise Impact

Municipalities must integrate noise contours into their land use planning.

Safeguarded areas with regard to noise were contemplated at the time of establishing land reserves for future airport construction at Ota.

- Risk prevention

Safeguarded areas must take into account the protection of persons and property on the ground, even though risk calculation has not been regulated.

- Land reserve for future construction

It is possible to establish land reserves for future airport construction or enlargement. The main planning instrument for this purpose would be a Sector Plan, although until now it has been achieved by means of special Acts of Parliament. According to the land reserve Acts, many activities can not be undertaken without the prior consent of the public enterprise in charge of airport management, “*Aerportos de Portugal*” (ANA).

Construction

No building permit is required for airport-related constructions undertaken by public entities in charge of airport administration or by concessionaires acting within the purpose of their concession.

No permit has been required for airport construction until now but new legislation will require the CAA’s authorization.

Operation

All the standard environmental permits are required regardless of the ownership of the land or the nature of the person or entity undertaking the activity.

No specific environmental permit is required for airport operation.

Airport operation requires an authorization from the CAA.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise must be taken into account by municipalities to define land uses and must be integrated with spatial planning. The law distinguishes 2 noise zones which must be defined in all local land use plans.

There are no specific provisions regarding airport noise planning or noise abatement measures.

Noise abatement plans must be drafted in case there are conflicts between airports and adjoining land use. The plans are adopted jointly by the Ministries in charge of environment and transportation.

Operation restrictions apply at night by setting a quota count system and a maximum cap of movements per week.

Air quality

There are no specific provisions for airport-related air quality.

Air quality is monitored in order to analyse airport environmental impact, although there is no specific legislation concerning airport-related air pollution.

SLOVAKIA

SPATIAL PLANNING SYSTEM

The “Territorial Development Conception”, or National Development Plan, is oriented towards socio-economic development, aimed at reducing disparities among the different areas of the country.

Regional plans define the basic structure of the territory, i.e. urban areas, infrastructure, transportation network and protected areas.

Municipal plans designate the areas to be developed and those where construction is restricted or forbidden, and locate transportation infrastructures, public utilities, and protected areas.

Areas designated for development as well as for public use or construction require the development of a “Zonal Territorial Plan”, regulating in detail land uses, building conditions, links with public utility networks, etc.

These plans are organized in a hierarchical structure where lower levels must always be in conformity with higher levels. All spatial plans have a binding part applying both to public and private parties.

Airport planning must be integrated into the spatial planning system.

REGULATIONS AND PERMITS

Construction permits

Construction activities need to obtain first a “territorial decision” which could be either a “decision on construction siting” or a “decision on the use of territory”, and then “building permission” from a competent “building office”. Both permits must be obtained separately, following independent procedures. The “construction siting” decision is not required when the spatial plan includes sufficient detail on the building plot, the exact location of the building and the construction conditions. “Use of territory” decisions are always required when the project involves changes in land use.

There are no exceptions or exemptions for large infrastructures or public projects, but in some instances building permits are issued by special authorities. In the case of airports this is the Civil Aviation Authority. The “decision on the use of the territory” must, nevertheless, be taken by the district authorities.

Environmental permits

EIA is regulated in accordance with EU Directives. The procedure includes a preliminary assessment, or “screening”, which may lead to a full evaluation or to the approval of the project. A full EIA may also be required at any time if during the project’s implementation the Ministry of the Environment considers that the possible impacts so require.

The evaluation of plans and programmes is regulated in somewhat ambiguous terms, and the “SEA” Directive 2001/42/EC, has not yet been transposed.

Other environmental permits required for water discharge or waste management must be obtained separately from the municipality.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The Slovak Government has been implementing an airport decentralization and privatisation policy, but there is no planning document analysing the future requirements of the system.

- Airport

There are no officially approved statutory airport development plans. Each airport company is responsible for preparing an internal General or Master Plan as a working document, where future developments of the airport are analysed. The last General Plan for Bratislava Airport was developed by the Slovak Airport Administration in 2000. The plan was not officially approved but was sent to the City of Bratislava for its inclusion and consideration in the municipal spatial plan.

Municipal plans are the only official spatial planning documents where airport planning takes place.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Airport companies are responsible for preparing maps with “obstacle protection zones” based on the ICAO obstacle limitation surfaces, although they are more restrictive than Annex 14 surfaces in some cases, in order to prevent illegal development. The maps are made available for citizen participation in the surrounding communities before being sent to the CAA for approval by Decree. The maps are binding on municipalities, which should include them into their

spatial plans, and on “building offices”, which must take them into account when granting building permissions.

- Noise Impact

Noise protection instruments have not yet been developed in Slovak legislation. Noise contours were calculated in the past for Bratislava airport but were not taken into account in spatial planning. In August 2005 new contours were sent to the municipality for inclusion in the local plan to create a “noise protection zone”.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

Land reserves must be included in spatial plans. Airport master plans are only internal documents and lack the power to establish such reserves.

Construction

Construction activities within airport grounds require a “territorial decision” from the district’s “building office” if there is any change in land use or the spatial plans did not regulate plot and building conditions in sufficient detail. A building permit issued by the CAA is also needed.

Most environmental permits would be included in the approval following an EIA process. Otherwise, the permits for waste management and water treatment should be obtained from the municipality.

Operation

Airports require an operating license from the CAA. Certification is not yet regulated but Slovak aviation authorities are already requesting airport companies to meet some of ICAO’s requirements.

AIRPORT NOISE AND AIR QUALITY

Noise

Aviation noise has not been the object of specific legislation. The “noise” Directive 2002/49/EC has been transposed but there are no major airports in the country.

No land-use restrictions have been applied to date and there are no noise abatement plans.

Air quality

There are no specific provisions on airport related air pollution.

SLOVENIA

SPATIAL PLANNING SYSTEM

The Spatial Development Strategy of Slovenia (SDSS), adopted in 2004, provides the framework for spatial development across the entire national territory.

Municipalities must prepare a Conception of Urban Development, setting out in detail their spatial development strategy. This includes the designation of new development and renewal areas, the general distribution of land uses and public facilities, and the strategy for the location of infrastructures, green areas, sport facilities, as well as disaster protection and spatially relevant developments.

Local Detailed Plans are municipal implementation documents, which plan in detail individual areas and spatial arrangements with known investors. For spatial arrangements of national significance, such as airports, the same type of document must be drawn up by the relevant ministry. Airport planning must be integrated into the spatial planning system through those Detailed Plans of National Importance.

These plans are organized in a hierarchical structure where lower levels must always be in conformity with higher levels.

REGULATIONS AND PERMITS

Construction permits

Every construction activity in Slovenia requires a building permit granted by the building authority. Only small individual buildings are exempted. Airports, like other infrastructures, also require permits for all construction.

Building permits are generally granted by the local authority, but permits for spatial arrangements of national significance, such as airports, are issued at the State level.

Environmental permits

EIA and SEA are regulated according to EU Directives. The procedures are integrated into the process for the preparation and adoption of the Detailed Plans of National Importance.

In the case of airports, an operating permit is also required once the construction activity is finalised, to check compliance with the conditions stated in the approval of the SEA or EIA reports.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

According to the Aviation Act 2001, the Ministry of Transport is responsible for preparing the “national civil aviation development program”, to be adopted by the National Assembly at the proposal of the Government, although this has not yet been prepared.

- Airport

The Ministry of Transport is also responsible for initiating the preparation of the Detailed Plans of National Importance for every airport of “national significance”. No such a plan has yet been prepared.

Once plans are prepared, they will have to be adopted by the government through a decree, and will be binding on municipalities, which will have to integrate them into their spatial plans.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The CAA is responsible for preparing maps with “obstacle protection zones” based on the ICAO obstacle limitation surfaces. Affected municipalities are informed of the requirement to consult the CAA before granting building permits in those areas.

- Noise Impact

There are no noise contours for any of the international airports in Slovenia. According to the Aviation Act, the CAA is responsible for tasks related to the “protection from noise and other aircraft emissions”.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports. The Spatial Development Strategy of Slovenia refers to the need for risk prevention to be taken into account when deciding the location of a new airport.

- Land reserve for future construction

Land reserves will have to be included in Detailed Plans of National Importance for airports.

Construction

Construction activities within airport boundaries require a building permit from the Ministry of the Environment and Spatial Planning. Environmental permits would be included in the approval following an EIA process. The prior consent of the CAA is also required.

Operation

The Ministry of the Environment and Spatial Planning must grant an operating permit, after checking compliance with the conditions set by the environmental approval, and the building permit. The CAA shall, after checking safety and compliance with regulations, grant operating permits for everything related to aviation.. Airport certification is not yet regulated.

AIRPORT NOISE AND AIR QUALITY

Noise

Aviation noise has not been the object of specific legislation. The “noise” Directive 2002/49/EC has been transposed but there are no “major airports” in the country. Land use restrictions could be applied once Detailed Plans of National Importance are prepared and adopted.

Air quality

There are no specific provisions for airport-related air pollution.

SPAIN

SPATIAL PLANNING SYSTEM

Spatial planning has been completely devolved to the Regions, so the national government only retains the power to adopt framework legislation setting the principles to be followed by the regional and local governments. There are no spatial plans at the national level.

Regional strategic plans can cover the entire region or concentrate on a specific area. In many cases there are provisions for plans or programs that provide coverage for large infrastructural developments of regional interest. In all cases, regional governments maintain a high degree of control over local plans which are drafted at the local level.

The archetypical local planning instrument in Spain is the general plan which can be considered a framework plan because it establishes the general pattern of development for the entire municipality and determines the location and characteristics of all major infrastructures and services. Detailed planning is conducted primarily through partial and special plans.

Airport planning is a competence of the national government, and must be integrated into the general spatial planning system, through local special plans.

REGULATIONS AND PERMITS

Construction permits

In principle, all building and construction activities require a building permit issued by the Municipality regardless of purpose or ownership. However, specific sector legislation has established a general exemption that “general interest” infrastructures, such as airports built by national authorities should not be subject to any control by local governments. The same occurs with specific projects considered “of regional interest” which are subject to the control of the regional government but not to the development control system managed by the municipalities.

Environmental permits

Spanish legislation and practice on EIA follows the dictates of EU Directives in this area closely. However, as regards the evaluation of plans and programs, Spain has not yet fulfilled the obligations imposed by the “SEA” Directive 2001/42/CE which will probably be transposed during the first half of 2006. In some Regions, land use plans and other planning and programming documents are already subject to environmental evaluation, but such requirements cannot be applied in the case of plans adopted by the national government.

Other environmental permits required for water treatment and waste management must be obtained separately from the municipalities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

Recently a new “Transport Infrastructure Strategic Plan” has been approved by the Government. It includes general guidelines as well as specific measures and investments to be executed in the period 2005-2020.

- Airport

All “general interest” airports are required by law to prepare a Master Plan which shall include not only the infrastructure, buildings and facilities required for operation of the airport in the short term, but also the area required for maximum development in the future. This Plan is binding on all subsequent spatial planning, and local spatial plans will have to include the entire area marked for future development within a specific “infrastructure zone” which prevents any development from taking place in such area.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The implementation of safety requirements recently takes place in Spain by means of “aeronautical servitudes” established for each airport by decree on the basis of the surfaces and restrictions defined by a specific law. It prevents the owners of adjoining land from building or surpassing certain height restrictions. The DGAC (CAA) is responsible for keeping those maps and decrees updated.

- Noise Impact

Aeronautical servitudes were recently enlarged with the establishment of acoustical servitudes”, aimed at preventing land uses which are not compatible with airport operations. However, the extent of these servitudes is yet to be legally determined.

Noise contours are included in the airport Master Plans approved by decree.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

Each airport Master Plan establishes the boundaries for future growth based on maximum projected development. This area, which can be extensive, should be considered a special infrastructure zone by the local plans, and become unavailable for any other purpose except uses such as agriculture which can be easily eliminated when construction of the development begins. This restriction does not give rise to any compensation: the owners will receive the price of the land when it is acquired for public use in the future. Such land reserves are, nevertheless, subject to certain time constraints. Land use planning legislation establishes almost invariably a maximum period of time, usually four or five years, during which land reserves can be maintained. After this period, the owner can request that the land either be acquired via compulsory purchase or that the restrictions be lifted.

Construction

No building permit is required at “general interest” airports for work undertaken by the State operator (Aena). Work for commercial or industrial purposes not directly related to airport operations or undertaken by other developers will be subject to the usual municipal building permit requirements.

Most environmental permits are included in the approval following an EIA process. Permits for waste management and water treatment must be obtained separately from the municipality.

Operation

Airports are required to obtain prior authorization from civil aviation authorities before they can begin operations. Some facilities, like fuel storage or sewage treatment, may require a specific permit in order to begin operation.

Airport certification has not yet been regulated in Spain.

AIRPORT NOISE AND AIR QUALITY

Noise

As a general rule, environmental competence lies within the same level of government that is responsible for the construction or authorisation of any project. This means that airport noise control is left to the national authorities, and is conducted according to national legislation.

“Noise” Directive 2002/49/EC has already been transposed, but noise levels for specific activities or areas have not yet been set.

Land use restrictions are imposed by the DGAC on the basis of the noise contours included in airport Master Plans or the environmental approvals following specific EIA processes in which compensation measures are also defined.

Air quality

Although the impact of airports on air quality can be considered as one of the factors contributing to air pollution, it is not specifically taken into consideration for the regulation of land uses.

SWEDEN

SPATIAL PLANNING SYSTEM

There are no spatial plans at national level, although Central Government can issue policy statements with clear spatial impacts on areas of “national interest”. Regional plans are strategic documents indicating fundamental features for the use of land and water areas as well as guidelines for the location of development and infrastructure.

Municipalities must prepare a “comprehensive plan” covering their entire territory, in which some strategic issues must be addressed, mainly concerning the intended use for land and water areas, the development and preservation of the built-up environment and the integration of national interest and environmental quality standards. These plans have no binding effect, although they must be taken into consideration by other spatial plans and decisions concerning the use of land.

Construction is regulated by “detailed development plans” and “area regulations” adopted for those parts of a municipality where a comprehensive approach to development is required.

Local plans can contradict regional or national policies but municipal decisions can be annulled by county boards if proven to be contrary to the public interest.

REGULATIONS AND PERMITS

Construction permits

All building and construction activities require a building permit issued by the Building Committee, unless a detailed development plan or an area regulation establishes special provisions to the contrary.

No exceptions or exemptions are defined for public infrastructures; only constructions designed for national defence are exempted from building permit requirements.

Environmental permits

Environmental Impact Assessment is applied to projects, plans in programmes according to the requirements of EU legislation.

There is a long list of activities which are considered “environmentally hazardous” and require an environmental license. The environmental authorities can require a license for any activity which they consider may involve environmental or health risks, even though it is not included in the list.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

Most airports are owned and operated by the Swedish Civil Aviation Administration (LVF), which prepares airport development plans and sends them to county administrative boards for approval. These plans do not have, nevertheless, a statutory basis, even though they are official documents. Once they have been approved by the county board they must be taken into consideration by spatial plans for the area, although municipalities are not bound to integrate them into their local plans. Local regulatory plans can be repealed, if they are considered to be contrary to the national interests, as expressed in an airport plan.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Airport plans include the safeguarded areas required to protect the obstacle limitation surfaces of current and projected infrastructures.

Construction projects within these areas must be cleared with the CAA before a building permit can be granted.

- Noise Impact

Airport plans include current and projected noise contours and define a “Building Restriction Area” on the basis of noise exposure. The restriction area is included in the EIA decision and must be taken into consideration by spatial plans. Municipalities, nevertheless, may disagree and propose their own noise contours, originating a conflict which can only be solved on a case by case basis at the time of adopting detailed development plans or issuing building permits.

- Risk prevention

There is no specific legislation regarding third-party risk areas, but the aviation authorities have considered this factor in connection with some building permits in the vicinity of airports.

- Land reserve for future construction

There are no land reserves for airport development. Land is usually purchased by the aviation authority once the airport development plan and the EIA have been approved.

Construction

Building permits are necessary for all airport constructions.

All airports require some sort of environmental assessment to be carried out: by Central Government in the case of runways over 2,100 m, by the Environmental Courts for runways over 1,200 m or more than 100 operations/year, and by municipalities in all other cases.

Operation

Airports require an operation permit issued by the CAA.

Airports are included among the activities that require an environmental permit to operate.

Airport certification has not yet been regulated in Sweden.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport development plans include a “building restriction area” based on noise exposure, which must be taken into consideration when adopting detailed spatial plans or issuing building permits.

There are no noise abatement plans, but environmental permits include provisions on the sound insulation costs to be paid by the airport operator.

Air quality

The environmental goals set by the Swedish Government lead to the introduction of take-off and landing charges based on total emissions of hydrocarbons and nitrogen oxides.

UK

SPATIAL PLANNING SYSTEM

The spatial planning system in the UK has recently undergone considerable change with the passing of the Planning and Compulsory Purchase Act in 2004.

Local authorities, 388 two tier county and district councils and single tier unitary councils, play a central role in spatial planning. They are required to prepare a Local Development Framework (LDF) comprising a Core Strategy and a suite of Local Development Documents (LDDs) where more detailed policies and proposals on specific land use planning issues and/or geographic areas can be provided.

The LDF and any decisions on planning applications must comply with national policies and regulations established by the Office of the Deputy Prime Minister (ODPM) through National Planning Policy Guidance (PPG) Notes, Planning Policy Statements (PPS) and Government Circulars. They must also comply with the Regional Spatial Strategies (RSS) which are prepared by the 8 Regional Assemblies and which set out the broad development strategy for a region. The RSSs are required to include a Regional Transport Strategy which can include policies on the development of airports and surface access.

The different levels of government (national, regional and local) are closely integrated to ensure a consistent approach to plan-making and the day-to-day control of development. All plan-making and planning applications are subjected to statutory processes of public consultation.

REGULATIONS AND PERMITS

Construction permits

In the UK, most types of development require planning permission from the local planning authority before construction can proceed. Even those few exceptions established by the legislation require consultation with the local authority.

For major applications, such as new airport developments and major expansion proposals, which are likely to have regional and national impacts, the government can use its 'call in' powers and require that the application is determined by means of a public inquiry.

New parliamentary procedures were introduced in 2001 by the government aimed at speeding up the decision-making process for major projects and reducing planning costs. A key component of these procedures is for Parliament to have the right to debate such proposals and to approve them (or otherwise) in principle.

Environmental permits

The regulations on assessment of the impact of projects on the environment follow EU Environmental Directives closely. However, there is a lack of clarity as to whether non-statutory airport master plans prepared by the airport authorities should be accompanied by Strategic Environmental Appraisals (SEAs).

Environmental Assessment and SEA processes, which are integrated in the planning application system, are administered by the local planning authorities, although several national agencies may participate.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The White Paper: The Future of Air Transport was published in 2003 by the Department for Transport, following an extensive period of consultation. It sets down the national policy and strategic framework to guide the development of airport capacity until 2030. All owners/operators of major commercial airports are requested to prepare or update Master Plans or Development Strategies which take account of the White Paper, and can be used as a basis for consultation with local authorities and regional government organisations.

- Airport

The airport operator is responsible for the planning and development of the airport. Master Plans are non-statutory documents prepared on a voluntary basis, with no legal status. They do not need to be approved by the CAA, national or local government. However, the new planning system does allow such master plans to be incorporated into Area Action Plans (AAP), which could then become one of the local development documents comprising a Local Development Framework (LDF). This possibility is subject to the local authority agreeing to this approach.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Certain civil and military aerodromes, selected on the basis of their importance, are officially safeguarded. This protection is defined on safeguarding maps, which are prepared by the airport operator, certified by the CAA and are intended to inform affected local authorities on how to respond to development proposals, including development which might create a bird hazard. Within

Safeguarded Areas it is a requirement for the local authority to consult with the aerodrome operator with respect to most applications for development.

Operators of airports which are not officially safeguarded are encouraged to take steps to protect airports from the effects of development by establishing consultation procedures with the LPA.

- Noise Impact

For all major aerodromes, noise contours have to be prepared for the existing and forecasted traffic, to determine approximately which residential properties are affected by the different noise exposure categories determined by the government. This information is then used to inform local planning policies, to determine decisions on planning applications, and to determine whether existing residents may be entitled to compensation payments including roof insulation and double glazing, and in some cases relocation packages.

- Risk prevention

The airport authorities, in consultation with the CAA and local authorities, have to prepare maps showing Public Safety Zones. These zones are areas of land at the ends of runways at the main UK airports within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident.

There is a general presumption against most types of development, although such uses as open storage, long stay/employee car parking, low intensity public open space, unmanned structures, golf courses and allotments may be acceptable.

Compensation is also considered in some cases.

- Land reserve for future construction

The White Paper: The Future of Air Transport supports the safeguarding of land at several airports for future developments.

Compulsory acquisition is possible, although it is subject to obtaining an Order from the Secretary of State for Transport.

Construction

Prior to any construction works taking place at airports it is necessary to obtain planning permission through the general development control system, where the Environmental Impact Assessment, when necessary, is integrated.

No permit is required for some specific small developments, although consultation with the local authority is required.

Operation

All civil and military aerodromes used for the public transport of passengers or for the purposes of instruction must be licensed and certified by the CAA.

AIRPORT NOISE AND AIR QUALITY

The White Paper: The Future of Air Transport sets out the government's latest policies with respect to aircraft noise and air quality. It established the following objectives:

- To require that airport developments are consistent with existing arrangements for the control of the noise impacts of aviation, and to develop further procedures and regimes for managing noise, including night noise.
- To respect targets on air quality which have been agreed to protect human health and the wider environment;

Under the White Paper, the government expects relevant operators to offer households subject to high levels of noise (69 dB(A)) assistance with the cost of relocating and to offer acoustic insulation to noise sensitive buildings exposed to medium and high levels of noise (63 dB(A)).

With regard to air quality, the government has set out a National Air Quality Strategy, including the objective of bringing aviation within the European emissions trading scheme, which must be considered by the airport operators.

For the 3 London airports (Heathrow, Gatwick and Stansted) which are the country's worst affected airports in terms of population affected by noise and air quality, there is additional legislation. The White Paper also suggested some additional actions to tackle these problems.

Noise and air quality issues can be integrated into the statutory spatial planning process through incorporating Airport Master Plans into Area Action Plans (AAP), adopted by the local authorities. This is subject to local authority agreement.

When a planning permission for an airport development is granted, it is usually subject to a number of conditions, including noise and air quality issues, which the airport developer will need to comply with before construction can commence and/or the development becomes operational.



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Country Report

AUSTRIA

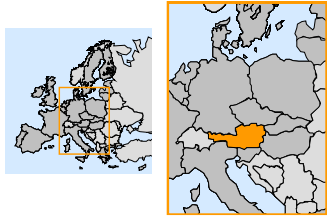


This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

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AUSTRIA		Location Map												
Population	8.2 mill. (100 inhabitant per sq. Km)													
Airports network There are six international airports in Austria. Vienna International Airport is owned and managed by Flughafen Wien AG, a private company. The other five airports are managed by public enterprises.														
Spatial planning system In accordance with Federal Constitutional Law, spatial planning is a competence of the <i>Länder</i> , which have their own legislation. <ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National level:</td> <td>No competence in spatial planning. ÖROK-Austrian Conference on Spatial Planning</td> </tr> <tr> <td style="padding-left: 20px;">Regional level:</td> <td><i>Land</i> governments</td> </tr> <tr> <td style="padding-left: 20px;">Local level:</td> <td>Planning regions, Districts, Municipalities</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>Spatial Development Concept (ÖROK). Regional development schemes</td> </tr> <tr> <td style="padding-left: 20px;">Framework plans</td> <td>Local development concepts</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans</td> <td>Land use plans. Building regulation plans</td> </tr> </table> • Process: Processes vary in accordance with each <i>Land's</i> Spatial Planning Act. The hierarchical nature of the system ensures vertical coordination. Public consultation is included. 			National level:	No competence in spatial planning. ÖROK-Austrian Conference on Spatial Planning	Regional level:	<i>Land</i> governments	Local level:	Planning regions, Districts, Municipalities	Strategic plans	Spatial Development Concept (ÖROK). Regional development schemes	Framework plans	Local development concepts	Regulatory plans	Land use plans. Building regulation plans
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Framework plans	Local development concepts													
Regulatory plans	Land use plans. Building regulation plans													
Regulation and permits All construction activities require a building permit from the relevant building authority: for airports it is the Federal Ministry of Transport, Innovation and Technology. Compliance with the local development concept currently in force is required.														
Airport planning <ul style="list-style-type: none"> • Policy and planning: There are internal documents, but no statutory airport master plans. Coordination with respective <i>Land</i> governments is required for integration of airport plans into spatial planning instruments. • Spatial impact: Coordination with the respective <i>Land</i> government is required in order to integrate restrictions into spatial planning instruments or to request consideration of spatial impact by the building authorities. Noise contours around the Vienna airport are integrated into the regional development scheme. Land reserves can be included in planning instruments only after the terrains have been acquired. • Construction: Location permit + building permit required from the CAA. Authorisation by the Federal Ministry of Transport, Innovation and Technology. Environmental permits and conditions integrated in EIA procedures. • Operation: An updated operating permit is issued by the CAA for the entire airport whenever new development takes place. Airport certification is required. 														
Airport noise and air quality <ul style="list-style-type: none"> • Noise: Not a common practice in all <i>Länder</i> in Austria. Mediation procedure suggested by the Federal EIA Act has been successfully implemented in Vienna. Noise zones are determined according to the noise contours calculated in accordance with an agreed methodology. Different compensation measures defined for each zone. • Air quality: Air quality is monitored around several airports, and is sometimes integrated into the local monitoring network. 														

1. SUMMARY

SPATIAL PLANNING SYSTEM

Spatial planning systems are defined in accord with *Land* legislation. However, this does not mean that there is a variety of plan types. Most laws define similar planning documents at the supra-local (*Land*) and local (*Gemeinde*) levels.

The Federal Government has no explicit spatial planning competence, so there are no spatial plans as such at the national (federal) level. However, there are some plans and policies at this level which impact on spatial planning: for example, the Austrian “Spatial Development Concept” developed by the ÖROK (which mentions airports only with regard to the need for guaranteeing good accessibility from all regions in the country) and some sectoral plans.

Each *land* is responsible for the “regional development scheme” and “spatial planning schemes and concepts”. The schemes are approved through a binding decree of the *Land* government, but the concepts are non-binding recommendations.

Local development concepts, local land use plans and building regulation plans are regulatory, detailed planning instruments.

As aviation is a competence of the national (federal) level, the integration of airport plans into the spatial planning system defined by each *Land* requires negotiation.

REGULATIONS AND PERMITS

Construction permits

All construction activities require a building permit from the relevant building authority. Different procedures are established by each *Land*. Depending on the *Land*, the only exemptions are minor construction activities. The municipalities are the relevant building authorities for urban development in general. The relevant federal ministry, or agencies under their umbrella such as the Civil Aviation Authority, are the building authorities for construction activities within their area of interest.

Environmental permits

Regulations on assessment of the impact of projects, plans and programs on the environment reflect the guidelines of EU Directives on the subject. Some additions exist, for example, the simplified EIA required for some specific projects, and the requirement for a mediation procedure in cases where conflicts are revealed during the EIA process.

Specific conditions may be established with regard to water management and air pollution.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The “General Transport Plan” (GVP-Ö 2002) includes some general provisions related to the development of the Vienna airport as the international gateway to Austria, its third runway and the connection to the railway network.

- Airport

Airport development plans are prepared by the airport companies as internal planning documents to serve as a basis for their investment plans. Sometimes, they are sent to the *Land* governments or to the municipalities, when the latter are updating their planning instruments.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Maps showing the obstacle clearance areas around each international airport are prepared by the CAA and sent to the affected *Länder* and *Gemeinden* for their consideration. In addition to the building permits granted by the local authorities, a permit from the CAA is required within these areas.

- Noise Impact

Noise contours must be calculated by the airport companies and may be sent to the relevant *Land* and surrounding municipalities for their consideration in their planning instruments. However, there is no common legislation or common practice on this matter in Austria.

- Risk prevention

There are no third-party risk surfaces around Austrian airports. Nevertheless, some risk assessment studies not strictly related to aircraft operation have been undertaken for specific areas around the Vienna airport.

- Land reserve for future construction

In those cases where the airport companies are the owners of the terrain, they may include land reserves in spatial planning instruments.

Construction

Airport construction requires several permissions from the Civil Aviation Authority.

All environmental permits and conditions are integrated into the EIA procedures. Building permits and the execution of construction activities must comply with any agreements reached during the mediation procedures and with the conditions established by the environmental impact statement.

Operation

An aerodrome operating permit is updated by the CAA whenever any new airport development takes place. Airport certification is regulated by the latest amendments to the Aviation Act, including some environmental matters, such as the definition of airport operating hours.

AIRPORT NOISE AND AIR QUALITY

Each *Land* is responsible for implementing the provisions regarding noise levels and air pollution included in its Spatial Planning Act or related ordinances. Once the *Land* has integrated noise and air quality provisions into its planning instrument, they will be binding on all municipalities located within its territory.

In that way, *Gemeinden* will be responsible for the execution of the provisions regarding noise and air quality, and limit urban developments in accordance with the restrictions imposed by the *Länder*.

Land use restrictions can also be imposed on municipalities through agreements reached as a result of mediation procedures. Compensation measures may be included in those agreements.

2. CONTEXT

Austria is a landlocked country in central Europe. Among its principal geographic and landscape features are the Alps, the Danube basin in the east, and extensive forests.

First settled by Celtic tribes, Austria became a republic in 1919; was annexed by Adolf Hitler in 1938, and regained full sovereignty in 1955. Several languages are used: the official language, German (nationwide), Slovene (Carinthia), Croatian (in Burgenland) and Hungarian (in Burgenland)

Austria is divided into nine states or *Bundesländer* (singular - *Bundesland*); Burgenland, Kärnten, Niederösterreich, Oberösterreich, Salzburg, Steiermark, Tirol, Vorarlberg, and Wien.



Figure 1. Map of Austria

Austria became a member of the European Union in 1995, and joined the Eurozone at its inception on 1 January 1999. With its well-developed market economy and high standard of living, Austria is closely tied to other EU economies, especially Germany's. Membership in the EU has resulted in an influx of foreign investors attracted by Austria's access to the single European market and by its proximity to economies aspiring to EU membership.

Austria's GDP stands at 28,990€ per capita, and exceeds the European Union average (22,400¹).

¹ GDP per capita in PPS (Purchasing Power Standards) at current market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	8,140,000
Latitude / Longitude	47°20' N, 13°20' E
Land area	82,444 sq Km
Coastline	0 Km
Capital City	Vienna
GDP per capita (PPS at market prices)	27,300
GDP real growth rate	2.4 %
Inflation rate	2.0 %
Unemployment rate	4.8 %

Table 1. Austria: Main facts and figures (2004) ²

2.1. Population and statistics

At present, the Austrian population exceeds eight million. The average density in Austria, 100 inhabitant per sq Km, is lower than the European average (EU-15 population density: 115).

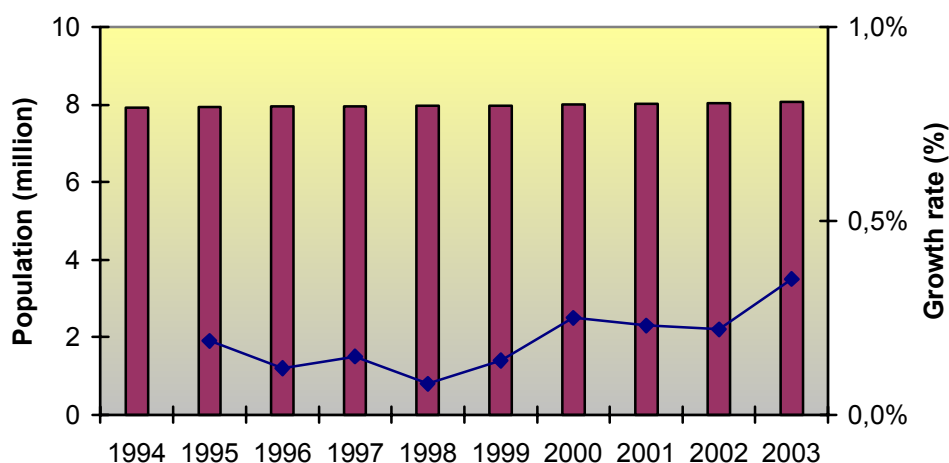


Figure 2. Austrian population evolution

² Source: EUROSTAT

In the last ten years, population growth has been stagnating, with growth rates under 0.5%. The main reason for this is the low birth rate, 8.81 births/1,000 population (2004 est), one of the lowest in the European Union.

The Austrian median age is 40.44 years, but population growth is threatened by the very low birth rate.

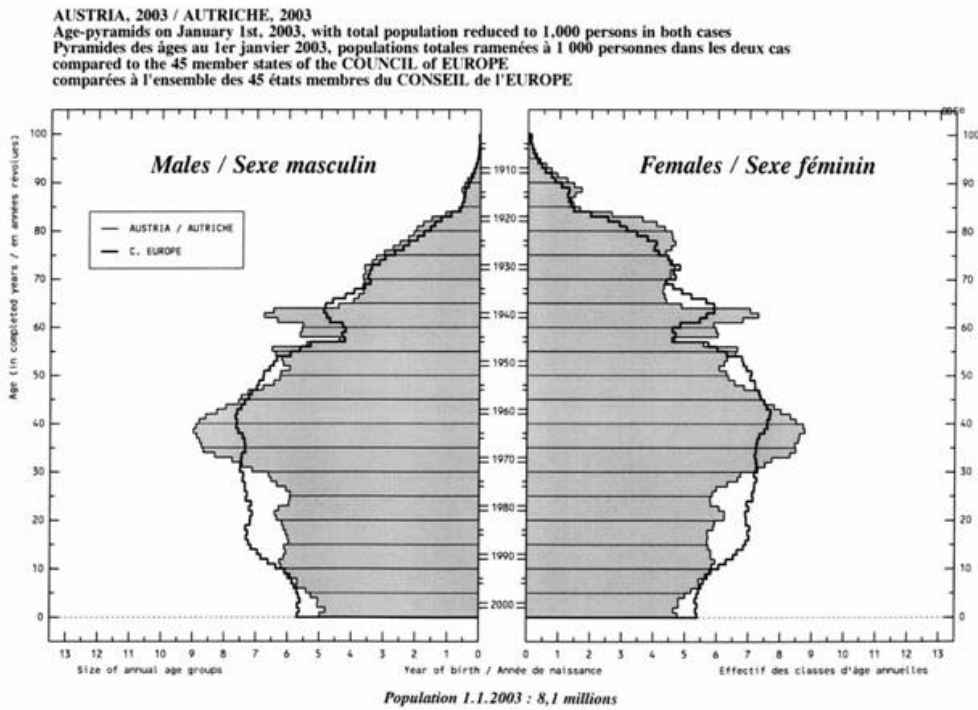
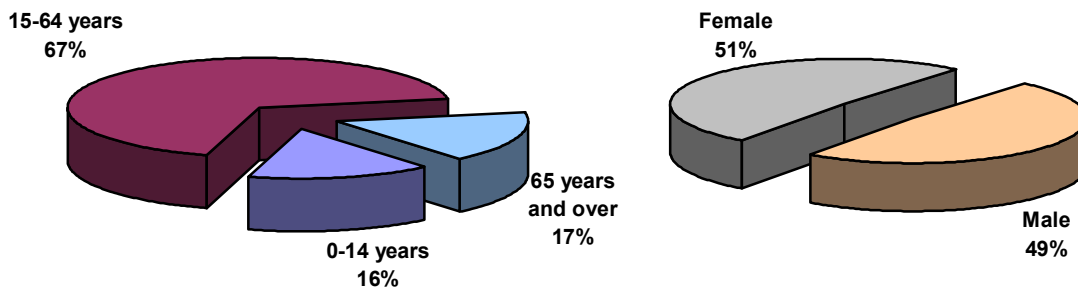


Figure 3. Austrian age-pyramids (2003)³



Figures 4 and 5. Austrian population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Austria is governed under the revised Constitution of 1929. It has a mixed presidential-parliamentary form of government. The Federal President, elected by popular vote for a six-year term, nominates the Prime Minister (or Federal Chancellor). The cabinet, headed by the Federal Chancellor, is responsible to the lower house (*Nationalrat*) of Parliament. The latter is elected by popular vote with proportional representation. The upper house (*Bundesrat*) is chosen by the provincial assemblies.

Austria is a federal republic, so its nine federal provinces are customarily referred to as States of Austria or *Bundesländer* (singular *Bundesland*).

According to the Constitution *Länder* and municipalities (*Gemeinden*) are fully responsible for the spatial development of their territories, as well as for most environment protection matters.

Aviation is a competence of the Federal Republic and is exercised through the Federal Ministry of Transport, Innovation and Technology and the Civil Aviation Authority.

2.3. Main airports

There are six international airports in Austria. The most important one is the Vienna International Airport, with more than 14.7 million passengers/year (2004). It is owned and managed by Flughafen Wien AG, a private company, but the *Land* governments of Vienna and Lower Austria participate in the company as shareholders (60% private shareholders of which 10% are for an employee foundation, 20% *Land* of Lower Austria and 20% *Land* of Vienna).

The five remaining international airports are managed by public enterprises owned by several administration levels (Federal Government, States, and Municipalities).



Figure 6. Austrian airport network

Table 2 shows commercial traffic in terms of passengers and cargo at the main Austrian airports during 2004:

Airport	Passengers	Cargo (Tons)
Vienna International	14,786,000	158,300
Salzburg W.A.Mozart	1,422,000	200
Graz	899,000	1,200
Innsbruck	728,000	500
Linz-Hörsching	750,000	600
Klagenfurt	486,000	100

Table 2. Austrian international airport data (2004)

3. SPATIAL PLANNING SYSTEM

No general law at the federal level establishes a common spatial planning system in Austria. The Federal Constitutional Law (*Bundes-Verfassungsgesetz*) only regulates the distribution of powers and responsibilities between the *Bund* (Federal Government), the *Länder* (States) and the *Gemeinden* (Municipalities).

3.1. Institutions

3.1.1. National

In accordance with the Federal Constitutional Law, and unlike other countries organised as federal states, the Austrian Federal Government does not have any explicit overall competence in spatial planning. However, the Federal Government is involved in spatial planning, as it clearly intervenes in this area through sectoral plans.

In effect, the Federal Government is fully responsible for areas such as transportation infrastructures, environment protection, energy policy, etc., which have clear consequences for spatial planning.

Those and other competences are regulated through federal legislation that impact on spatial planning, such as the Forest Law, the Federal Transport Network Law, the Aviation Law, the Environmental Impact Assessment Law, the Mining Laws, etc. The relevant federal ministry in each case is responsible for implementing measures concerning spatial planning within its area of interest.

Federal influence on spatial planning must be implemented by the States and the Municipalities. To ensure that implementation, the Austrian Conference on Spatial (also referred to in some translations as “Regional”) Planning (*Österreichische Raumordnungskonferenz*, ÖROK) was created in 1971. This joint organisation of the *Bund* (Federal Government), the *Länder* (States) and the *Gemeinden* (Municipalities), is responsible for coordinating spatial planning.

ÖROK’s executive committee is chaired by the Federal Chancellor and includes all federal ministers, *Länder* governors, the presidents of the Austrian Union of Towns and the Austrian Union of Communities, as well as representatives of various interest groups (the latter participate in an advisory capacity).

It must be noted that the ÖROK can only issue resolutions and recommendations that are not binding on *Länder* and *Gemeinden*. The participation of the latter, however, ensures a certain measure of agreement with those recommendations.

3.1.2. Regional

According to article 15 of the Federal Constitutional Law, responsibility for spatial planning lies with the *Länder*. This article states that all power not explicitly delegated to the Federal Government “remains within the autonomous sphere of competence of the *Länder*”.

To make use of those powers, each of the nine *Länder* has adopted a Spatial Planning Law (or Regional Planning Law in Vorarlberg and Burgenland). *Länder* are also responsible for adopting the building codes that define technical conditions for construction activities within their territories.

These regulations determine the general principles and goals of spatial planning within the territory of the *Land* as well as define the instruments for supra-local (*Land* level) and local (*Gemeinde* level) spatial planning.

In this way, the *Länder* define the regulatory framework for spatial planning within their territories. To do so they must take into account the guidelines of the federal government in the areas of transport infrastructure, energy policy, water rights, etc. and integrate them into the spatial planning system

Due to the absence of a common regulatory framework for this area at the national (federal) level, some differences are apparent between the spatial planning laws of the different *Länder*. Those differences do not arise in terms of planning instruments but rather with regard to legal details, terminology and implementation processes.

The situation described above hinders cooperative planning between different *Länder*. However, some initiatives of coordinated spatial planning exist, such as the Planning Co-operation East (*Planungsgemeinschaft Ost*) established in 1978 by Vienna and the surrounding *Länder* of Niederösterreich (Lower Austria, where the Vienna Airport is located) and Burgenland. This organisation was created to adopt joint measures and improve infrastructure in the eastern part of Austria. Another example is the Regional Management Vienna-Hinterland, which was founded in 1998 to promote co-operation between the districts within Vienna and the municipalities surrounding the capital city. Responsibility for this co-operation falls on the planning departments of Vienna and Lower Austria.

3.1.3. Local and area wide

There are two levels of local government in Austria: *Länder* (divided into districts -*Politische Bezirke*) and municipalities (*Gemeinden*). In addition, each *Land* can also establish “planning regions” with independent spatial plans. For instance, Lower Austria has eleven planning regions.

Districts, headed by commissioners appointed by the respective *Land* governor, are primarily responsible for administering federal programmes, but they have no direct competence over spatial planning.

Municipalities, on the other hand, are self-governing entities with a local council elected by the citizens. Their functions and responsibilities are defined by article 118 of the Federal Constitutional Law.

With regard to spatial planning, municipalities are subject to the regulatory framework established by the respective *Land* through its Spatial Planning Act. *Gemeinden* are responsible for drafting, adopting and implementing local land use plans. These plans are subject to supervision by the *Land* and must comply with spatial or sectoral plans developed at higher levels of government. *Gemeinden* are also responsible for granting building permits in accordance with the plans.

According to article 116a of the Federal Constitutional Law, several *Gemeinden* may agree on common spatial planning measures, provided that they are approved by the *Land*. That is the case of the KREKs (regional development concepts on a small level) founded and subsidised by Lower Austria to establish closer links between several of the more than five hundred *Gemeinden* within its territory.

3.2. Instruments

Spatial planning instruments are defined by the Spatial Planning Laws in each *Land*. However, this does not mean that there is a variety of types of plans; most of the laws define similar planning documents at the supra-local (*Land*) and local (*Gemeinde*) levels.

3.2.1. Strategic plans or policy documents

There are no spatial plans as such at the national (federal) level, as the Federal Government has no explicit spatial planning competence. However, there are some plans and policies at this level which impact on spatial planning.

ÖROK is responsible for preparing the Austrian “Spatial Development Concept” (ÖREK), and updating it every ten years. This task was accomplished for the first time in 1981, ten years after the foundation of ÖROK. Revised versions were prepared in 1991 and 2001 (currently in force). The latest version, which contains six general guidelines on the spatial development of the federation, was published in September, 2002. Airports are only mentioned as regards the need to guarantee good accessibility from all regions in the country.

ÖROK is also responsible for preparing a Spatial Planning Report, (*Raumordnungsbericht*), to describe the spatial development situation throughout the federation. The report discusses the variety and complexity of

planning schemes and the measures adopted at the various planning levels. The first spatial planning report was published in 1975; the latest one (the tenth) in 2002, covers the period from 1999 to 2001.

Some sectoral plans at the federal level impact on spatial planning, such as the General Transport Plan (*Generalverkehrsplan Österreich GVP-Ö 2002*) adopted in January 2002 in which the Federal Ministry of Transport, Innovation and Technology suggests the expansion of the Vienna airport.

On the other hand, the Spatial Planning Law passed by each *Land* defines the planning instruments at this supra-local level. These instruments usually consist of a “regional development scheme” and “spatial planning schemes and concepts”. They can be prepared for the entire territory of a *Land* or for part of it (a planning region). For instance, there are eleven planning regions in Lower Austria, and some regional development schemes have already been prepared.

Some Spatial Planning Laws (Salzburg) establish the need to set up official “regional associations” in each planning region. These associations are responsible for developing the regional development schemes for their respective planning region.

Regional development schemes are comprehensive plans with regulations and development policies which set out general guidelines for land use planning within the territory. They may also specify the location of environmental protection zones, areas reserved for recreation purposes, etc.

These schemes may impose restrictions on the spatial development of certain urban areas that must be respected by the municipalities in their planning instruments. For instance, the regional development scheme of *Wien Umland* (Vienna hinterland to the north and the south, the planning region of Lower Austria where the Vienna airport is located) includes the noise contour of 60 dB L_{Aeq} (day). On the basis of that contour, the regional development scheme imposes restrictions on the development of the urban areas affected by or close to the contour. In that way, the *Land* government tries to keep the number of inhabitants affected by high noise levels from growing.

Graphic materials accompanying the plans are designed on a scale of 1:50,000 or 1:25,000.

Regional development schemes are approved by a binding decree of the *Land* government. The concepts, on the other hand, are non-binding recommendations. Municipalities are obliged to take the provisions of the binding schemes into account and also to take the recommendations into consideration because the *Land* government must approve the planning instruments prepared by the municipalities before they are adopted by the local councils.

Sectoral spatial planning schemes at the *Land* level focus on the development of specific areas for commerce, industry, transport, tourism, etc. However, in most *Länder* there is a tendency to develop these plans as concepts rather than approve them through binding decrees.

3.2.2. *Local (framework) plans*

The Spatial Planning Law adopted by each *Land* defines the “local development concepts” as framework planning instruments at the local (*Gemeinde*) level..

The “local development concepts” must describe the fundamental and long-term objectives of municipal development. They provide information on how the municipalities would like to structure their territories in the future, the target number of inhabitants and other economic issues. Graphic materials accompanying the plans are usually designed on a scale of 1:10,000.

These planning instruments should cover a ten-year periods, and be updated by the municipalities. This usually entails revising them twice a year to assess how well objectives are being met.

Local development concepts must include alternatives for the development of the territory. These alternatives must be evaluated and approved by the relevant *Land* before they are subject to citizen participation within the municipality. Compliance with measures or restrictions imposed by the relevant regional development scheme is checked.

Finally, local development concepts must be adopted by the municipal council through a Resolution.

3.2.3. *Regulatory (detailed) Plans*

The Spatial Planning Act adopted by each *Land* defines “local land use plans” and “building regulation plans” as regulatory planning instruments at the local (*Gemeinde*) level..

“Land use plans” must contain definitions of the distribution and types of zoning for the entire municipal territory. At the very least, they specify the land allocated for open space, building and transportation purposes.

“Land use plans” must establish population density. Graphic materials accompanying the land use plans are usually designed on a scale of 1:5,000. These “land use plans” are used as a basis for granting building permits.

“Building regulation plans” must be prepared for any areas designated for building purposes in the land use plans. They must regulate the type of buildings permitted, construction density, maximum building heights and basic architectural design. Graphic materials accompanying land use plans are usually designed on a scale of 1:2,000.

Proposals for both “land use” and “building regulation” plans must be formulated in accordance with the objectives and goals set out by the “local development concept”.

“Land use” and “building regulation” plans must be adopted by the municipal council and approved through binding decrees. In some *Länder*, the “local development concept” and the “land use plan” are jointly approved by the municipal council in a single decree.

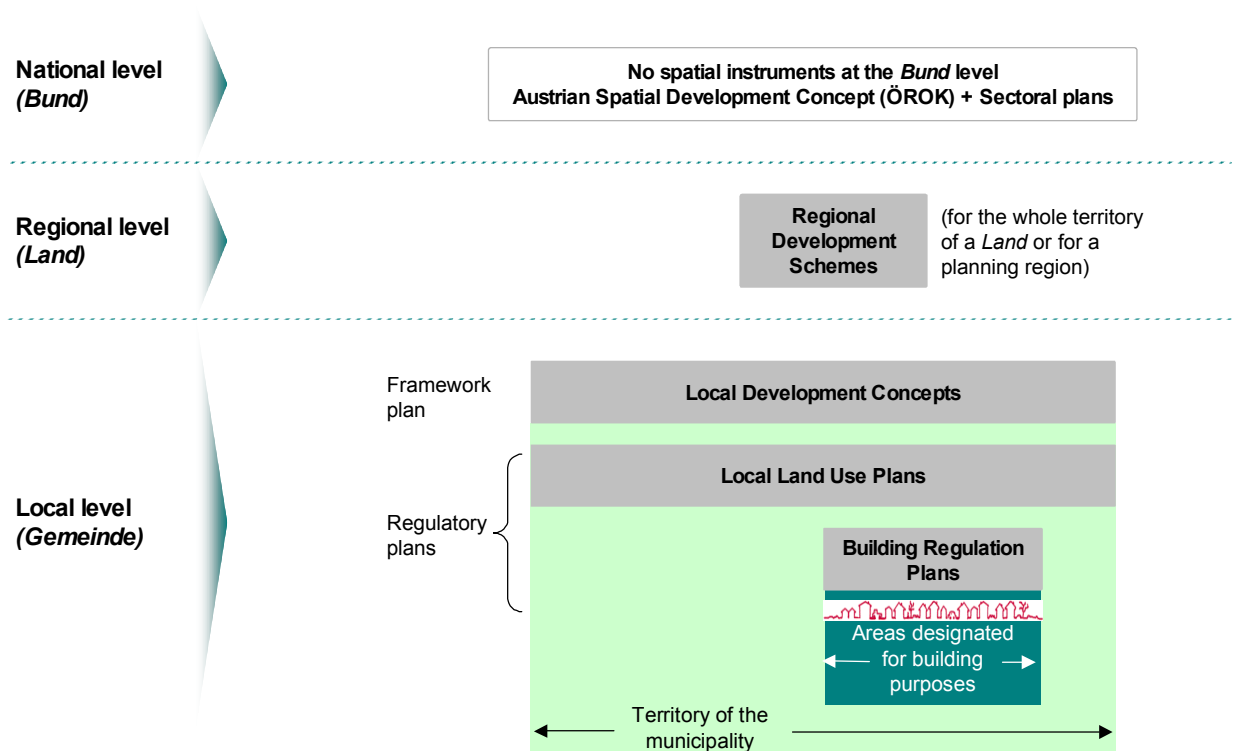


Figure 7. Spatial planning instruments

3.3. Process

3.3.1. Inter-governmental consultation

The degree of horizontal coordination of spatial planning activities is not high at the *Land* or *Gemeinde* levels. Co-operation is constrained by differences in the fiscal and political systems which lead to a climate that is more competitive than cooperative.

There are a few examples of good coordination, for instance, the above-mentioned Planning Co-operation East, (*Planungsgemeinschaft Ost*), established in 1978 by Vienna, Niederösterreich (Lower Austria) and Burgenland. At the local level, the best example is the Regional Management Vienna-Hinterland, founded in 1998 to promote co-operation between the districts within Vienna and the municipalities surrounding the capital city.

With regard to vertical coordination, the Austrian Conference on Spatial Planning (ÖROK) is the planning organisation in which the three levels are represented. Although ÖROK can only issue non-binding recommendations, the presence of *Länder* and *Gemeinden* in the organisation ensures understanding and consideration of its recommendations.

During the preparation of the periodic “Report on Spatial Planning”, all planning authorities are consulted about their activities for the reporting period. In that way, all legislative modifications, planning instruments that have been adopted and measures that have been taken by all the planning authorities in Austria are made known to all the members of ÖROK.

Vertical coordination is also ensured by the hierarchical nature of the spatial planning system in Austria. Most plans must be approved by the next level of government before they can be adopted by a planning authority.

Planning instruments must always comply with the provisions of higher level plans. Even the regional development schemes which are only approved by the Land Government must comply with sectoral plans that impact on spatial planning already adopted at the federal level.

3.3.2. *Policy Integration*

Although there is no specific mandate for the integration of federal policies into the spatial development process, planning instruments at the *Land* and *Gemeinde* levels must always consider the spatial consequences and implications of sectoral plans that have been developed by the federal ministries for their areas of interest.

In the case of airports, the best example of this approach is the possible integration of the expansion of the Vienna airport, including a third runway, into the next regional development concept of Wien Umland, the planning region of Lower Austria where the airport is located. The development scheme currently in force for that planning region already includes the airport and its noise impact. The future scheme could also show the results of the “mediation process” described below for the approval of airport expansion projects by the neighbouring authorities including new restrictions to urban development within areas which will be affected by noise in the future.

3.3.3. *Citizen participation*

Sectoral plans developed at the federal level and regional development schemes are not subject to citizen participation unless they require strategic environmental assessment or the specific measures proposed are subject to Environmental Impact Assessment. Some Spatial Planning Laws require consulting the regional plan proposal with a Board of Experts in areas of transport, tourism, environment, etc.

With regard to planning instruments at the local level, only the “local development concept” is subject to citizen participation. This must take place after the draft proposal has been approved by the respective *Land* as supervisory authority. Then, the draft proposal together with the amendments proposed by the *Land*, must be available for public consultation at the municipality for a period of six weeks. Once all the comments and objections have been assessed and answered, the municipal council can approve the plan and adopt it through a Resolution.

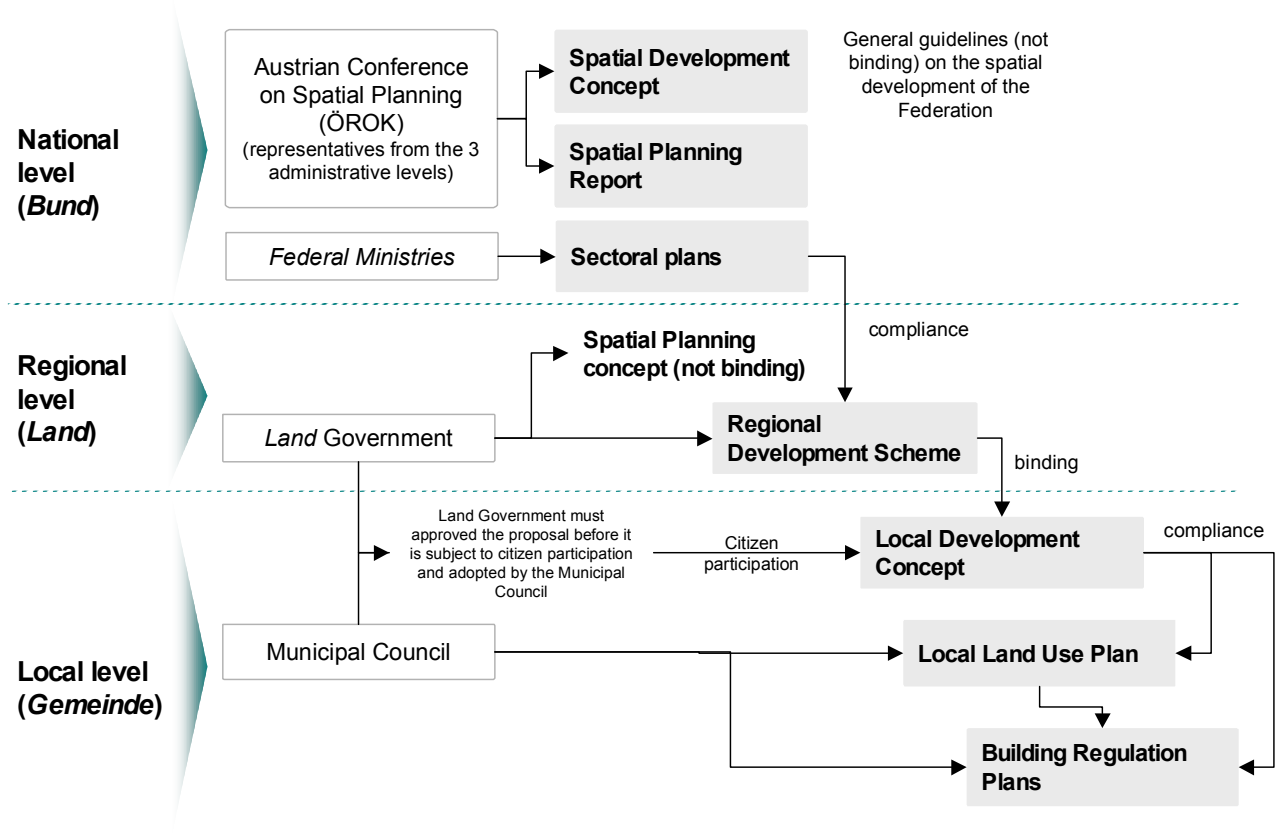


Figure 8. Spatial planning process

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

Spatial Planning Laws and Building Codes adopted by each *Land* specify that all construction activities require a building permit from the relevant building authority. Different procedures are established by each *Land*. In the case of urban developments, the documentation at the real estate register usually contains the procedures and identifies authorities involved.

4.1.2. *Exceptions or exemptions*

Only some minor construction activities, depending on each Building Code, are exempted from obtaining a building permit.

4.1.3. *Institutions involved: inter-governmental relations*

The municipality is the relevant building authority for urban development in general.

The relevant federal ministry or agencies under their umbrella such as the Civil Aviation Authority are the building authorities for construction activities within their area of interest.

In the case of airports and other transport infrastructures, all construction activities fall within the competence of the Federal Ministry of Transport, Innovation and Technology. The building permit for airport constructions is granted by the Federal Ministry once the project has been approved by the Civil Aviation Authority. In those cases, a public conference must be held at the relevant planning region to discuss building permission.

The CAA also participates in the process of granting building permits to urban developments in the vicinity of airports. Before the actual building permit can be obtained from the municipality, a permit from the CAA is required in areas affected by the obstacle limitation surfaces. .

4.1.4. *Relationship with planning*

No building permit can be granted if it goes against the provisions of a “local development concept”.

The building authority checks compliance with the relevant “local development concept” in force, as well as any restriction to height, density, etc, imposed by a “land use plan” or a “building regulation plan”.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

In Austria, Environmental Impact Assessment procedures are regulated by the Federal Act on Environmental Impact Assessment that was adopted in 1993 and has been modified several times.

This law follows the provisions of the Directive 85/337/EEC⁴ (the “EIA” Directive), but several activities have been added to the list of those requiring an EIA.

With regard to airports, the Federal Act states that the following activities shall require a complete EIA:

“a) Construction of new airports, excluding glider airfields and heliports that mainly serve for rescue missions, missions of the police administration, the performance of tasks of national defence or traffic monitoring using helicopters;

b) Construction of new runways with a length of 2,100 m or more;

c) Modification of airports by the construction of new runways or the extension of existing ones, if the total runway length increases by 25% or more due to the new or extended runway;

d) Modification of airports, if this is expected to increase the number of flight movements (motor aircrafts, power gliders in powered flight or helicopters) by 20,000 or more per year within a forecasting period of five years;”

The Law states that the following activities will only require a simplified EIA, to be decided on a case-by-case basis. A, B, C, D and E are different types of protected areas according to the Act:

“e) Construction of new runways with a length of 1,050 m or more in protected areas of Category A, D or E;

f) Modification of airports by the construction of new runways or the extension of existing ones in protected areas of Category A, D or E, if the total runway length increases by 12.5% or more due to the new or extended runway;

g) Modification of airports in protected areas of Category A, D or E, if this is expected to increase the number of flight movements (motor

⁴ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

aircrafts, power gliders in powered flight or helicopters) by 12.5% or more per year within a forecasting period of five years.”

According to the Law, activities at existing military airports do not require an EIA even if they are included in the list above. Activities designed to enhance air safety conditions are not required to undertake an EIA unless they include the construction of a new runway longer than 2,100 m.

Another interesting point of the EIA Act is that a mediation procedure must be initiated if a major conflict is detected during the public hearings.

“If major conflicts of interest between the project applicant and the other parties involved or affected are revealed in the course of the procedure, the authority may interrupt it for a mediation procedure upon request of the project applicant. The results of the mediation procedure may be forwarded to and considered by the authority, within the limits of statutory possibilities, in the rest of the development consent procedure and in the decision. Further agreements between the project applicant and the parties involved or affected may be documented in the administrative order. The project applicant may submit a request on the continuation of the development consent procedure at any time.”

Directive 2001/42/EC⁵ (the “SEA” Directive) has recently been transposed into Austrian Federal law.

4.2.2. *Other environmental controls*

All environmental permits are integrated into EIA procedures. Nevertheless, the Federal Ministry of Agriculture and Forestry, Environment and Water Management may establish specific conditions regarding water management and air pollution.

4.2.3. *Institutions involved*

According to the Federal Act on EIA, the *Land* government in which the assessed activity is located is the responsible body for the procedures. Excepted are specific cases of EIAs of federal roads and high-speed railways. The latter are the responsibility of the Federal Ministry of Transport, Innovation and Technology.

The Federal Ministry of Agriculture and Forestry, Environment and Water Management is the central participating body at the federal level in EIA procedures.

⁵ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

Municipalities and citizens also participate in the process.

The Federal Act on EIA provided for the creation of an Environmental Council in which political parties, labour and economic organisations, *Länder*, *Gemeinden* and the Federal Government are all represented. The functions of this council are related to the proper implementation of the Federal Act on EIA and ways to improve it.

4.2.4. Integration with other permits

The Federal Act on EIA integrates assessment into the application process for “development consent”. This consists of project approval and a positive environmental statement which may lead to granting of the building permit. In that way, all environmental permits are integrated within the EIA procedure.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Transport policy in general is a competence of the federation (*Bund*). According to the Federal Aviation Act, most recently amended in November 2004, the Federal Ministry of Transport, Innovation and Technology is responsible for airport planning within airport boundaries and for the obstacle clearance areas around the airports. The Austrian Civil Aviation Authority is the technical body under the Federal Ministry with competences in that area.

In fact, however, the participation of the Federal Ministry in airport planning is very reduced.

The same occurs with the *Länder*, although in this case, most *Länder* are shareholders of the airports located within their territories, so they participate in airport planning decisions through their representatives on the supervisory or advisory boards of the airport companies.

Airport planning is carried out primarily by the airport companies, and in some cases with strong private participation in their shareholding..

Other organisations, municipalities and citizens may participate in airport planning if a mediation procedure, as defined in the Law on EIA, takes place when a major conflict is revealed.

5.1.2. Instruments

As transport, and aviation in particular, is a competence of the national (federal) government, (see article 10 of the Federal Constitutional Law), the Federal Ministry of Transport, Innovation and Technology is the body responsible for proposing airport developments in accord with the needs of the federation.

The “General Transport Plan” (GVP-Ö 2002) includes some general provisions relating to the development of the Vienna airport in its role as the international gateway to Austria, the third runway and the connection to the railway network.

The Federal Ministry is also responsible for classifying airport terrains as “traffic zones”. The Federal Ministry is the highest authority within the airport boundaries, and is responsible for any development related to aviation purposes.

Airport development plans are developed by the airport companies as internal documents to serve as a basis for their investment plans. Sometimes, they are

sent to the *Land* governments or to the municipalities when the latter are reviewing their planning instruments.

5.1.3. Process

Airport companies prepare their development plans according to their needs and in response to demand forecasts. When a development is required, the airport company initiates planning procedures and submits the project designs to the building authority. If required, the Environmental Impact Assessment report is also submitted.

When an EIA is required, the *Land* government where the airport is located is responsible for the procedures and the Federal Ministry of Agriculture and Forestry, Environment and Water Management represents the federation.

If a major conflict appears during the public hearings or on a voluntary basis, a mediation procedure (*Mediationsverfahren*) is opened, and all affected parties are invited to participate. The main objective of the procedure is to achieve acceptance of airport plans by the affected population. Once agreement has been reached, the overall procedure continues until a positive Environmental Impact Statement is published and the project is approved.

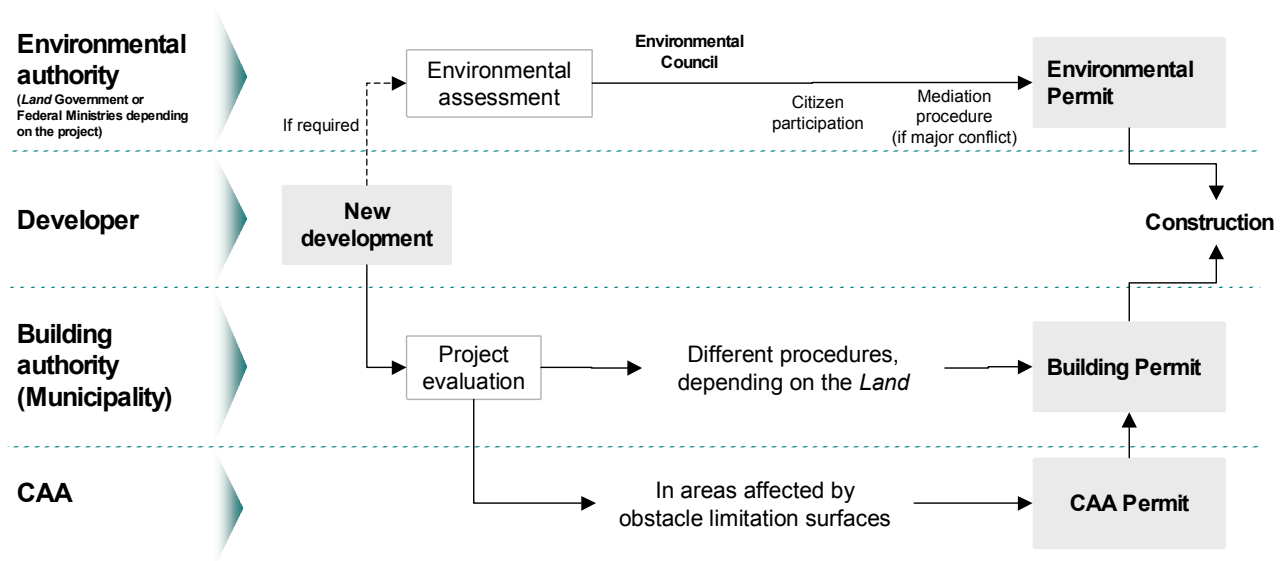


Figure 9. Airport planning process

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

According to the Aviation Act, the Federal Ministry of Transport, Innovation and Technology is the body responsible for controlling the obstacle protection areas around Austrian airports.

The Aviation Act states that every international airport requires an obstacle clearance area consisting of a series of surfaces defined by other Austrian Directives in accordance with ICAO Annex 14, and safeguarded areas for air navigation aids.

Maps showing the obstacle clearance areas around each international airport are prepared by the CAA, and sent to the affected *Länder* and *Gemeinden* for their consideration. Within these areas, a permit from the CAA is required as are the building permits granted by the local authorities.

Information about this additional permit requirement should be included in the Land Registry for each property.

5.2.2. Noise Impact

Noise contours must be calculated by the airport companies and sent to the relevant *Land* and surrounding municipalities for consideration in their planning instruments.

A good example of the above is the regional development scheme for the planning region in Lower Austria where the Vienna airport is located. There, the 60 dB L_{Aeq} contour is included as it is one of the maximum noise levels established by the *Land* government. However, the municipalities around an airport may contract an independent institute to re-calculate the noise contours.

No common legislation or common practice on integration of noise contours into spatial planning instruments exists in Austria.

5.2.3. Risk prevention

There are no third-party risk surfaces around Austrian airports. Nevertheless, some risk assessment studies not strictly related to aircraft operation have been carried out for specific areas around the Vienna airport..

5.2.4. Land reserve for future construction

When an agreement has been reached by mediation procedures and approval of the project has been obtained, the airport company is responsible for acquiring the land needed for airport development.

Once the airport companies own the terrains, they are included in the spatial planning instruments.

Expropriation can only take place as a last resort, and in cases of public interest.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: Airport construction requires several permits from the Civil Aviation Authority.

Firstly, a location permit for new airport infrastructure must be granted by the CAA after it has checked compliance with existing infrastructure and equipment. In the case of a new runway, the obstacle clearances for the new runway system are prepared and evaluated. At this stage, citizen participation is encouraged and a public conference is organised to explain the project. Comments and objections can be submitted to the CAA.

Secondly, the CAA must grant a building permit to regulate the details and conditions for the construction. The permit must also include the permission to operate the new infrastructure.

- b) Environmental permits: All environmental permits and conditions are integrated into the EIA procedures.

5.3.2. Institutions and processes involved

- a) Authorisation: The Federal Ministry of Transport, Innovation and Technology is responsible authorising airport construction.
- b) Supervision: The authority granting the permit, in this case the Federal Ministry of Transport, Innovation and Technology, is responsible for supervising construction activities.

In cases where an EIA is required, the Environmental Impact Statement shall include provisions to be considered during construction.

5.3.3. Integration with planning and environmental controls

Building permits and the execution of the construction activities must be carried out in accordance with any agreements reached during the mediation procedures and the conditions established by the Environmental Impact Statement.

5.4. Airport operation

5.4.1. Operating permit

An aerodrome operating permit is re-issued by the CAA when new airport development takes place.

5.4.2. Airport certification

Airport certification is regulated by the latest amendments to the Aviation Act, and includes environmental matters, such as the definition of airport operating hours.

The CAA is responsible for approving the aerodrome manuals prepared and updated by the airport companies. The CAA is also working on the future implementation of Safety Management Systems.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

The Spatial Planning Laws adopted by each *Land* already include some provisions on noise and air quality in their respective territories. In general, each *Land* adopts independent Ordinances or Regulations to establish maximum noise levels and land uses for areas affected by noise.

In the case of Lower Austria where most of the towns and villages affected by noise caused by aircraft operations at Vienna Airport are located, article 14 of the Spatial Planning Law states:

“...land allocated for housing, sensitive or recreation purposes must be free of disturbances...”

In February 1998, on the basis of this and other general provisions, the *Land* Government of Lower Austria adopted Ordinance 27/98⁶ which specifies maximum noise levels for different land uses.

At the national (federal) level, the Federal Act on Environmental Impact Assessment includes a classification of protected areas (A, B, C, D and E) as Annex 2. The articles of the Act refer to each category, depending on the type of activity causing the impact assessed by each section of the Act.

Category D is dedicated to “areas subject to air pollution”. According to the EIA Act, these areas must be defined by the Federal Ministry of Agriculture and Forestry, Environment and Water Management through an Ordinance.

Category E, on the other hand, refers to “settlement areas” where noise sensitive buildings (houses, schools, hospitals...) exist or are projected. Most of the activities causing noise during their construction or operation stages will be required to analyse their impact on these settlement areas in the EIA report.

Both Directive 2002/49/EC⁷ (the “noise” Directive) and 2002/30/EC⁸ (the “noise-related operating restrictions” Directive) have been already transposed into Austrian legislation.

⁶ Stammverordnung 27/98 “Verordnung über die Bestimmung des äquivalenten Dauerschallpegels bei Baulandwidmungen”

⁷ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

⁸ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

The Austrian Working Group on Noise Abatement (ÖAL), an initiative of the federal government, published some guidelines on noise impacts which are usually considered by the *Länder* in addition to their own regulations on this matter.

The Federal Act on Ambient Air Pollution⁹, adopted in 1997, established the maximum exposure limits for air pollution caused by different substances.

6.2. Institutions

Each *Land* is responsible for implementing the provisions regarding noise levels and air pollution included in its Spatial Planning Act or related ordinances.

It must integrate these provisions into its planning instruments, taking into account any protected area specified by the Federal Ministry of Agriculture and Forestry, Environment and Water Management. Once the *Land* has integrated noise and air quality provisions into its planning instrument, they are binding on all municipalities located within its territory.

Consequently *Gemeinden* are responsible for the execution of provisions regarding noise and air quality. To do so, they limit urban developments in accordance with the restrictions imposed by the *Länder*.

Other organisations involved in the assessment of noise and air quality impacts are the technical institutes. The institutes are contracted by each *Land* and airport company in accordance with the requirements of local authorities to calculate environmental impacts in the vicinity of airports. That is the case of the Research Institute for Heating and Sound Technologies, an independent institution in Vienna, which has calculated a 66 dB L_{Aeq} (day) around the Vienna airport every year since 1978.

In the case of major conflicts with regard to noise or air pollution impacts revealed during the EIA for a new airport infrastructure, a mediation procedure may take place in which all the affected parties, authorities, organisations and citizens must be represented.

6.3. Instruments

- a) Planning: Areas affected by noise and air pollution should be integrated into the planning instruments at the *Land* level. In the case of air pollution, the Federal Ministry of Agriculture and Forestry, Environment and Water Management may define protected zones according to the EIA and Ambient Air Quality Acts. The *Land* will also be responsible for the implementation of those protected areas.

⁹ Immissionsschutzgesetz-Luft 115/97

Protected zones and noise contours must be integrated into regional development schemes to become binding on local authorities.

The definition of noise contours and their effect on land use planning depends on the legislation adopted by each *Land* as described below.

- b) Land use restrictions: Each *Land* is responsible for imposing land use restrictions related to environmental matters in its regional development scheme. Those restrictions should be based on the provisions of the Spatial Planning Law or related regulations adopted by each *Land*.

For instance, Ordinance 27/98 of the Lower Austria *Land* government states that residential areas must not be subject to noise levels above 55 dB L_{Aeq} (day: 6-22h) or 45 dB L_{Aeq} (night: 22-6h) and that mixed areas within the cities must not be subject to noise levels above 60 dB L_{Aeq} (day) or 50 dB L_{Aeq} (night).

On the basis of these noise levels, land use restrictions are imposed by the regional development scheme. The noise contour of 60 dB L_{Aeq} (day) is included in the maps accompanying the plan currently in force for the planning region in which the Vienna airport is located. No new residential developments are allowed in areas already affected by the noise contours or close to them.

As the provisions of the regional development scheme are binding on the municipalities, no local development concept can be approved that conflicts with these land use restrictions.

The other way to impose land use restrictions on the municipalities in Austria is by reaching an agreement through a mediation procedure.

According to the EIA Act, such a procedure may take place when a major conflict arises as a result of proposed airport expansion. This situation has recently occurred Vienna because the airport company has proposed the construction of a third runway 3,600 m. long.

As this expansion should be subject to an EIA with citizen participation, because the runway length exceeds 2,100 m, in 1999 the airport company voluntarily decided to initiate a mediation procedure to discuss the possible construction of the runway with all affected parties.

As a result of this mediation procedure, an agreement to build a third runway was signed on 22 June 2005 by fifty-five institutions and organisations in representation of all the stakeholders involved and/or affected by the expansion of the airport.

The conditions included in that agreement are related to the construction and operation stages of the airport. In terms of restrictions to land use, the most important one is the calculation of the 54-57-60-65 dB L_{Aeq} (day) noise contours for the three runway systems and the traffic expected in 2010 following an agreed methodology. Different restrictions in those noise zones will be applied to urban development in surrounding municipalities, and the airport will take the appropriate measures to respect those contours (in particular, the 54 dB), and will compensate citizens already affected by these noise zones.

Finally, the ordinance of the Federal Ministry of Agriculture and Forestry, Environmental and Water Management which develops the law transposing the “noise” Directive, establishes maximum levels for aircraft noise of 65 dB L_{den} and 55 dB L_{Amax} (night).

These noise levels will be used to prepare the official noise maps around the Vienna airport. However, they will not be taken into account for imposing land use restrictions, as other more restrictive conditions have been agreed on through the mediation procedure for the construction of the third runway.

- c) Compensation: Compensation for the inhabitants affected by aircraft noise exceeding the maximum levels established by each *Land* has been a common practice in Austria for the last 15 years.

Both Vienna and Salzburg airport companies have invested in the installation of soundproofing measures (double glazing) in the vicinity of the airports.

The agreement signed for the construction of the third runway at the Vienna airport as a result of the mediation procedure also requires the airport company to take soundproofing measures in the noise zones defined by the calculated noise contours. Measures will be taken depending on the noise level in each zone.

6.4. Integration with spatial planning

Once the noise contours and the protected zones (related to air quality) are integrated into the regional development schemes, they become a binding part of the spatial planning system and no development can take place that goes against the restrictions imposed.

It will be especially important to integrate the conditions included in the agreement reached through the mediation procedure for the third runway at the Vienna airport into the regional development schemes, and later to integrate them into the local development concepts.

6.5. Integration with development, construction or operation controls

When appropriate noise contours and protected zones are included in the regional development schemes, all planning decisions take into account the environmental impacts, as happens in Lower Austria.

With regard to the construction stage, the environmental impact statement for each activity includes a series of measures to be taken during construction to minimise those impacts.

The conditions of the agreement signed after the mediation procedure regarding the expansion of the Vienna airport includes provisions to ensure an environmentally-friendly construction stage.

With regard to aircraft operation in Austrian airports, environmental impacts are controlled through several measures at each airport.

Most airport companies have installed noise monitoring stations (Vienna, Salzburg, Innsbruck, Graz, Klagenfurt, Linz). In the case of Vienna, the system consists of monitoring stations: fourteen fixed and two mobile.

All the information compiled by those systems is usually analysed by the airport company and the relevant *Land* government.

The Salzburg and Vienna airports have also installed the FANOMOS system (Flight Track and Noise Monitoring System). Thanks to the support of Austro Control GmbH, the Air Navigation Services provider, the system records the exact flight path of every aircraft operation at both airports,. In that way, noise abatement procedures can be designed to minimise noise impacts.

This is particularly important in the case of the Salzburg airport, as most of the operations overfly German territory. Air traffic at Salzburg is regulated by the “Treaty of 19 December 1967 between the Federal Republic of Germany and the Republic of Austria on the effects of the location and operation of the Salzburg airport on the sovereign territory of the Federal Republic of Germany.” The Treaty authorises air traffic as if the airport were located in German territory, and operation is subject to German legislation.

Several groups of residents in the affected areas of Germany denounced the conditions of the Treaty to the German Federal Constitutional Court, but the sentence of the Court of 12 March 1986 validated the effects of the Treaty.

A flight noise committee has been founded to discuss new noise abatement measures, and suggest new noise abatement procedures on the basis of the data recorded by FANOMOS.

Similar commissions are also at work at other Austrian airports, such as the Airport-Environment Forum at Innsbruck and the Neighbours Advisory Board at

Vienna. In addition, in Salzburg there is also an Ombudsman who represents the interests of the residents in the vicinity of the airport.

Operating restrictions are also considered at some airports. For instance, the agreement signed pursuant to the mediation procedure for the expansion of the Vienna airport includes a maximum of 3,000 aircraft operations/year during the night period (22-6h)

7. CASE STUDY – VIENNA INTERNATIONAL AIRPORT

Vienna International Airport is owned and operated by Flughafen Wien AG, a private company since 1992. The current shareholder structure is 60% private shareholders (stock exchange) (including 10% for an employee foundation), 20% *Land* of Lower Austria and 20% *Land* of Vienna.

In 1996, after several runway and terminal expansions, the company decided to prepare an airport master plan for the period up to 2015. The main projects in that plan included the construction of a third runway, which will be required by 2011/12 to meet the expected demand, the expansion of the passenger and cargo terminals and a new railway connection to the city. The rail connection started operations in December 2003.

In 1998, the Planning Department of the *Land* of Lower Austria decided to review the regional development concept for the planning region of *Wiener Umland* where the airport and most of the surrounding villages are located.

Taking advantage of the good coordination between the airport company and the *Land* government (which participates in the shareholders and management boards of the company), the noise contours calculated by the airport company were sent to the *Land*, and integrated into the planning instrument. They were taken into account to impose restrictions on the urban development of the villages in the vicinity of the airport. This plan was adopted by the *Land* government in 1999 (amended in 2003 and 2005), and became binding on all the municipalities around the airport.

Figure 7 shows part of the graphic materials accompanying the regional development scheme. The noise contour of 60 dB L_{Aeq} (day) appears in pink and the restrictions to urban developments within the contour or towards it appear as red lines and arrows.



Figure 10. Detail of the Regional development concept Wiener Umland

Meanwhile, the plans to build the third runway were discussed by the airport company management boards, and it was decided to initiate a mediation procedure in accordance with the Federal EIA Act prior to any decision or application for permission. This procedure sought acceptance of the airport plans by the population.

The mediation procedure was suggested by the airport company in 1999, but it was not until March 2001 that an agreement was signed by the airport company, the Air Navigation Services provider, the main airline operating at the airport, citizens groups, political parties, departments of planning and environment of *Land* Governments, mayors and interest groups to discuss two main subjects: short-term measures and the future expansion of the airport.

With regard to short-term measures, a partial contract was signed in May 2003 including a commitment reached by the airport and other representatives of the aviation sector to implement new measures to reduce noise disturbances. New noise abatement procedures and a more sustainable distribution of traffic were implemented by April 2004, and an evaluation group was founded to monitor the results of those measures and propose improvements.

With regard to the expansion of the airport, various alternatives were discussed, including the relocation of the airport and several options for the third runway. Finally, it was decided to undertake a detailed analysis of the possible construction of a third runway 3,600 m long to the south of and parallel to existing runway 11-29. This agreement was reached in July 2004, and includes conditions for night flights, noise abatement plans and the creation of an environmental fund to compensate the affected population. It fixed the date for the final agreement as the end of June, 2005.

In effect, on 22 June 2005 a contract agreement was signed by all the participants¹⁰ with the following main subjects:

- It defines the location of the new 11-29 runway 3,600 m in length;
- It includes specific measures to be taken during the construction of the runway which will begin in 2008;
- It includes technical information about noise modelling and the methodology for calculating the noise contours;
- It includes noise contours of 54, 57, 60 and 65 dB L_{Aeq} (day) for the three runway system and the traffic expected in 2010;

¹⁰ “Abschlussdokumente Mediationsverfahren Flughafen Wien” A German version of the contract can be consulted at [Http://www.viemediation.at](http://www.viemediation.at)

- It establishes a limit of 3,000 aircraft operations/year from the moment the new runway opens to air traffic during the night period defined as 23:30h-05:30h;
- It creates an environmental fund financed by the airport company;
- It defines an insulation programme with different measures and levels of investment from the environmental fund for the houses within the different noise contours. Relocation will be considered in exceptional cases;
- It considers the noise contour of 54 dB L_{Aeq} (day) as the maximum noise disturbance created by the aircraft operations at the airport. The airport company will be responsible for controlling air traffic at the airport so that this contour is never exceeded. An interim period of two years is agreed so as to adjust the contour once the runway is open to air traffic;
- It prohibits new urban developments by any of the municipalities around the airport within the noise contour of 54 dB L_{Aeq} (day).

COUNTRY CONTACTS

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹¹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹¹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Nationalrat</i>	Lower House of Parliament
<i>Bundesrat</i>	Upper House of Parliament
<i>Bund</i>	Federal Government
<i>Bundesländer or Länder</i>	States of Austria
<i>Politische Bezirke</i>	Districts
<i>Gemeinden</i>	Municipalities
<i>Bundes-Verfassungsgesetz</i>	Federal Constitutional Law
<i>ÖROK</i>	<i>Österreichische Raumordnungskonferenz</i> - Austrian Conference on Spatial (or Regional, according to other translations) Planning
<i>ÖREK</i>	Spatial Development Concept
<i>Planungsgemeinschaft Ost</i>	Planning Cooperation East – an initiative of coordinated spatial planning between the Vienna, Lower Austria and Burgenland Länder
<i>Raumordnungsbericht</i>	Spatial planning report prepared by ÖROK
<i>GVP-Ö</i>	<i>Generalverkehrsplan Österreich</i> - General Transport Plan
<i>Mediationsverfahren</i>	Mediation procedure

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http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Austrian laws:
 - Austrian Federal Constitutional Law
 - Federal Act on Environmental Impact Assessment
 - Ordinance 27/98 of Lower Austria *Land* government
- The Austrian Spatial Development Concept (2001)
- Austrian General Transport Plan (GVP-Ö)



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

BELGIUM



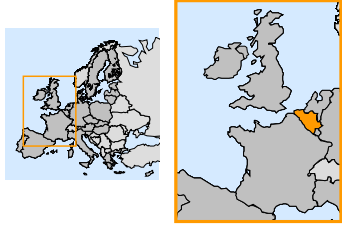
This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

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BELGIUM		Location Map										
Population	10.3 mill. (340 inhabitant per sq. Km)											
Airports network	The airport network in Belgium comprises 5 airports, with a high level of private participation. Brussels International airport is the most important and there are 4 other regional airports											
<p>Spatial planning system</p> <p>Spatial planning in Belgium has been entirely devolved to the regions (Wallonia, Flanders and Brussels-Capital). Each region has adopted its own legislation.</p> <ul style="list-style-type: none"> • Institutions <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">National level:</td> <td>Federal Government does not have any competences in the field of spatial planning</td> </tr> <tr> <td>Regional level:</td> <td> Wallonia: Regional Government and spatial planning commission Flanders: Regional Parliament, government and spatial planning commission and provincial government Brussels-Capital: Regional Government, Regional Development Commission </td> </tr> <tr> <td>Local level:</td> <td>Municipalities and local consultative commission</td> </tr> </table> • Instruments <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">Strategic plans</td> <td>Developed at regional, provincial and local level to provide a basic framework</td> </tr> <tr> <td>Regulatory plans</td> <td> Wallonia: Sector plans (Regional level) and municipal spatial plans Flanders: Regional, provincial and municipal implementation plans (land use regulation) </td> </tr> </table> • Process: In all regions, spatial planning process involves all institution levels and citizen participation. There is no mandatory integration of airports infrastructures into the spatial planning either in Wallonia or in Flanders 			National level:	Federal Government does not have any competences in the field of spatial planning	Regional level:	Wallonia: Regional Government and spatial planning commission Flanders: Regional Parliament, government and spatial planning commission and provincial government Brussels-Capital: Regional Government, Regional Development Commission	Local level:	Municipalities and local consultative commission	Strategic plans	Developed at regional, provincial and local level to provide a basic framework	Regulatory plans	Wallonia: Sector plans (Regional level) and municipal spatial plans Flanders: Regional, provincial and municipal implementation plans (land use regulation)
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Regulatory plans	Wallonia: Sector plans (Regional level) and municipal spatial plans Flanders: Regional, provincial and municipal implementation plans (land use regulation)											
<p>Regulation and permits</p> <p>All activities involving construction, demolition, changes in use, etc., require permits. Airports also need an Environmental Impact Assessment, issued by regional administrations</p>												
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: There are no statutory plans for the construction or development of airports. Some airports have their own master plans for internal purposes but they are not legally binding • Spatial impact: In order to protect the operation of aircraft and the growth of the airports, several servitudes are defined, but there is no specific legislation concerning land reserves. Regional plans establish the spatial framework to avoid future airport constraints • Construction: Airport construction needs ministerial approval and the planning permit of the regional authorities • Operation: Operation licenses are only necessary for Brussels Airport. All airports have to obtain an environmental permit in order to operate, and in the case of international airports, certification from the Ministry in charge of civil aviation is also necessary 												
<p>Airport noise and air quality</p> <p>Belgian legislation defines different noise zones which must be integrated into the spatial planning process. Air quality monitoring systems are installed around airports</p>												

1. SUMMARY

SPATIAL PLANNING SYSTEM

The federal Government in Belgium does not have any competences in the field of spatial planning. Regional systems are fairly similar since they have evolved from a common trunk.

Both Flanders and Wallonia have Regional Structure Plans providing a basic framework for economic development and spatial organization for the region. In Flanders there is a provincial level of planning while in Wallonia there are no intermediate plans between regional and local level.

Regulatory plans can be adopted at all levels of government. In Wallonia a regional “Sector Plan” was used to regulate airport development, covering not only the airport but also the areas where land use restrictions are imposed as a result of noise exposure. In the Flanders region a regional implementation plan has been adopted to allow for the construction of a rapid rail link as well as to change current land uses permitted within the Brussels National airport.

All Flemish spatial plans which have an impact on the Brussels National airport or on air traffic must be submitted to the Aviation Administration of the Federal Ministry for Communications and Infrastructures.

REGULATIONS AND PERMITS

Construction permits

All activities involving construction, demolition, excavation, tree cutting, changes in use, etc. require a construction permit in both Flanders and Wallonia.

Major infrastructure works such as airports are also required to obtain construction permits regardless of whether they are undertaken by the public or the private sectors.

Construction permits are issued by municipalities as a rule, but in Flanders the Regional Government is responsible for issuing building permits for airport construction or development and air navigation facilities.

Environmental permits

All competences regarding environmental permits, including Environmental Impact Assessments (EIA) have been devolved to the regions, regardless of whether the project is undertaken by the Federal Government.

In Wallonia all projects and economic activities must undergo environmental evaluation either an EIA, in line with EU requirements, or a simplified process leading to an integrated building/environmental permit.

Flanders also regulates EIA according to EU legislation, although it may require an evaluation for runways over 800 m. Environmental permits are required for activities which may have an adverse impact on the environment or may be considered a safety hazard.

Airports are required to obtain environmental permits and authorizations for operation in both regions. Environmental permits are granted for a number of years and must be renewed periodically.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no national planning concerning airports. Regional spatial plans include some considerations about airports.

- Airport

There are no statutory airport plans. Airports prepare development plans as internal documents. A long-term development plan is prepared by the Regional Government for each airport in Wallonia in order to determine noise exposure levels.

The Walloon region adopted a regional implementation plan for Liège airport and the surrounding area.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Safeguarded areas were regulated in a 1930 Act which has not been updated. The areas must be integrated into land use plans and the restrictions are binding on municipalities at the time of issuing building permits.

- Noise Impact

Both Flanders and Wallonia require the preparation of noise exposure maps in the vicinity of airports.

Noise contours and the resultant land use restrictions must be integrated into spatial planning.

- Risk prevention

Third-party risk is not considered in Belgium's national or regional legislation.

- Land reserve for future construction

Spatial planning has been used on occasions to reserve land for future airport expansion, taking into account future noise estimates.

Construction

Airport construction and development requires a building permit.

New aerodromes require an authorization from the Regional Minister in charge of civil aviation. Modifications must be notified to the competent Minister and to the air navigation authority.

In Brussels National airport, any new construction within the airport perimeter shall be decided by the Federal government but a construction permit must be obtained from the Flemish Government.

Operation

Airport operators must obtain an operation license for Brussels National airport. Such licenses are granted by the Federal Government. No similar requirement is established for other airports.

Airports are required to obtain an environmental permit in order to operate.

The Federal Government is in charge of airport certification.

AIRPORT NOISE AND AIR QUALITY

Noise

Regions have adopted their own legislation on noise pollution. The Brussels Region (which has no airport within its territory) has adopted strict noise regulations concerning aircraft noise.

Noise exposure plans and noise abatement plans have been adopted in Wallonia and insulation or relocation aid is provided to residents.

In Flanders, the airport operators must prepare the noise contours which, in the case of Brussels National airport are reviewed every year.

The environmental permits required to operate airports set detailed regulations regarding noise abatement measures.

Air quality

There is no specific legislation regarding airport-related air quality.

Monitoring has not evidenced air quality levels in excess of legal standards.

2. CONTEXT

Belgium is a country in northwest Europe at various times under the rulers of Burgundy, Austria, France, and the Netherlands before becoming an independent kingdom in 1830. It was occupied by Germany during the world wars. After World War II, in 1947, Belgium formed the Benelux customs union with the Netherlands and Luxembourg. It is a founder member of the European Union and the home base for NATO.

Belgium mainly consists of a low-lying region of sand dunes, woods, and heath in the north and west, and a fertile undulating central plain rising to the Ardennes uplands in the southeast.

Belgium is divided in 3 regions (Brussels-Capital, Flanders and Wallonia) and 10 provinces (Antwerpen, Brabant Wallon, Hainaut, Liège, Limburg, Luxembourg, Namur, Oost-Vlaanderen, Vlaams-Brabant, West-Vlaanderen).

There is a cultural and language division in the country, with the Dutch-speaking Flemings of the north and the French-speaking Walloons of the south. According to this land division, the 2 main spoken languages are Belgium Dutch (60%) and French (40%). German is also an official language (less than 1%).



Figure 1. Map of Belgium

Belgium's modern economy has capitalized on its central geographic location, a highly developed transport network and a diversified industrial and commercial base. Industry is concentrated mainly in the populous Flemish area in the north. Roughly three-quarters of its trade is with other EU countries. It should be noted that Brussels is the administrative headquarters for NATO and the European Union. Belgium, together with 11 of its EU partners, introduced the euro as the national currency in January 2002.

Characteristic	Description
Population	10,396,400
Latitude / Longitude	50°50' N, 4°00' E
Land area	30,278 sq Km
Coastline	66.5 Km
Capital City	Brussels (1.75 million)
GDP per capita (PPS at market prices)	26,500 ¹
GDP real growth rate	2.9 %
Inflation rate	1.9 %
Unemployment rate	7.9 %

Table 1. Belgium: Main facts and figures ²

2.1. Population and statistics

The population density of Belgium exceeds 340 inhabitants per sq Km. This means that Belgium is the third most densely populated country in the European Union after Malta and the Netherlands.

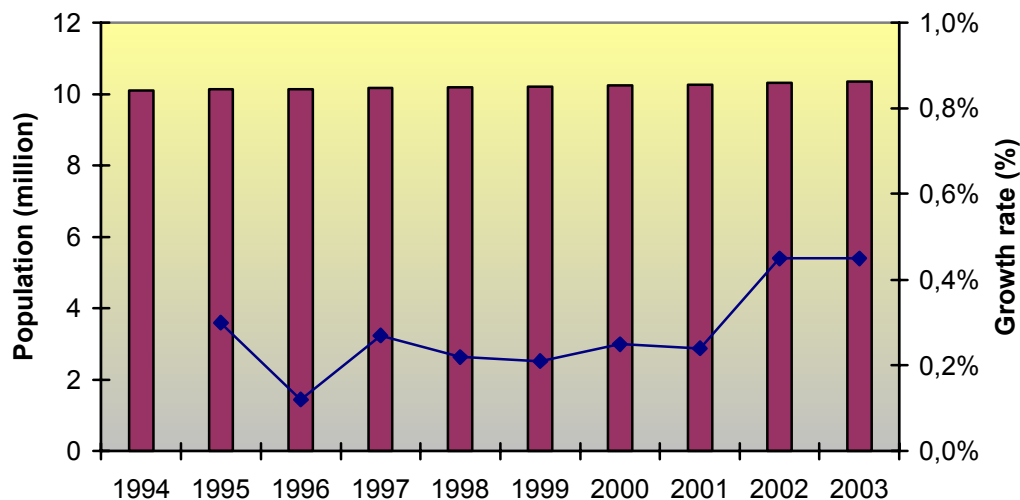


Figure 2. Population growth

¹ GDP per capita in PPS (Purchasing Power Standards) at current market prices. 2004

Source: EUROSTAT

² Source: EUROSTAT

In recent years, the population of Belgium has not changed significantly, with a low net migration rate of 3.9 per 1,000 inhabitants (2002).

The median age in Belgium is 40.2, with a birthrate of around 10.59 births/1,000 population (2004 est).

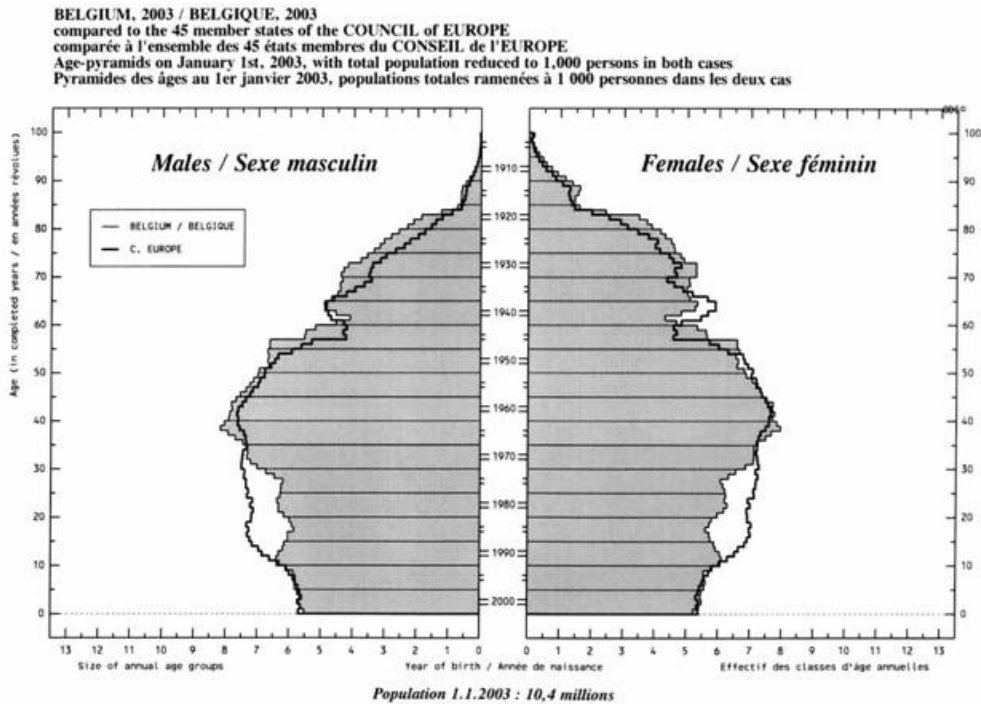


Figure 3. Belgian age-pyramids (2003)³

The pie charts below show the Belgian population and gender split.

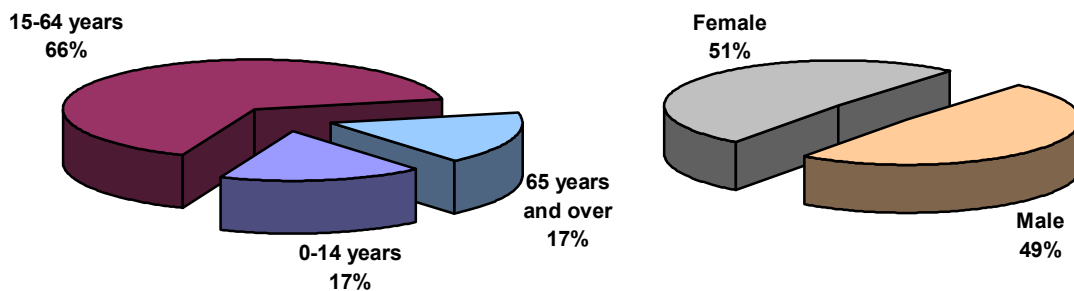


Figure 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Belgium is a federal parliamentary democracy under a constitutional monarchy. Its first constitution dates from 1830, and successive constitutional amendments granted the regions formal recognition and autonomy establishing a federal state.

In the Executive branch of Government, the chief of state is King Albert II, and the head of the government or Prime Minister is Guy Verhofstadt. The King of Belgium formally appoints the Cabinet or Council of Ministers and the Prime Minister, which nominations must then be approved by the Parliament.

The legislative branch in Belgium is a bicameral Parliament, consisting of a Senate with 71 members and a Chamber of Deputies with 150 seats elected for periods of four years.

The highest body in the Judicial branch is the Supreme Court of Justice, whose judges are appointed for life by the Government. Candidates have to be put forward by the High Justice Council.

As a result of the constitutional revisions culminating in 1993 that furthered devolution into a federal state, there are now three levels of government (federal, regional and linguistic community) with a complex division of responsibilities.

Spatial planning competences have been entirely devolved to the regions, which have adopted their own legislation.

2.3. Main airports

There are 5 airports in Belgium. The most important and one of the gateways to Europe is Brussels International Airport, operated by Brussels International Airport Company (BIAC), which has recently been privatised.

There are 4 regional airports: Charleroi, Liège, Ostend and Antwerp. Brussels South-Charleroi is the second Belgian airport with a spectacular traffic increase after the beginning of Ryanair operation.

It should be noted the high level of cargo traffic at Brussels National and Liège airports due to the use of these airports as Central European hubs by DHL and TNT respectively. However, the continuity of DHL's operation in Brussels is not assured due to noise-related constraints. In fact, DHL has announced it will be relocating its international air freight hub to Leipzig/Halle, where a new runway is planned and better operating conditions are offered, in 2008.

The map and table below show the location, and the traffic and cargo levels of all Belgian airports during year 2004:



Figure 6. Belgian airport network

Airport	Passengers	Cargo (Tons)
Brussels-National	15,584,000	659,100
Brussels South Charleroi	2,034,000	-
Liège-Bierset	200,000	382,300
Antwerp international	153,000	4,300
Ostend / Bruges int.	81,000	97,600
Total	18,052,000	1,143,300

Table 2. Belgian airport data (2004)

3. SPATIAL PLANNING SYSTEM

Spatial planning in Belgium was entirely devolved to the regions by virtue of Article 6. § 1, I of the Special Law on Institutional Reform of 8 August 1980. The planning systems in the three regions are based on a national spatial planning act of 1962, but are becoming increasingly different as each Region adopts its own legislation.

The description that follows is essentially based on the systems in force during 2005 in the Walloon and Flemish regions, since the region of Brussels does not include any airports.

3.1. Institutions

3.1.1. National

The federal Government in Belgium does not have any competences in the field of spatial planning.

3.1.2. Regional

A.- Wallonia

The Regional Government in Wallonia is responsible for drafting and adopting regional planning instruments as well as for the final approval of municipal spatial plans. The regional Government appoints and is assisted by a Regional Spatial Planning Commission, whose 45 members include representatives of the universities, social and cultural associations, professionals, farmers, unions, economic interests, tourism and associations for the protection of the environment. This Commission must be consulted in the drafting and approval process for all spatial planning instruments, both regional and local.

B.- Flanders

In Flanders, the Regional Government drafts and approves the regional structure plan, although the binding part of this document must also be approved by the Regional Parliament. There is also a Flemish Spatial Planning Commission which acts as a 24-member consultative body. It is appointed by the Regional Government from candidates proposed by the Ministry in charge of spatial planning, universities, environmental protection organizations, unions, employers, Flemish towns and provinces, agricultural and forestry councils and other Ministries in the Flemish Government.

3.1.3. Local and area wide

There are no intermediate planning authorities between the Region and the Municipalities in Wallonia, while in Flanders the provinces have retained the

power to adopt provincial spatial plans and play a role in the adoption of local plans.

In Flanders, there are also Provincial Spatial Planning Commissions serving in a consultative role with 22 members each, and Municipal Commissions for the same purpose designated by the municipal council.

In Wallonia, municipalities also have their own consultative commissions for spatial planning.

Institution level	Walloon region	Flanders region
National	Federal Government does not have any competence in spatial planning	
Regional	<ul style="list-style-type: none"> • Regional government <ul style="list-style-type: none"> - Draft and adopt regional planning instruments - Approval of municipal spatial plans • Regional spatial planning commission <ul style="list-style-type: none"> - Consultative body to define regional and local planning instruments 	<ul style="list-style-type: none"> • Regional Parliament <ul style="list-style-type: none"> - Binding opinion about regional structure plan • Regional government <ul style="list-style-type: none"> - Draft and approve regional structure plan • Regional spatial planning commission <ul style="list-style-type: none"> - Consultative body
Province		<ul style="list-style-type: none"> • Province government <ul style="list-style-type: none"> - Adopt provincial spatial plans - Take part in the adoption of local plans • Provincial spatial planning commission <ul style="list-style-type: none"> - Consultative body
Local or municipalities	<ul style="list-style-type: none"> • Municipalities and local consultative commission <ul style="list-style-type: none"> - Adopt local plans - Issue of permits 	<ul style="list-style-type: none"> • Municipalities and local consultative commission <ul style="list-style-type: none"> - Adopt local plans - Issue of permits

Figure 7. Belgian institutions and main activities

3.2. Instruments

A.- Wallonia

3.2.1. Strategic plans

The Regional Structure Plan (*Schéma de Développement de l'Espace Régional*, SDER) provides a basic framework for economic development and spatial organization for the entire region. The current SDER, adopted in May 1999, specifically mentions the airports of Liège and Charleroi, stressing their role in the regional economy and the need to establish buffer zones where no residential uses are permitted and land is reserved for the future expansion of the airport and airport-related activities. Chapter VI of the regional plan, dealing with integration in European networks, defines the future role of each of these

two airports, their respective specialization in cargo and passengers and reiterates the need to connect them to the high-speed rail networks and to reserve land in their vicinity, taking into account “both the respect for the quality of life of their neighbours and the perspectives for economic development”⁴.

The regional structure plan is adopted by the regional Government and published in the Official Gazette.

At local level, municipalities draw up their own strategic plans, Municipal Structure Plans (*Schéma de Structure Communale*), setting out in fairly broad terms the future spatial organization, infrastructures and services as well as the environmental situation. These plans are adopted by the municipality, but must be submitted to the Regional Government which can revoke the local decision within a period of 60 days.

Both the regional and the municipal strategic plans have no regulatory control but are binding on public administrations, both when drafting more detailed plans and when undertaking their projects. These plans are only binding on private firms and citizens when they receive funding from public bodies.

3.2.2. *Local (framework) plans*

Local Structure Plans could be considered in this category, although they focus more on economic development and environmental protection than land use planning.

3.2.3. *Regulatory (detailed) plans*

Regulatory plans can be drafted both by the Region and the Municipalities. In the case of the Region these instruments are called “Sector Plans” (*Plans de Secteur*) and can cover any portion of the regional territory. Municipal Spatial Plans (*Plan Communale d'aménagement*) can cover all or part of the municipality and must be in accordance with municipal structure planning. They include a detailed regulation of land uses, the exact location of infrastructures and areas reserved for green spaces, agricultural and forestry areas, ecological networks and public services.

In principle, local plans must also be in accordance with Sector Plans adopted by the Region, but in some well-founded cases they may be allowed to depart from the provisions.

Sector Plans are drafted and adopted by the Regional Government after hearing the opinion of the Regional Spatial Planning Commission. Municipal Spatial Plans are drafted by the municipalities but must be approved by Regional Government.

⁴ Schéma de Développement de l'Espace Regional (SDER) page 201.

Regulatory plans, both regional and municipal, are binding on all parties.

Sector Plans have been used to establish the necessary conditions for future airport development. In the case of Liège airport, for example, this plan encompasses not only the airport itself and the land needed for future development, but also the entire area where land use restrictions are imposed as a result of noise exposure.

B.- Flanders

The planning system in Flanders is not very different from the one in Wallonia. It also includes structure plans both at regional level, the Regional Structure Plan (*Ruimtelijk Structuurplan Vlaanderen*), and local level, Local Structure Plans (*Gemeentelijk Structuurplan*), as well as regulatory instruments at subregional and municipal level. Regulatory plans are known as “Implementation Plans” (*Uitvoeringsplannen*)

Since the provinces in Flanders have retained planning powers, there are also provincial, structure and implementation plans. The system comprises three levels of planning, each one having its own strategic and implementation instruments.

The system is organized in an entirely hierarchical manner where lower tier plans must always be in accordance with higher tier instruments.

3.2.4. Strategic plans

Regional Strategic Plans are drafted by the Flemish Government in consultation with Parliament and the Flemish Spatial Planning Commission, but finally must be approved by the Flemish Parliament.

The Regional Structure Plan currently in force dates from 1997. It includes the delimitation of the Brussels National airport area (located entirely within the Flemish Region) and provides for the adoption of an implementation plan concerning the airport, which was never finished.

Provincial structure plans are drafted by the Provincial Council but must be approved by the Flemish Government which can withhold such approval if the Provincial Plan is not in agreement with the Regional Structure Plan.

Local structure plans are drafted by municipal governments and are approved by the provincial government if there is a provincial structure plan or by the Flemish Government, if not.

Structure plans contain both an indicative part and a binding part. The law, in some specific instances, allows lower tier plans to depart from the provisions of the indicative part of higher tier instruments, but no exception is contemplated for the binding part.

3.2.5. *Regulatory (detailed) plans*

Implementation plans are drawn up at the three levels of government and must be in accordance with structure plans. Lower tier implementation plans must also conform to the provisions of higher tier implementation plans, although the law allows for a limited degree of discrepancy.

At regional level, implementation plans can cover whatever area is considered necessary and are drafted by the Flemish Government to implement the provisions of the Regional Structure Plan. Final approval of these plans also lies with the Flemish Government and does not involve parliamentary scrutiny.

The Region has recently drafted an implementation plan in order to provide for the construction of a high-speed rail link as well as to modify the current land uses permitted within Brussels National airport, so that the new "Airport City" can also include office uses, which are not currently permitted.

Provincial plans, which must be in agreement with regional implementation plans, are drafted by the provincial governments in order to implement the provincial structure plan in any part of the province. Final approval of provincial implementation plans lies with the Flemish Government.

Local implementation plans are drafted by the municipal administration for the purpose of implementing the local structure plan or part of the regional and provincial structure plans designated for local execution and must be in accordance with provincial and regional planning instruments. These plans can cover any part of the municipal territory as may be deemed necessary according to the purpose of the same. Although local plans are initially adopted by the municipal Council, final approval lies with the provincial government. However, the Flemish Government can revoke the decision, if it considers that the local plan is not in compliance with regional plans or projects.

All implementation plans may include land use regulations which may restrict, either partially or totally, the right to build. These restrictions only give rise to compensation on very limited occasions, for instance, when they limit building rights granted by a previous plan.

3.3. **Process**

A.- Wallonia

3.3.1. *Inter-government consultation*

In the case of Wallonia, the law does not establish interdepartmental horizontal coordination requirements for the adoption of the Regional Structure Plan, since it only states that the Regional Government shall consult with the Regional Spatial Planning Commission, the Walloon Environmental Council for

Sustainable Development and any other persons or entities it deems necessary. As far as vertical coordination is concerned, nevertheless, the law contemplates that all municipalities can express their opinions. All opinions must be submitted in writing and only have indicative value.

Local structure plans are submitted to the Local Spatial Planning Commission and the Walloon Environmental Council for Sustainable Development, but there is no provision for coordination with other branches of government.

The procedure for the adoption of Sector Plans encourages full participation of the municipal authorities as well as consultation with the Regional Spatial Planning Commission and the Walloon Environmental Council for Sustainable Development, but there is no mention of possible consultations with other branches of government. In the case of Municipal Spatial Plans, there is no express requirement to consult other government bodies, other than the abovementioned Council, the Local Spatial Planning Commission and, in some cases, the Directorate General for Natural Resources and the Environment. However, it would appear that the fact that the local plan has to be approved by the Regional Government is a guarantee that no provision in the municipal spatial plan will be allowed to be contrary to regional planning policies. Vertical coordination is thus attained by means of this regional approval.

3.3.2. Policy Integration

There is no mandatory integration of airport infrastructures in spatial plans in Wallonia.

3.3.3. Citizen participation

All spatial planning instruments in Wallonia, are subject to citizen participation processes which must be advertised in the press and provide all interested parties with the opportunity to present their views or objections in writing.

The law requires that spatial plans are presented in public hearings, and that all the comments submitted by citizens are collected by the municipal Councils which are charged with transmitting them to the regional Government together with a report on the participation process.

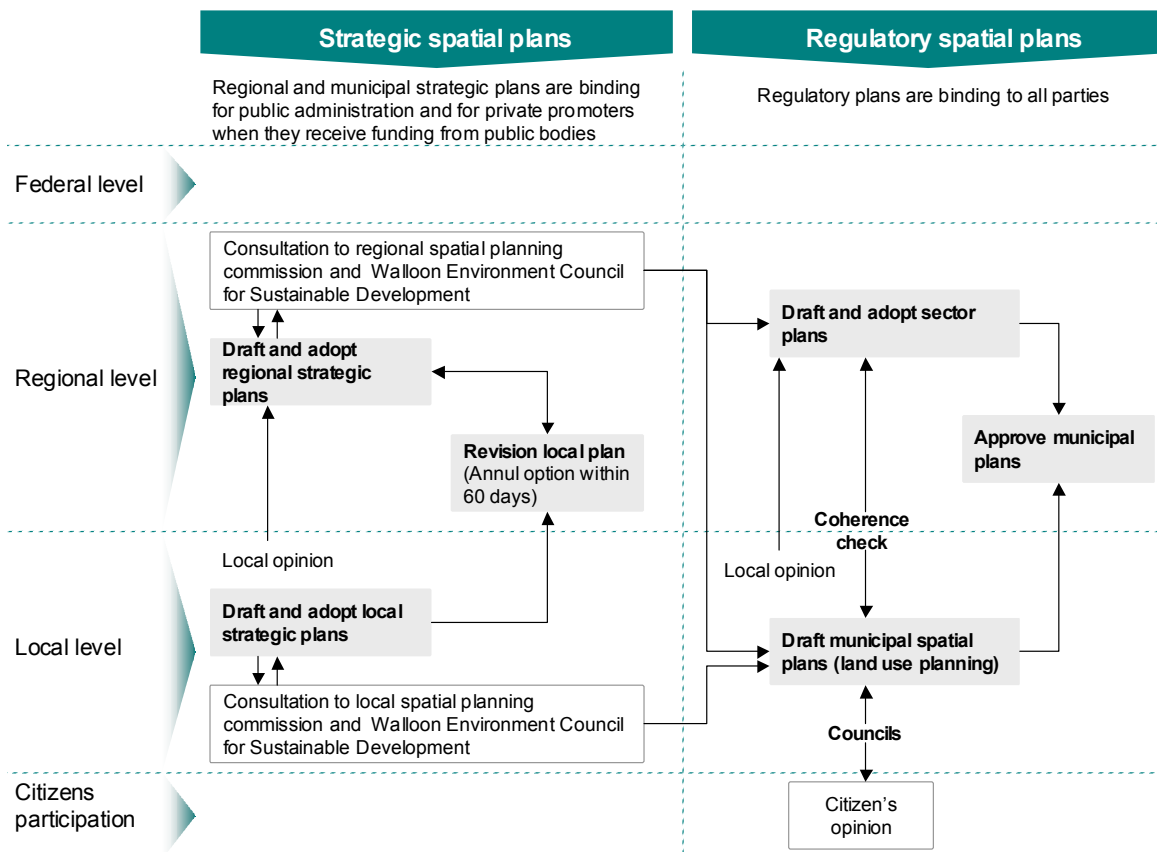


Figure 8. Spatial planning in Wallonia

B.- Flanders

3.3.4. Inter-government consultation

In Flanders, vertical consultation among levels of government takes place for all planning instruments. Horizontal consultation is required in many cases including airports as mentioned below. All regional planning instruments are submitted to the Flemish Spatial Planning Commission, whose members include several representatives from different regional Ministries. The regional structure plan is also sent to the Flemish Council for the Environment and Nature.

For all spatial planning instruments, the law requires extensive consultations among levels of government and with neighbouring administrations. Such consultations are always steered by the Planning Commission acting at the corresponding level of government (regional, provincial or local) which has to hold a number of consensus-building meetings and to issue a written report. The Commission's opinion is not binding but it carries a lot of weight and can not be ignored at the time of approving the plan.

In the case of provincial and local level plans, the Flemish Government not only has a say in their final approval, but must be provided with a copy of the preliminary plan before it can be submitted to the public. This should allow

ample time to enable the regional authorities to verify whether the plan is in compliance with regional policy and to issue their opinion before the final version of the plan is drafted.

In relation to airports, it should be noted that, pursuant to the Order (*Arrêté*) of the Flemish Government of 11 May 2001, all draft spatial implementation plans (regional, provincial and municipal) which has an impact on Brussels National airport or on air traffic must be submitted to the Aviation Administration of the Federal Ministry for Communications and Infrastructures⁵. When the plans may have an impact on regional airports or on air traffic they must be submitted to the Administration of Passenger Transport and Airports in the Road and Communications Administration⁶ and the General Environmental and Nature Division of the Administration for Environment, Soil and Water⁷.

3.3.5. *Policy Integration*

There is no mandatory integration of airport infrastructures in spatial plans, either in Wallonia or in Flanders.

3.3.6. *Citizen participation*

In Flanders, there is also a basic requirement to promote citizen participation in the planning process. The spatial planning commissions (regional, provincial or local, depending on the planning instrument) are in charge of receiving and coordinating all written submissions, which must be taken into account in drafting their final opinions.

⁵ Administration de l'Aéronautique du Ministère fédéral des Communications et de l'Infrastructure

⁶ Administration du Transport de Personnes et des Aéroports de l'Administration des Routes et des Communications

⁷ Division de la Politique générale de l'Environnement et de la Nature de l'administration de la gestion de l'Environnement, de la Nature, du Sol et des Eaux

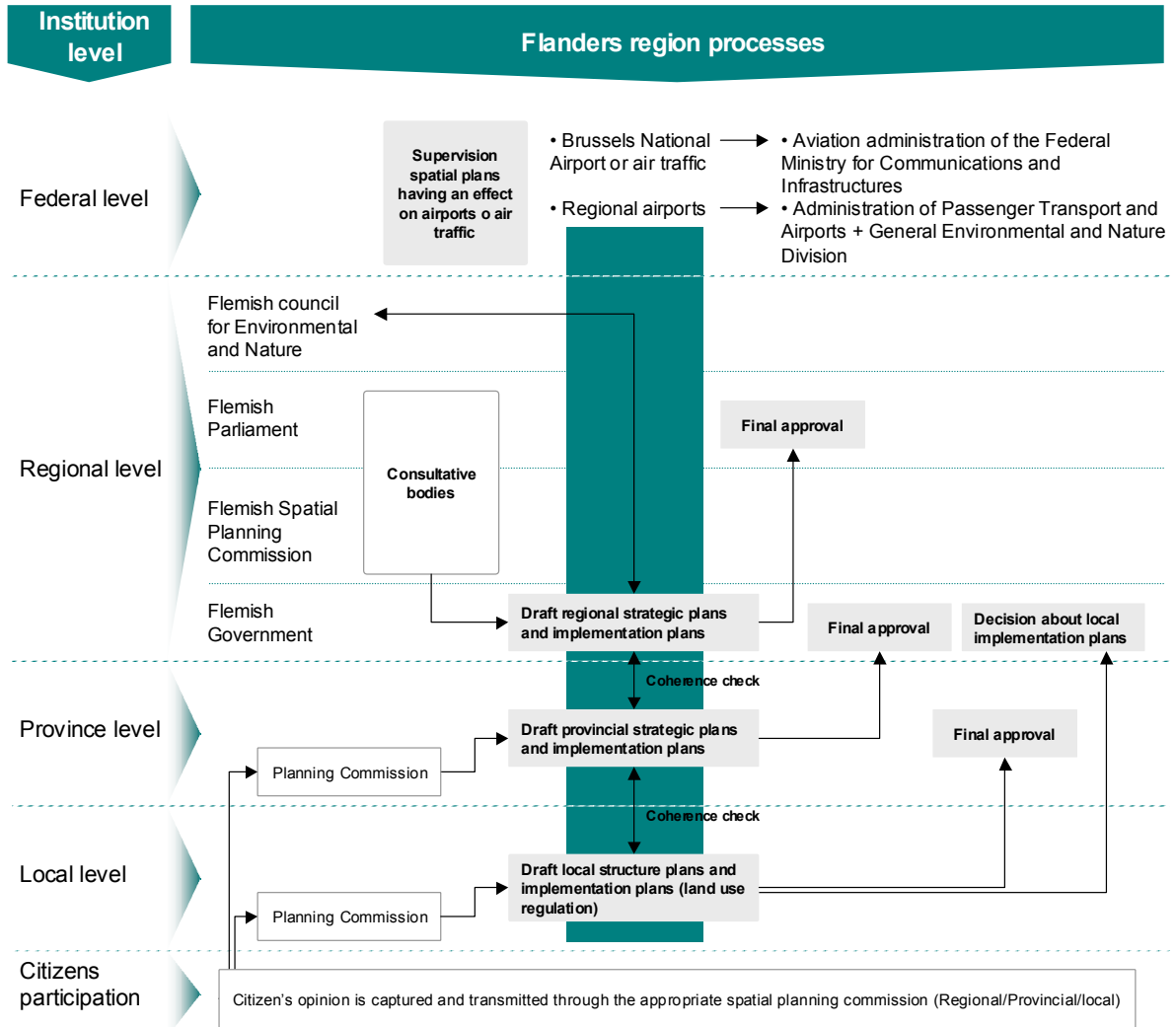


Figure 9. Spatial planning in Flanders

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

All activities involving construction, demolition, excavation, tree cutting, changes in use, etc. require a construction permit in both Flanders and Wallonia.

4.1.2. *Exceptions or exemptions*

In both Regions the only activities exempted are those of minor importance. Public works and major infrastructure works are also required to obtain construction permits regardless of whether they are undertaken by the public or the private sectors.

4.1.3. *Institutions involved: inter-government relations*

Construction permits are issued by municipal authorities as a rule but there are some cases when the regional government must be consulted or is actually in charge of providing the permit.

In Wallonia, municipalities must obtain prior consent from the decentralized offices of the Regional Government whenever a permit is requested for an area which does not have an approved local plan. Construction activities which also require environmental permits are now subject in Wallonia to a single permit which takes the place of the construction permit, as explained below in environmental permits.

In Flanders, applications for construction permits are, as a rule, submitted to the municipal authorities, who must consult with the regional Government in certain cases, i.e. constructions alongside main highways or concerning monuments or protected sites. The opinion of the regional authorities is binding when it is negative or imposes restrictions. In the case of works undertaken by public bodies or works of public interest, including airports and “infrastructures for air traffic”, the construction permit procedure is handled in its entirety by the Flemish Government, which shall decide after hearing the opinion of the municipality. Some infrastructure construction may be carried out without a permit but this exception does not include airport-related activities.

4.1.4. *Relationship with planning*

In principle, a permit can not be granted for a construction that is not in accordance with the spatial plans. However, both in Wallonia and in Flanders, the law may provide for some exceptions and, in the case of works of public interest, derogate from the plan and authorise the project while a new version of the plan is being prepared in which the projected works are taken into account.

Conversely, if the application is in agreement with the existing plan the building permit must be granted, since there is no right to exercise discretionary power in relation to this matter.

4.2. Environmental permits

All competences regarding environmental permits, including Environmental Impact Assessments (EIA), have been devolved to the regions, regardless of whether the project is undertaken by the Federal Government. Although environmental procedures in both Flanders and Wallonia are quite similar, there are some important differences, mainly regarding integration with other necessary permits.

A.- WALLONIA

4.2.1. Environmental Impact Assessment

The Walloon government has implemented a clear policy of integrating all the permits required for the execution of any project and has adapted its legislation in order to achieve this end. Environmental assessments are now conducted as part of the process required to issue the construction permit and there is only one consultation and one public participation process for all permits related to a single project.

Environmental assessments can take two forms, an “Impact Notice” (*notice d'évaluation des incidences sur l'environnement*) and an “Environmental Impact Assessment” (*étude d'incidences sur l'environnement*), which division is established by separating activities into different categories based on their potential impact according to their characteristics, dimensions and location. The preparation of an “impact notice” is required for any activity that needs an environmental or a construction permit, and EIA is only necessary for projects included in a closed list that follows closely on what EU legislation has determined. A particular project may be exempted from these requirements, when it is included within a spatial plan that has already been subjected to an environmental assessment.

Aerodromes with runways over 2,100 m in length are subject to an Environmental Impact Study, as required by Council Directive 85/337/EEC⁸ (the “EIA” Directive). This applies not only to construction projects and modifications, as envisaged in the EU Directive, but, since 2004, also to the operation of the airport.

Environmental permits are granted for a maximum period of 20 years, after which term they must be renewed subject to a new Environmental Impact

Assessment. The administration can establish specific requirements for the activity or project, including the need to file periodic monitoring reports. This applies to airport operators since 2004, who must now validate their permit at least every 20 years and comply with whatever requirements are established at the time when the permit is issued.

Directive 2001/42/EC⁹ (the “SEA” Directive), has been transposed into the new Environmental Code (*Code de l’Environnement*) adopted on 27 May 2004, and 17 March 2005, and in force since 4 May 2005. All draft spatial implementation plans (both Regional and Municipal) have been subject to an environmental impact study since 2002.

4.2.2. *Other environmental controls*

In Wallonia, the so-called “environmental permit” includes all permits and authorizations that are required under environmental law as well as legislation on major accidents hazards.

4.2.3. *Institutions involved*

Applications for environmental permits are filed before municipal governments which are most often competent to decide after consulting with the Walloon Council for Sustainable Development and the Municipal, or Regional, as the case may be, Spatial Planning Commission and holding a public participation process. The decentralized offices of the Regional Government are competent to decide when the activity shall encompass more than one municipality. All decisions may be appealed before the Walloon Government.

Municipalities must consult the decentralized office of the Regional Government, which may transmit the application to as many institutions and entities as deemed necessary. These institutions shall have 60 days (in the case of airports) to submit their opinions in writing, and may request that concertation meetings be held in order to reach a decision on the project.

In situations where both an environmental and a construction permit are required, the unified or single permit procedure shall be handled by the decentralized office of the Walloon Government, if the building permit is to be issued at regional level, as is the case with airports.

4.2.4. *Integration with other permits*

In Wallonia, environmental permits are now integrated into a single procedure. If a construction permit is also required, the law has provided for what is known as

⁸ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁹ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

“Single Permit” (*Pérmis Unique*) bringing together the procedures to grant both type of authorizations.

Since airport construction is a matter within the competence of the Regional Government, all procedures shall be handled by regional authorities, including the environmental impact assessment. Regional authorities are also in charge of the final decision regarding all aspects of the single permit.

B.- FLANDERS

4.2.5. Environmental Impact Assessment

Environmental Impact Assessment regulation in Flanders basically conforms to EU regulation, bringing together both the “EIA” and the “SEA” Directives in order to jointly regulate the evaluation of projects and the evaluation of plans, although the required information and procedures are different. The same legislation¹⁰ also regulates the evaluation of safety concerning major hazards, with the aim of promoting permit integration.

In the case of airport construction, an Environmental Impact Assessment (EIA) is required for runways over 2,100 m long and may be required when runway length is between 800 m and 2,100 m. These projects are within the competence of the Regional Government.

4.2.6. Other environmental controls

Flemish legislation also requires an environmental permit for activities which may have an adverse impact on the environment or can be considered a safety hazard. For such activities, the Flemish Government can impose operating conditions or standards which are in addition to those that may be established for a specific project at the time of the EIA. This permit is called an “environmental authorisation” and airport operation is included among the activities that are required to obtain it. Brussels airport obtained the environmental permit on 1 February 2000 for a period of 5 years, which was renewed at the beginning of the year 2005.

Title II of the Flemish environmental regulations (VLAREM II) sets the standards for different types of activities, which in the case of airports¹¹ focus on noise and noise contours delimitation. Nevertheless, these standards can be modified by the specific environmental authorisation issued for each airport.

Like the case of Wallonia, environmental authorisations in Flanders are issued for a maximum period of 20 years.

¹⁰ Decree of April 5, 1995, amended in 2002, 2003, and 2004

4.2.7. *Institutions involved*

Environmental authorisations for airport operation are issued by the Flemish Government¹², including Brussels National airport, which is controlled by the Federal Government but is located entirely within Flemish territory. In this case the regulation specifically states that the competent authority must observe the proportionality principle when setting out the conditions in the environmental authorisation. By virtue of this principle, no authority can adopt, without an acceptable reason, any measure which is so restrictive as to make it extremely difficult for another authority to perform its own duties.

4.2.8. *Integration with other permits*

Environmental authorisations are only integrated with the permits required for major accident hazard facilities, although the law includes a call to integrate as many other permits as possible into the same procedure.

With respect to construction permits there is no integration. The law gives priority to the environmental authorisation and states that the planning permit issuing procedure shall be suspended while a decision is being made with regard to the environmental authorisation. The planning permit can not be issued if the environmental authorisation is denied.

¹¹ 19 JANVIER 1999. - Arrêté du Gouvernement flamand modifiant l'arrêté du Gouvernement flamand du 1er juin 1995 fixant les dispositions générales et sectorielles en matière d'hygiène de l'environnement (VLAREM II)

¹² Decree of May 18, 1999 on spatial planning, Article 103§ 2.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Airport projects are approved by the competent administration which, in the case of Brussels National Airport, is the Belgian Federal Government and, in the case of other airports, the Regional Governments of Flanders or Wallonia depending on where the airport is situated.

There are no specific provisions for public participation or intergovernmental coordination other than those established for environmental and planning permits.

5.1.2. Instruments

There are no statutory plans for the construction or development of airports, although some airports such as Liège, for example, have their own master plans which are made public but have no legal force.

A long-term development plan is prepared by the Regional Government for each airport in Wallonia in order to determine noise exposure levels.

5.1.3. Process

There are no specific processes involved since there are no airport planning instruments.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

In order to protect the operation of aircraft in the vicinity of airports, the Law of 30 June 1930¹³ established servitudes around a number of airports. Despite the title of the Law, the servitudes were not limited to military aerodromes, but also included civil aviation airports. These servitudes were based on the delimitation of a safety zone of 400 m from the end of the runway and up to 5 corridors 200 m wide along the safety zone. In the first 200 m of the safety zone obstacle height is limited to 20 m, and in the rest the limit is equal to one-tenth of the shortest distance between the obstacle and the runway.

These servitudes have not been modified and may be out of touch with the realities of modern aviation, but they are still in place and in some cases they

¹³ Loi du 23 juin 1930 concernant la création, autour des aérodromes utilisés par une ou des escadrilles de l'armée, d'une zone de sécurité frappée de servitudes aéronautiques

have been brought to bear at the time of adopting spatial plans near existing airports.¹⁴

The protection of obstacle limitation surfaces is now entrusted to airport certification since all international airports with runway length equal to or more than 1,200 m must comply with the requirements of Annex 14 in order to be certified.¹⁵

There is no indication in the law as to how airports can guarantee the obstacle limitation surfaces, if they extend beyond the aforementioned airport servitudes, or in new airports or new developments where servitudes have not been delimited. While the servitudes established according to the 1930 Law must be represented on a map that can be consulted at the municipality and must be notified to all affected owners, there is no such provision concerning areas resulting from the implementation of Annex 14 requirements.

Municipalities are required to observe existing servitudes when issuing construction permits.

5.2.2. Noise Impact

Noise impacts are not contemplated in national airport legislation, but have been regulated by the Regions. Both Flanders and Wallonia require the preparation of noise contours for airports, as described below.

5.2.3. Risk prevention

Third-party risk prevention is not considered in Belgium's national or regional legislation.

5.2.4. Land reserve for future construction

Although there is no specific legislation concerning land reserves for future airport construction or enlargements, regional planning instruments have played an important role in setting the spatial framework needed for future airport development. In this respect a good example is the airport of Liège whose growth has been anticipated in the Sector Plan approved by the Walloon Government on 6 February 2003¹⁶. The plan covers all or part of multiple municipalities and was adopted for the specific purpose of allowing the development of the airport and connected activities.

¹⁴ Literal translation of the Orders of the Flemish Government approving the revision of the Liege Structure Plan.

¹⁵ Arrêté Royal du 15 mars 1954 réglementant la navigation aérienne réglementant la navigation aérienne. As modified by Arrêté Royal of January 27, 2004.

¹⁶ Arrêté du Gouvernement wallon adoptant définitivement la révision du plan de secteur de Liège en vue de permettre le développement de l'activité aéroportuaire de Liège-Bierset et de l'activité qui lui est liée

In establishing this plan, the Walloon authorities took into consideration not only the current needs of the airport, but also projected capacity in the long term. The plan not only reserves land for future infrastructures, but includes provisions for high-speed links, parks and green buffer zones, as well as economic activities directly related to the airport operation. As the Sector Plan can establish detailed regulations concerning land use, the Plan has zoned the area around the airport in such a way so as to prevent the location of residential uses in areas where noise projections are higher than accepted standards. It has also stipulated that in certain areas industrial or commercial uses must be linked directly to the operation of the airport. The regulation of land uses has been done taking fully into account projected noise levels as a result of the contour estimates included in the noise abatement plan and the environmental impact study that had to accompany the plan.

The land reserves and land use regulations contained in the Plan do not generate compensation unless owners are deprived of their property or prevented from continuing with land uses existing at the time plan was approved. In practice, no compensation is being paid for land reserves, since they mostly affect rural areas currently under agricultural or forestry use.

5.3. Airport construction

5.3.1. Permits and authorisations required for airport construction or development

According to Article 43 of the Air Navigation Regulations of 1954, as amended on 31 August 1970, new aerodromes require an authorisation from the Minister in charge of civil aviation. Since 1980, these powers are exercised by the regional ministers. Article 43 also states that if the aerodrome is to be permanent, then it is necessary to consult with the Minister in charge of spatial planning. This provision is upheld by the fact that airport construction is subject to a building permit, and the regional authorities are in charge of issuing such permits, as explained above.

Airport modifications are not subject to ministerial approval but must be first notified to the competent Minister, who may order operational changes. Changes which have an effect on air traffic control and air navigation systems will require the approval of the air navigation authority (Belgocontrol) before the airport can operate.

In Wallonia, airport creation is regulated by a Decree of 23 June 1994, on the creation and operation of airports in the Walloon Region. In spite of its title, the Decree does not contain any provisions regarding airport creation, but rather sets out a list of airports and aerodromes in the Region, establishes the principle that airports can be operated as a concession, determines the times during which airports can operate, and sets noise-related operating conditions and infringement penalties.

Environmental Impact Assessments and other related permits shall be required as explained above.

5.3.2. Institutions and processes involved

In the case of Brussels National airport any new construction within the airport perimeter shall be decided by the Federal government but is required to obtain a construction permit from the Flemish Government.

In the case of regional airports in Flanders and Wallonia, new airports would require authorisation from the regional minister in charge of civil aviation, as well as construction permits from the regional government.

In both regions the regional consultative institutions in the fields of environment and spatial planning will be involved in the decision-making process.

5.3.3. Integration with planning and environmental controls

Integration of environmental and planning permits is described above in 4.2.

5.4. Airport operation

5.4.1. Operating permit

According to the Royal Order of 27 May 2004, airport operators must obtain an operation licence for Brussels National airport. Such licences are granted by the Federal Government. No similar requirement is established for other airports.

Airports are required to obtain an environmental permit in order to operate, as indicated above, and to renew it at least every 20 years.

5.4.2. Airport certification

Airport certification was introduced in 2004 as an amendment to the Air Navigation Regulations of 1954. According to Article 43 bis of the Regulations, certification is issued by the Minister in charge of air navigation or the Director General for Air Transport.

Certification is required only for international airports with runways equal to or longer than 1,200 m. This certification only covers the requirements established for ICAO Annex 14.

6. AIRPORT NOISE

6.1. Legislation

A.- Federal

The basic legislation on this matter is contained in the Law of 18 July 1973, concerning the fight against noise. It is a fairly general Law which enables government to adopt regulations on noise and establishes penalties (even prison) for breaches of noise regulations or for hindering the work of noise inspectors. This Law is still in force, although it has been abrogated for the Brussels Region. The Walloon Region has inserted a series of articles with far more detailed regulation.

Aircraft noise in particular was regulated through the Royal Order (*Arrêté Royal*) of 17 September 2000, which transposed into Belgian law the provisions of Council Directive 92/14/EEC¹⁷.

For the Brussels National Airport, the Belgian Government included many noise-related conditions in the contract with the airport operator (Brussels International Airport Company, BIAC) when this company was created in order to separate airport operation from air traffic management and entrust each of these activities to two different entities. Royal Order of 23 September 2003, transposes Directive 2002/30/EC¹⁸ (the “noise-related operating restrictions” Directive).

Until the sale of a major part of its stock to a private company in November 2004, BIAC, as a public corporation, had some regulatory powers. In 2000, BIAC introduced a operating regulation in order to reduce noise, with a quota count system which was completed by a Ministerial Order in 5 May 2004. In some cases, there has been some overlapping between the provisions of BIAC and the Federal Government and the conditions established by the Flemish Government in the environmental permit.

On top of these regulations, the Belgian Government also opted for implementing a noise charge system in Brussels National Airport, based on the type and weight of aircraft plus the time of day. These tariffs are applied both for the airport and for air traffic control.

¹⁷ Council Directive 92/14/EEC of 2 March 1992 on the limitation of the operation of aeroplanes covered by Part II, Chapter 2, Volume 1 of Annex 16 to the Convention on International Civil Aviation, second edition (1988)

¹⁸ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

B.- Brussels

The Brussels Region adopted its own legislation on noise through the Ordinance of 17 July 1997, as amended on 4 April 2004. It includes a rather complete regulation of airport noise, establishing different areas that have to be designated for noise purposes, indicators, methodology, strategic noise plans and noise abatement plans. Both the strategic noise plan and the regional noise abatement plan are mandated to take specifically into consideration the noise generated by Brussels Airport and aircraft noise in general.

In 1999 (*Arrêté du Gouvernement du 27 mai 1999*), the Brussels Government adopted specific regulations on aircraft noise, setting noise metrics and dividing the Region in 3 zones. For each zone, a set of discrete noise limits were established. Brussels Government has established penalties, which can be steep, for surpassing these limits, although airlines are given the opportunity to justify why a certain level of noise was reached on a particular occasion.

Indirect impact is, on the other hand, rather important since aircraft flying over the region are required to observe the noise limits established by the Regional Government and have been subject to penalties for exceeding noise levels in the past.

C.- Wallonia

Noise legislation in Wallonia is based on the abovementioned Law of 18 July 1973, modified for the Walloon Region, through successive Decrees in 1999, 2001 and 2004. These amendments to the national law were introduced to improve airport noise regulation. Article 1.bis §1 enables the Walloon Government to adopt measures in order to protect neighbouring areas from airport noise. Paragraph 2 of the same article enables the Government to establish a long-term development plan based on noise exposure estimation for maximum projected development. The law sets the formulae to be used to estimate noise, based on L_{den} indicators, and determines that 4 zones shall be delimited on that basis. Zone A, where exposure is equal to or greater than 70 dB(A), Zone B, where levels are between 66 dB(A) and 70 dB(A), Zone C, which includes levels between 61 dB(A) and 66 dB(A), and Zone D, where limits stay between 56 dB(A) and 61 dB(A). These zones are used as a basis for spatial planning and for the adoption of noise abatement measures.

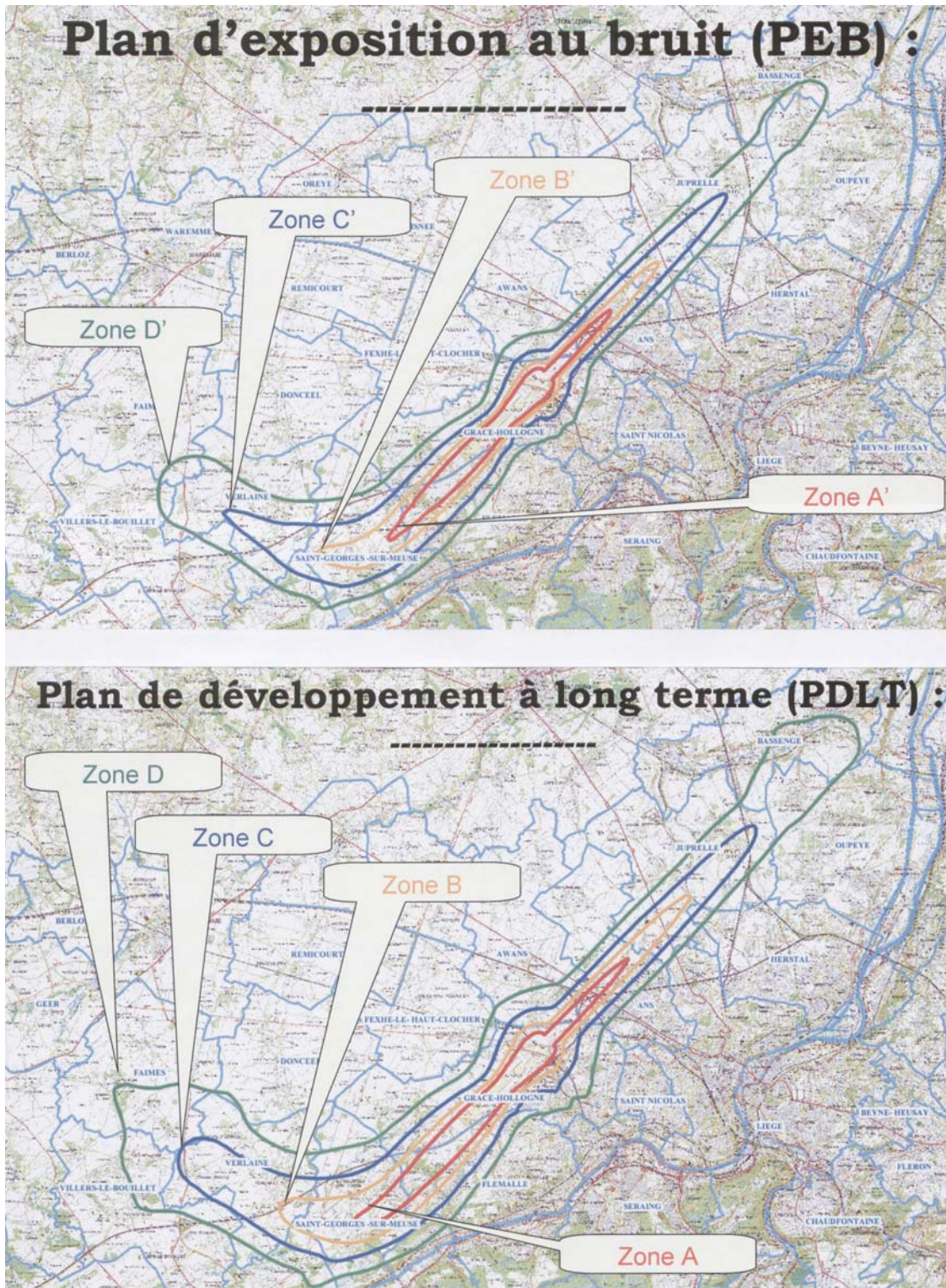


Figure 11. Liège airport noise zones

The 1994 Decree on Airport creation and operation was amended in 2001 to include the times when the airports of Liège-Bierset and Charleroi are allowed to operate. The former is open 24 hours and the latter from 06:30h to 23:00h, with a quota count system being applied between 06:30h and 07:00h and 22:00h to 23:00.

In 2000, the Walloon Government also adopted an Order (*Arrêté du 8 novembre 2000*) which sets out the operating restrictions in the regional airports, and bans Chapter 2 aircraft, as well as night flights of “hushkitted” aircraft and engine tests between 21:00h and 09:00h.

Directive 2002/49/CE¹⁹ (the “noise” Directive) has been transposed into Walloon law by means of the Order of 13 May 2004, which refers to the need to prepare noise maps and action plans within the terms established by the EU legislation.

D.- Flanders

In 1999, the Flemish Government amended the general environmental regulations (VLAREM II) in order to introduce a chapter about airport noise, in addition to other purposes. Article 5.57.1.2. §1 of the 1999 Order requires 3 groups of noise contours to be drawn. The first set of contours would allow the number of people affected to be estimated, the second set would only focus on daytime noise and the third would cover night time noise, but these contours have not been established due to technical reasons. The Order states the values to be used for the contours and the methodology (prediction by means of INM simulation). It is the obligation of the airport operator to establish these noise maps resulting from these contours and to send them to the Regional environmental administration.

These general provisions can be adjusted each time an environmental permit is issued. For example, Brussels National airport environmental permit establishes more detailed requirements and sets out other conditions such as the obligation to review the noise contours every year and to create a coordination committee. More importantly, the environmental permit establishes a quota count system for night operations.

In the case of Brussels National airport, noise regulation has become a rather complex matter since the Federal Government has direct authority over the airport as well as air traffic. The Flemish Government is the environmental authority and can set out the operating conditions in the environmental permit, and the Brussels Government can regulate noise immission levels that must also be taken into account. To this intergovernmental complexity one has to add the influence of the courts, since the issue has been the object of abundant litigation. As a result of this complex situation, noise regulation at this airport has been subject to important changes in recent years.

The current policy of the Federal Government is to disperse flights in order to spread the noise over as large a territory as possible, seeking an equitable distribution of nuisances which has resulted in reducing the amount of noise for

¹⁹ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

some areas while increasing the number of people affected. Under this dispersion policy, it is not feasible to implement any soundproofing scheme and former plans to adopt mitigation measures have been abandoned.

6.2. Institutions

In relation to airport noise, only the Federal and the Regional Governments are really involved. Municipalities play a very minor role in regulating these matters or in issuing environmental or construction permits for these infrastructures.

Regions are fully empowered to establish and to enforce their own environmental legislation, including airport and aircraft noise. This has given rise to some problems at Brussels National airport, due to the fact that the Flemish Government has set specific noise conditions in the environmental permit required for airport operation and the Brussels Government has established fairly strict regulations on the noise of aircraft flying above the region.

The Belgian Government created a “Mediation Service” in June 2001 to act as an intermediary between citizens, administrations, Brussels National airport and the aviation community. This service, which is accountable to the Federal Ministry of Communications and Infrastructure, acts as a mediator between citizens affected by aircraft noise and all the authorities concerned. The purpose of the “Mediation Service” is not to act as a disciplinary body, but to gather the citizens’ complaints and to provide them with all the necessary information, and to bring to the attention of the proper authorities all the complaints received.

In Wallonia, the Regional Government established an independent authority in 2001 for the purpose of monitoring airport noise, acting in a consultative role and as a mediator. Each airport has also its own coordination committee, where representatives of the affected citizens meet with representatives from Regional and Municipal Governments, airport operators and users.

The Walloon Government has also created a public company, SOWAER, for the purpose of implementing noise mitigation measures. This company is in charge of acquiring properties in areas of excessive noise and paying compensation or soundproofing aid to citizens and businesses affected by noise.

6.3. Instruments

6.3.1. Planning

The use of noise abatement plans can be found only in the region of Wallonia, since the current dispersion policy at Brussels National airport is not conducive to this kind of measures. The Walloon Government has been trying to put noise-related planning in place since 1998, but due to a number of court judgments,

among other reasons, it has not been able until very recently to put into practice the full provisions of the law. The abovementioned Article 1.bis of the 1973 Noise Law enables the Walloon Government to establish a “Noise Exposure Plan” whose sole purpose is to establish 4 zones based on the noise contours delimited for the long-term development of the airport, which are to be reviewed every 3 years.

The noise contours for each of these areas have finally been approved, after several legal battles that nullified the first effort made for that purpose. The “noise plan” is not contained in a single document, but rather a number of Government Orders which establish the noise contours and the zones where different kinds of compensation or mitigation measures apply.

Noise maps and action plans as required by the Order of 13 May 2004 have yet to be prepared but they shall not be required until 2008.

6.3.2. *Land use restrictions*

Wallonia is the only region where noise and land use have been brought together under the provisions of the Noise Law and spatial planning legislation. The four zones mentioned above were delimited by applying noise impact simulations to the maximum airport development forecast and have been integrated into the regional Structure Spatial Plan for the Liège area, where land uses are allocated taking into consideration noise exposure values.

Noise-based land use restrictions are made public through spatial planning.

6.3.3. *Compensation*

In Wallonia, owners, lessees or businesses may be entitled to different compensation measures depending on the noise zone where their property is located.

Within zones A and B, homeowners can sell their property to SOWAER²⁰ at market value (about 1,000 houses have been already acquired) or request the installation of soundproofing. Lessees and professionals can apply for compensation in order to relocate to a different area. In Zone C, SOWAER covers the cost of soundproofing according to certain standards, and in Zone D SOWAER pays a fixed amount of compensation as a support measure for homeowners who wish to improve soundproofing.

6.4. **Integration with spatial planning**

The delimitation of noise exposure zones for the purposes of long-range airport development is adopted by spatial plans and fully integrated within their

²⁰ SOWAER: Société Wallonne des Aéroports

provisions in order to avoid incompatible uses of land. This integration takes place at the level of the Sector Plan which can not be ignored by municipalities in drawing up their own plans or issuing building permits.

6.5. Integration with development, construction or operation controls

Noise, in all three regions, must necessarily be considered when drawing up spatial plans, as it forms part of the environmental assessment that plans are required to include. In Wallonia, noise has already been fully integrated into the spatial planning system as evidenced by the case of Liège.

Since spatial planning is binding on municipalities at the time of issuing building permits, with few exceptions, it would be very difficult to grant a permit for uses that were contrary to the plan.

Airports are now being required to obtain an environmental permit for their operation both in Flanders and in Wallonia. The permit is issued for a limited number of years, and is always subject to review in a case of non-compliance or external circumstances that justify such a review. Furthermore, when the environmental permit is granted, it establishes certain conditions such as specific control measures, including the operation of noise monitoring networks and the revision of noise contours.

7. AIR QUALITY

7.1. Legislation

The basic text regarding air pollution is the Law of 28 December 1964, which was abrogated in a large part for the Region of Brussels, which adopted its own regulations, and was amended for the Flemish Region in 2004. The Law enables Government to adopt adequate measures to prevent and fight air pollution, including the prohibition of certain types of pollution and the regulation of air pollution generating devices. The law also allows public authorities to adopt special measures in a case of serious pollution and establishes penalties, including prison, for breaches of the legislation on this matter. This general law has been followed by a number of regulations concerning specific emission sources, but there is no piece of legislation that addresses the issue of air pollution in or around airports.

Brussels adopted its own Ordinance in 1999²¹ but Flanders and Wallonia have essentially regulated this issue in the context of environmental permits and control of contaminating activities, together with other forms of pollution, and by establishing particular rules for certain kind of emissions or pollutants.

²¹ Ordonnance de 25 mars, 1999, relative à l'évaluation et l'amélioration de la qualité de l'air ambiant

No mention is made in this legislation of measures specifically designed to address this issue in or around airports. The only mention to be found in relation to aviation activity is in the regional regulations which transposed Directive 2001/81/CE²² (the “NEC” Directive) on the determination of national ceilings for certain atmospheric pollutants (Ozone NO_x, SO₂, VOC, and NH₃), which states that such emission limits do not apply to aviation except in the landing and take-off phases.

7.2. Institutions

The regulation and implementation of air quality is left largely in the hands of the Regional governments. Local administrations implement regional legislation in issuing environmental permits, although all activities that may have a substantial impact fall within the competence of the regional authorities.

7.3. Instruments

Air quality considerations are integrated into spatial planning in that it has to be taken into account in the environmental assessment that all plans must undergo. In fact, the Order approving the Sector Plan for the enlargement of the Liège Airport includes some considerations about the impact of the airport on air quality, indicating that as far as SO₂, CO and hydrocarbons are concerned, aviation only produces 0.3% in the area, while road traffic produces 49% of the hydrocarbon emissions.

Legislation on air pollution is enforced through the environmental permit that the airports must obtain, where specific conditions and monitoring requirements are established.

In Brussels National airport, for instance, air quality monitoring is in the hands of the Flemish Environmental Management Company (*Vlaamse Milieumaatschappij*, VMM) which operates a network of stations in the area, and the report for 2002²³ indicates that SO₂ emissions were rather low and that air quality is greatly influenced by the road network. Some peak measurements have been caused by construction activities but in no case did emissions go beyond the limits established in the legislation.

²² Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants

²³ Most recent year for which a translation was available.

8. CASE STUDY – LIÈGE AIRPORT

After the regionalisation of Belgium in 1980, the airports came under the jurisdiction of the Regions. Liège airport was transferred to the Walloon region, although the Air Traffic Corporation provided interim control until 31 December 1991.

In 1990, the private company SAB S.A. was founded and was granted a 50-year renewable concession by the Walloon Region to develop and promote Liège airport.

Liège Airport is located in an area with relatively low population density. In addition, the runway runs parallel to the main city and this makes it easier for aircraft to avoid overflying urban areas. Nevertheless, the airport's rapid development, mainly at night, led the Walloon Region and SAB to take a certain number of ancillary measures regarding the environmental impact of aircraft operations.

The most important of these measures was the "Noise Exposure Plan" (*PEB Plan d'Exposition au Bruit*) to protect and compensate local residents, together with the noise contours for the Long Term Development Plan (*PDLT Plan de développement à long terme - 2020*)

The plan was initially appealed and partially suspended by the State, however, it was finally approved by the Regional Spatial Planning Commission (Decision of 29 June 2002) by means of a revision of the sector plan for the airport area. The new sector plan defined different land uses for the areas covered by the noise zones considered in the PEB, which affected several municipalities around the airport. These land uses are represented in Figure 12.

This revision of the sector plan also approved the extension of the runway and other airport developments, such as new passenger and cargo terminals.

Finally, the noise zones defined by the noise contours included in the PEB and in the PDLT were approved by Ordinances of 27 May 2004. Each Ordinance approves a different area defined by the following noise contours:

PDLT	PEB
zone A >70 dB(A) L_{den}	zone A' >70 dB(A) L_{den}
65 dB(A) L_{den} > zone B >70 dB(A) L_{den}	66 dB(A) L_{den} > zone B >70 dB(A) L_{den}
60 dB(A) L_{den} > zone C >65 dB(A) L_{den}	61 dB(A) L_{den} > zone B >66 dB(A) L_{den}
55 dB(A) L_{den} > zone D >60 dB(A) L_{den}	56 dB(A) L_{den} > zone B >61 dB(A) L_{den}

Zone A

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187633&IDREV=1&MODE>

Zone A'

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187639&IDREV=1&MODE>

Zone B

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187645&IDREV=1&MODE>

Zone B'

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187651&IDREV=1&MODE>

Zone C

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187657&IDREV=1&MODE>

Zone C'

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187663&IDREV=1&MODE>

Zone D

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187669&IDREV=1&MODE>

Zone D'

<http://wallex.wallonie.be/wallexII?PAGEDYN=SIGNTEXT&CODE=187675&IDREV=1&MODE>

A new passenger terminal has been recently inaugurated and the rest of the provisions included in the sector plan for the airport area are being developed.

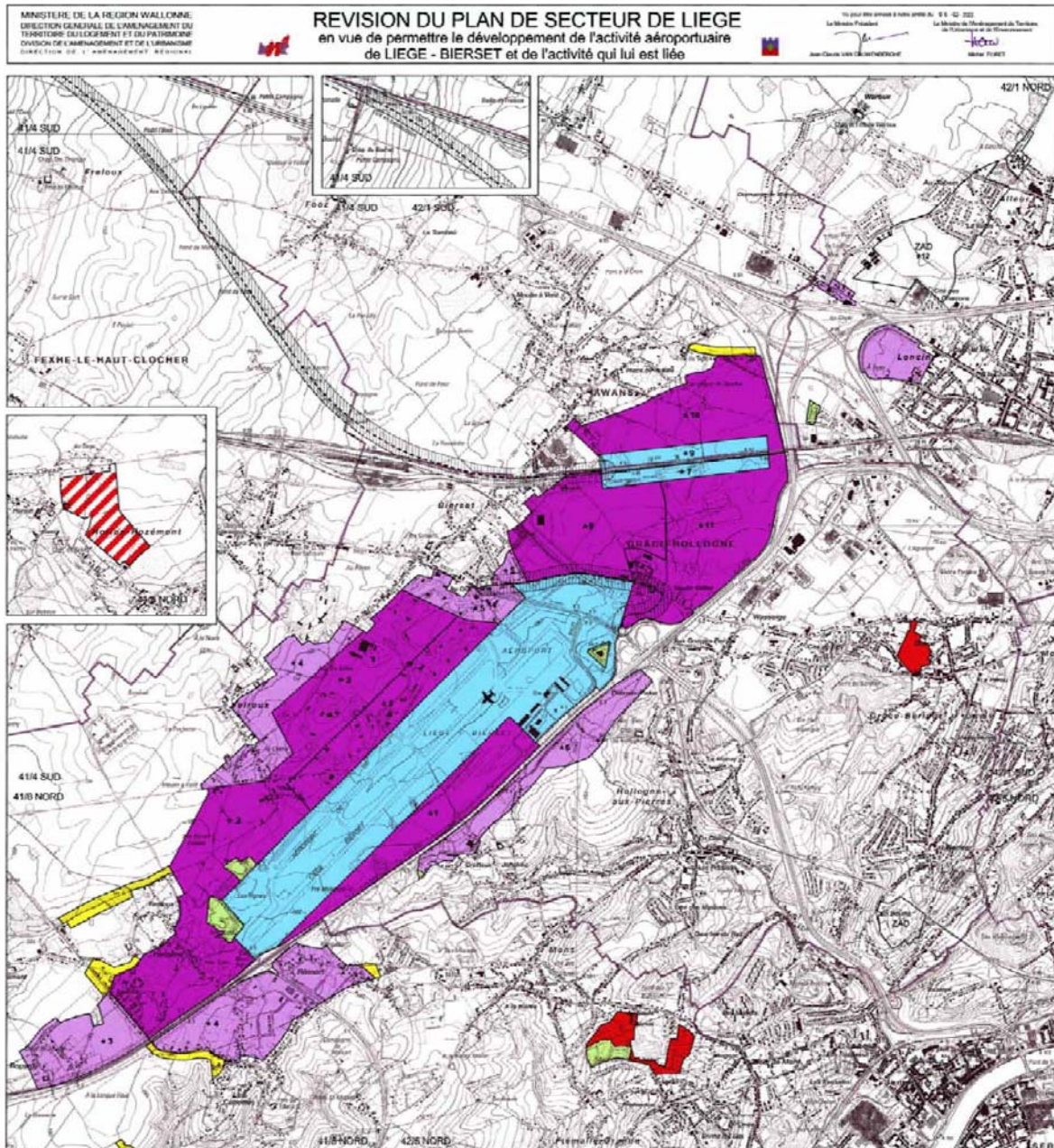


Figure 12. Liège-Bierset airport

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”²⁴)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

²⁴ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Schéma de Développement de l'Espace Régional, SDER</i>	Regional Structure Plan
<i>Schéma de Structure Communal</i>	Municipal Structure Plan
<i>Plans de Secteur</i>	Sector Plan
<i>Plan Communal d'aménagement</i>	Municipal Spatial Plan
<i>Ruimtelijk Structuurplan</i>	Regional Structure Plan
<i>Gemeentelijk Structuurplan</i>	Local Structure Plan
<i>Uitvoeringsplannen</i>	Implementation Plan
<i>Arrêté Royal</i>	Royal Order
<i>Arrêté</i>	Order
<i>Notice d'évaluation des incidences sur l'environnement</i>	Environmental Impact Notice
<i>Étude d'incidences sur l'environnement</i>	Environmental Impact Assessment
<i>Code de l'Environnement</i>	Environmental Code
<i>Code de l'Environnement</i>	Single Permit
<i>Vlaamse Milieumaatschappij, VMM</i>	Flemish Environmental Management Company
<i>PEB Plan d'Exposition au Bruit</i>	Noise Exposure Plan
<i>PDLT Plan de développement à long terme</i>	Long-term development plan

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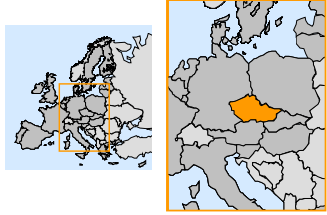


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CZECH REPUBLIC		Location Map												
Population	10.4 mill. (132.5 inhabitant per sq. Km)													
Airports network Of the country's airports, only Prague airport is state-owned, operated by Airport Prague, a state enterprise funded by the Ministry of Transport. The other 3 main international airports are owned and managed by their respective regional authorities.														
Spatial planning system Centralised spatial planning system, although some powers have been given to the local governments in the recent amendments to the 1976 Building Act. <ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National level:</td> <td>Ministry for Regional Development (Superior planning authority)</td> </tr> <tr> <td style="padding-left: 20px;">Regional level:</td> <td>Cohesion regions (regional offices)</td> </tr> <tr> <td style="padding-left: 20px;">Local level:</td> <td>District offices. Municipalities</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>National Development Plan. Regional plans</td> </tr> <tr> <td style="padding-left: 20px;">Framework plans</td> <td>Local plans</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans</td> <td>Regulatory plans</td> </tr> </table> • Process: Common process defined by the Building Act, regardless of the type of plan or the authority in charge. Specification => Conception draft => Proposal => Approval. Binding and guiding parts. Binding parts approved by a binding decree of the relevant authority. High level of citizen participation. 			National level:	Ministry for Regional Development (Superior planning authority)	Regional level:	Cohesion regions (regional offices)	Local level:	District offices. Municipalities	Strategic plans	National Development Plan. Regional plans	Framework plans	Local plans	Regulatory plans	Regulatory plans
National level:	Ministry for Regional Development (Superior planning authority)													
Regional level:	Cohesion regions (regional offices)													
Local level:	District offices. Municipalities													
Strategic plans	National Development Plan. Regional plans													
Framework plans	Local plans													
Regulatory plans	Regulatory plans													
Regulation and permits Planning permission (territorial decision) and a building permit are required for all construction activity. Districts and some municipalities are the ordinary building offices. The CAA is the special building office, responsible for granting building permits for airport constructions.														
Airport planning <ul style="list-style-type: none"> • Policy and planning: Non statutory airport plans; only internal documents developed by the operators and sent to the municipalities for their integration into local plans. • Spatial impact: Protective zones integrated into local and regulatory plans, on the basis of safeguard maps and noise contours (negotiation with affected municipalities) • Construction: Planning permission obtained from the ordinary building office (district or municipality) and building permit obtained from the CAA. EIA approval from national or regional environmental authorities (depending on the project) • Operation: Operating permit for new infrastructures granted by CAA. Airport certification under development. 														
Airport noise and air quality <ul style="list-style-type: none"> • Noise: Major airports obliged by law to propose and negotiate a noise protective zone to be integrated into regulatory plans, with compensation measures (insulation or expropriation in cases where insulation is not possible) Noise protective zones delimited by polygonal lines on the basis of the noise contours and negotiations. • Air quality: no land use restrictions based on air quality considerations 														

1. SUMMARY

SPATIAL PLANNING SYSTEM

The National Development Plan 2004-2006, approved by the Cabinet, sets the national development policy including a definition of planning priorities according to the requirements of sustainable development. Specific public investment projects and national importance objectives are included in justified cases.

Regional plans, prepared for the territory of the administrative regions, are strategy documents with a similar character to the national development plan. They shall define the most relevant areas for development within the territory of the administrative region, including the location of the most important investment projects, the main transport corridors and the requirements for a sustainable development.

Local and regulatory plans drawn up by the municipalities will finally establish the specific conditions and regulations for the development of certain areas.

These plans are organised in a hierarchical structure, in which lower levels must always be in conformity with higher levels.

All spatial plans have a binding part applicable both to public and private parties. The binding parts of planning documentation shall be declared by the responsible planning authority through a binding decree.

Airport planning must be integrated into the general spatial planning system.

REGULATIONS AND PERMITS

Construction permits

All construction activities need to obtain planning permission ("territorial decision"), and a building permit from a competent building office. Both types of permission may be combined for minor constructions but, in general, it is necessary to obtain them separately, following independent procedures. Only minor construction activities are exempted or simply require a notification to the building authority.

In general, the building offices form part of the local governments, but there are special building offices responsible for granting the building permits for transport infrastructures (the CAA in the case of airports). In any case, the planning permission must be obtained from the relevant local government.

Environmental permits

The EIA and SEA are regulated according to EU Directives. The relevant legislation splits assessment of the environmental impact into two parts: assessment of the impact of buildings, activities and technologies and assessment of the impact of drawing up policies and plans. In the field of transport, several national strategic plans have already been subject to a Strategic Environmental Assessment.

Other environmental permits, required for water treatment and waste management, must be obtained separately from the municipality.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

A new “National Transport Policy 2005-2013” has been recently approved by the Government. It includes a proposal for the development of Prague airport, the only airport currently under state ownership, with the construction of a new parallel runway.

- Airport

There are no specific airport development plans officially approved in the Czech Republic. Airport planning takes place through integration of internal airport plans into general spatial planning instruments, responsibility for which lies with the local and regional authorities.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Airport operators are responsible for preparing maps showing obstacle limitation surfaces. Those maps are part of the airport plans sent to local authorities for their integration into the spatial planning system. The relevant building offices are responsible for the definition of protective zones around the airports in accordance with those maps.

- Noise Impact

Noise contours, calculated on the basis of mathematical modelling, are included in airport plans submitted to the municipalities. The relevant building offices are responsible for the definition of protective zones around the airports in accordance with those plans.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

The only way to reserve land for future airport developments is by including those terrains as part of the airport in a general spatial planning instrument, so that no other use can be proposed in those areas. Such proposals must be included in the binding parts of the plan.

Construction

Construction activities within airport boundaries require a “territorial decision” from the relevant local building office and a building permit issued by the CAA.

Most environmental permits would be included in the approval following an EIA process. Where an EIA has not been necessary, the “administrative body of environment”, part of the local building office, will issue a statement with conditions related to the potential impacts on the environment. In other cases, the permits for waste management and water treatment should be obtained from the municipality.

Operation

The CAA is responsible for granting the operating permit for a new infrastructure.

Airport certification is not yet fully regulated in the Czech Republic, although the legal system already accepts ICAO Annexes as Czech regulations.

AIRPORT NOISE AND AIR QUALITY

Noise

Aviation noise is considered by the general regulations on public health, including maximum noise levels. The “noise” Directive 2002/49/EC has not yet been transposed, although it has been discussed twice in the Parliament.

Land use restrictions are imposed through noise protective zones proposed by the airport companies and adopted by the building offices. Compensation measures are negotiated within those protective zones.

Air quality

There are no specific provisions for airport-related air pollution.

2. CONTEXT

The Czech Republic is a country in central Europe formed, after the defeat of Austro-Hungary (1918), as a nation of Czechs in Bohemia, Moravia and Silesia. In 1989 popular unrest led to the resignation of the politburo of Czechoslovakia and the formation of a non-Communist government. On 1 January 1993, the Czechoslovakia country underwent a division into its two national components: the Czech Republic and Slovakia. The Czech Republic joined NATO in 1999 and the European Union in 2004.

The Czech Republic is divided into 13 regions (*kraje*, singular - *kraj*) and 1 capital city* (*hlavni mesto*); Jihocesky Kraj, Jihomoravsky Kraj, Karlovarsky Kraj, Kralovehradecky Kraj, Liberecky Kraj, Moravskoslezsky Kraj, Olomoucky Kraj, Pardubicky Kraj, Plzensky Kraj, Praha*, Stredocesky Kraj, Ustecky Kraj, Vysocina, and Zlinsky Kraj. There are 8 administrative regions and 6,251 municipalities.



Figure 1. Map of Czech Republic

Recent Czech accession to the EU has given further impetus and direction to structural reforms. Intensified restructuring among large businesses, improvements in the financial sector, and effective use of available EU funds should strengthen output growth. The Czech Republic's GDP per capita is 70% of the European Union average (22,400¹).

¹ GDP per capita in PPS (Purchasing Power Standards) at current market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	10,211,500
Latitude / Longitude	49°45' N, 15°30' E
Land area	77,276 sq Km
Coastline	0 Km
Capital City	Prague
GDP per capita (PPS at market prices)	15,700
GDP real growth rate	4.4 %
Inflation rate	2.6 %
Unemployment rate	8.3 %

Table 1. Czech main facts and figures (2004)²

2.1. Population and statistics

The Czech population is over the 10 million threshold, with an average density of 132.5 inhabitants per sq Km.

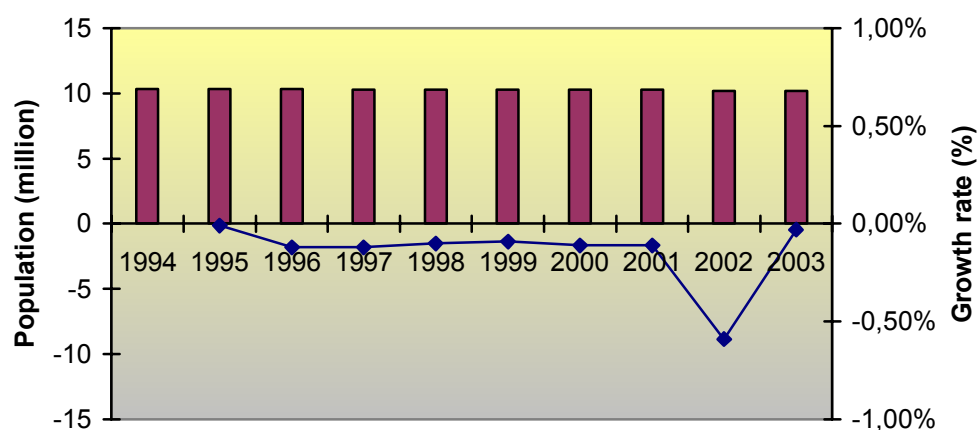


Figure 2. Czech population evolution

During the last 10 years, the population growth rate has been negative, mainly due to a sharp decrease in the birth rate during the 1990's, as shown in the following figure:

² Source: EUROSTAT

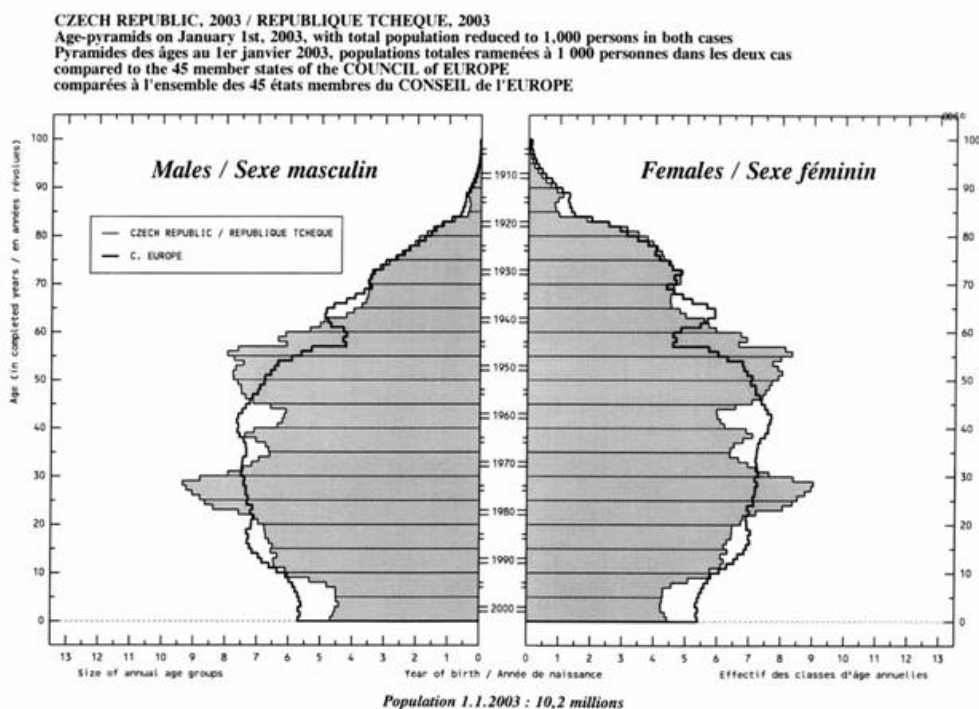
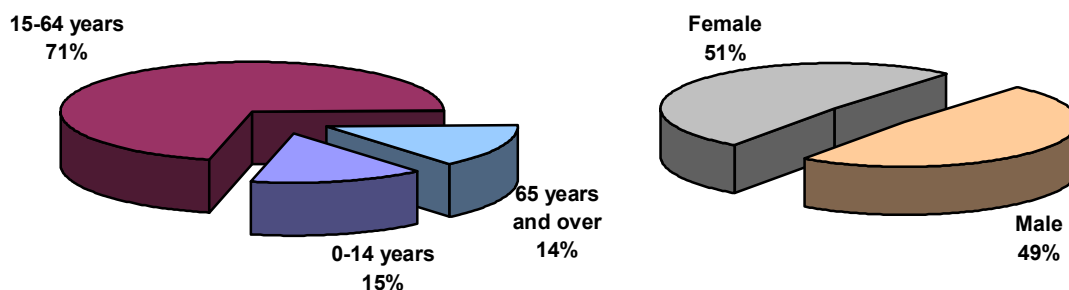


Figure 3. Czech age-pyramids (2003)³

Currently, the birth rate has recovered, reaching 9.07 births/1,000 population (2004 est.), which is still one of the lowest of the European Union. The Czech median age is 38.97 years.



Figures 4 and 5. Czech population split (2004 est.)

2.2. Government structure and powers

The Czech Republic is a parliamentary democracy. The bicameral legislature consists of the 81-seat senate, whose members are elected by popular vote to serve staggered two-, four-, and six-year terms, and the 200-seat chamber of deputies, whose members are elected by popular vote for four-year terms. The

³ Source: Council of Europe

president, who is the chief of state, is elected by parliament for a five-year term. The prime minister, who is the head of government, is appointed by the president, as is the cabinet. For administrative purposes, the country is divided into eight administrative regions, including the capital.

The central body responsible for Environmental Impact Assessment and air quality issues is the Ministry of the Environment. The Ministry of Health is responsible for the protection of public health, including noise impacts. The Ministry for Regional Development is responsible for spatial planning.

With regards to aviation, the Civil Aviation Authority (UCL) under the Ministry of Transport is the supervisory body, while the Civil Aviation Department of the same Ministry of Transport is the regulatory body.

2.3. Main airports

Listed according to the number of aircraft movements and number of passengers, there are 4 main airports in the Czech Republic: Prague/Ruzyne, Ostrava/Mosnov, Brno/Turany and Karlovy Vary.

All four airports were owned and managed by the Czech Airports Authority (CSL) from its creation in 1991 until last year. Now, since 2004, the CSL owns and manages only Prague airport, while the rest have been divested to their respective regional authorities. The CSL is the property of the Czech state, although there are some plans to privatise the company. Since 30 September 2005, the company's name has been Airport Prague.



Figure 6. Main Czech airports

The following table shows the commercial passenger traffic and cargo of the main Czech airports during 2004. It should be noted that over the last few years Prague airport has enjoyed one of the highest growth rates in passenger traffic, with a 29,9% growth rate in 2003/04.

Airport	Passengers	Cargo (Tons)
Prague- Ruzyně	9,696,000	52,100
Ostrava Mosnov	234,000	1,500
Brno – Turany	172,000	5,200
Karlovy Vary	36,000	-

Table 2. Main Czech airport data (2004)

3. SPATIAL PLANNING SYSTEM

The spatial planning system in the Czech Republic is regulated by the “Act 50/1976 on Town and Country Planning and Building Regulations (Building Act)”, as amended and modified several times since its creation, most recently in 2001.

Work is now in progress for the adoption of a new Building Act, the draft of which was approved by the Government in 2002 but which has not yet been adopted. It is expected to enter into force in 2007.

3.1. Institutions

3.1.1. National

According to section 12 of the Act 50/1976 (Building Act), the Ministry for Regional Development is the central body responsible for spatial planning in the Czech Republic. It is responsible for procuring planning and technical materials for the whole territory of the country.

The Ministry for Regional Development serves as a superior planning authority for the regions and the capital City of Prague, and decides on approval of plans for certain areas whose control is reserved by the Government.

The Ministry of Defence is responsible for spatial planning of military areas.

3.1.2. Regional

According to section 12 of the Act 50/1976 (Building Act), the regional offices are the spatial planning authorities in their territories, where they are responsible for preparing planning materials and drafting regional plans.

The regional structure in the Czech Republic has been subject to several changes since it was firstly established by the “Constitutional Act of the Czech National Council 1/1993”. It was amended by the “Act 347/1997 on establishing Higher Territorial Self-Governing Units”, which divided the territory of the country into 14 regions (including the capital City of Prague) and 77 districts (later abolished in December 2002).

These 14 regions constitute the regional level in the Czech Republic, but for administrative coordination and cohesion purposes the “Act 248/2000 on Regional Development Support” created 8 “cohesion regions” (including the capital City of Prague). These 8 cohesion regions are now the regional offices responsible for spatial planning.

3.1.3. *Local and area wide*

According to the section 12 of Act 50/1976 (Building Act), the municipalities, on the basis of a state-delegated power, are the local spatial planning authorities responsible for local and regulatory plans and other planning instruments for their territories.

There are also district offices in the Czech Republic, which serve as a superior planning authority to a municipality and have responsibilities in permission processes.

3.2. Instruments

The Building Act defines the spatial planning system on the basis of three main planning tools: non-statutory planning materials, planning documentation and the planning permission.

Only those documents classified as “planning documentation” are spatial planning instruments as such, but the non-statutory planning materials are also an important tool. They comprise all kinds of urban studies dealing with technical, architectural, environmental, sociological, economic or regulatory conditions for land use, forecasts of long term development potential, etc.

Non-statutory planning materials should be prepared by each planning authority not only as a basis for the development of planning documentation, but also to monitor its implementation and decide the best moment for its review, as well as to take decisions when no planning documentation is available.

Planning documentation includes regional, local and regulatory plans and consists of binding and guiding parts. According to the Building Act,

“Fundamental area disposition principles and land use limits that are formulated in the regulations are binding; other parts are guiding”

3.2.1. *Strategic plans or policy documents*

National Development Plan

The National Development Plan sets the national development policy including a definition of planning priorities according to the requirements of sustainable development. The development policy provides for co-ordination of industrial sector policies affecting both the area and development principles of particular administrative regions. Specific public investment projects and national importance objectives are included in justified cases.

The National Development Plan is prepared by the Ministry for Regional Development, in co-operation with administrative regions and authorities, and

consequently approved by the government. The current National Development Plan 2004-2006 was approved by the Cabinet with Resolution 1272/2002.

Regional Plans

A regional plan is a strategy document with a similar character to the National Development Plan. It shall define the most relevant areas for development within the territory of the administrative region, including the location of the most important investment projects, the main transport corridors and the requirements for a sustainable development.

“Decree 135/2001 of the Ministry for Regional Development on non-statutory planning materials and planning documentation” defines the binding part of a regional plan:

“The planning documentation binding part shall particularly contain:

a) in case of a regional plan, the main corridors and areas suitable for the location of transport and infrastructure structures of the super-local significance, determination of the regional and superregional territorial systems of ecological stability, land use limits of the super-local significance, corridors and grounds for public works, ...”

Maps and drawings containing the design and regulations of the plan in a graphic form should be scaled 1:50.000, 1:25.000 and, if possible, 1:10.000.

Regional plans are prepared, in general, for the territory of an administrative region. While it is possible to prepare a regional plan for the territory of several regions, only one of the regions should be responsible for its coordination and approval.

If there is no agreement between the different regions, the State, through the Ministry for Regional Development, can coordinate and approve the regional plan. In case of regional plans for a single region, the regional office is responsible for its approval.

3.2.2. *Local (framework) plans*

Local Plans

A local plan shall define the overall urban planning concept, taking into account those areas already developed and proposing other areas with a potential for development. It can establish specific conditions for the development of certain areas, as well as regulations for the development of the whole territory covered by the plan.

“Decree 135/2001of the Ministry for Regional Development on non-statutory planning materials and planning documentation” defines the binding part of a local plan:

“The planning documentation binding part shall particularly contain:

...

b) in case of a local plan, the urban planning concept, land use and the spatial disposition of the grounds, determination of the areas with development potential, restriction of changes in structure use, area disposition principles for transport, technical and public infrastructure, determination of the territorial system of ecological stability, land use limits, grounds dedicated to the extraction of raw materials, grounds for public works, and grounds for demolitions and reclamation treatments...”

Maps and drawings containing the design and regulations of the plan in a graphic form should be scaled 1:10.000 and, if possible, 1:5.000, with altitude descriptions.

Local plans shall be prepared for the territory of a municipality, or for several municipalities if the local authorities reach an agreement.

In the case of the capital City of Prague, local plans can be prepared for separate parts of the city.

The municipalities, on the basis of a state-delegated power, are responsible for preparing and approving local plans.

3.2.3. *Regulatory (detailed) plans*

Regulatory plans

Regulatory plans define specific land uses for an area within a municipality or for the entire municipal territory, regardless of whether it is already covered by a local plan or not. These plans set out in detail all the elements that define the spatial organization of an area, including land uses, street lines, building alignments and heights, preservation areas, flood protection areas and other land use constraints. They must also define the main infrastructure networks and land reserves for public works, as well as mining and land reclamation areas. These plans have to include an assessment of their impact on the environment and forestry or agricultural lands.

“Decree 135/2001of the Ministry for Regional Development on non-statutory planning materials and planning documentation” also defines the binding part of a regulatory plan:

“The planning documentation binding part shall particularly contain:

...

c) in case of a regulatory plan, determination of the areas with development potential, individual building plots and nature of their use, structure locations, restriction of changes in structure use, access roads to the structures and the their connections to the infrastructure, components of the territorial system of ecological stability, grounds dedicated to the extraction of raw materials, if such an extraction is feasible and possible, regulatory elements of the area and spatial dispositions (e.g. street and construction line, height and volume of structures, land use indicators, transport and technical infrastructure design), land use limits and determination of the ground for public works, demolitions and reclamation treatments.”

Maps and drawings containing the design and regulations of the plan in a graphic form should be scaled 1:1.000 and, if possible, 1:500, with altitude descriptions.

Regulatory plans can be prepared for part of a municipality or for its entire territory.

Municipalities, on the basis of a state-delegated power, are responsible for preparing and approving regulatory plans.

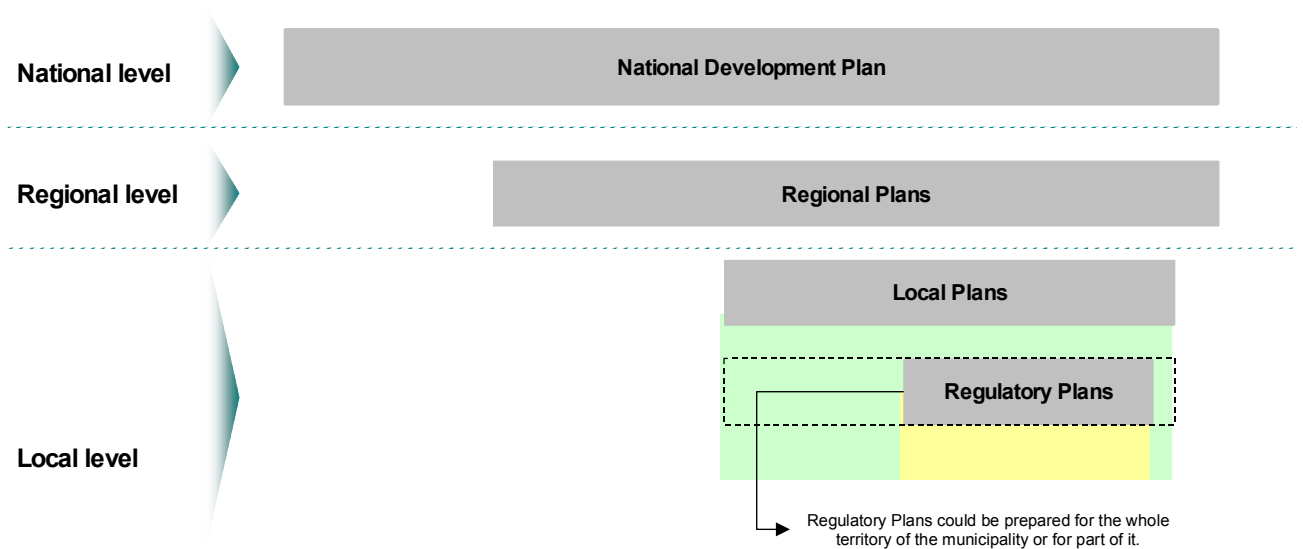


Figure 7. Spatial planning instruments

3.3. Process

The Building Act defines a common process for the preparation and approval of any planning documentation, regardless of the type of plan or the authority responsible for it.

3.3.1. Inter-government consultation

On the basis of non-statutory planning materials or any other preparatory work,, the planning authority should firstly prepare a draft “specification” with its objectives and position and the requirements for the preparation of the plan.

This specification shall be published to allow for citizen participation and sent to all relevant authorities affected by the plan for their comments. All comments and opinions shall be analysed and discussed and a final version of the specification shall be approved by the planning authority.

The planning authority will then prepare a “conception draft” of the plan. This conception is not necessary for local or regulatory plans, provided that the specification is sufficiently detailed to reach an agreement and is supported by other planning materials. The conception shall include alternatives and different options for the final solution, and shall indicate which the binding parts of the plan would be.

This conception, with the same structure and extent as the planning documentation, shall again be subject to public consultation. Public meetings shall be held, in which explanations of the contents of the plan and the position of the planning authority will be followed by discussion and time for comments. Those comments, to be submitted in writing after the meeting, will be analysed and included in an assessment report to be prepared by the planning authority, where proposals of decision on the objections raised will be made.

This assessment report, sent to all participants in the process, shall be approved by the planning authority and will be used as the basis to prepare the final “proposal” of the plan for approval.

This final proposal shall be published and subject to further public consultation. A report on this consultation, together with all the comments received and decision on objections, is to be prepared by the planning authority.

That report and the final draft plan shall be submitted to the approving authority for its final decision. Compliance with higher level plans will be checked by the superior planning authority, i.e. local plans are verified by the regional authority in order to ascertain whether they comply with regional planning.

The binding parts of planning documentation shall be announced by the responsible planning authority through a binding decree. This binding part will

be an obligatory material for preparation and approval of any related planning documentation at a lower level and for decision-making in the area.

Inter-government consultation is guaranteed throughout the whole process, both horizontal and vertical. All the preparatory work is distributed and consulted with all affected authorities at the same level of administration, and the authorities at a higher level are requested to check compliance with any other plan or regulation.

3.3.2. Policy Integration

Planning authorities are required to monitor and, at regular intervals (i.e. every two years), evaluate compliance with the plans and with any existing regulation on spatial planning.

Policy integration takes place in so far as spatial plans include infrastructural networks, land reserves for public projects, and areas subject to land use constraints due to of specific legislation.

3.3.3. Citizen participation

Citizen participation is guaranteed before any approval of planning documentation in Czech Republic. All the preparatory documents, including specifications, conception and draft proposals of regional, local and regulatory plans, are published and explained to all those citizens affected during public meetings, and enough time for comments and objections is provided. The assessment reports must take into account all comments and provide information about the reasons for their acceptance or rejection.

4. REGULATIONS AND PERMITS

4.1. Development control system

According to the Building Act, all construction activities need to obtain:

1. planning permission (“territorial decision”), and
2. a building permit

from a competent authority. Both types of permission may be combined for minor constructions but, in general, they need to be obtained separately, following independent procedures.

4.1.1. *Activities subject to development control*

The first step for the construction of new structure, a change in land-use, or the protection of a certain area is to obtain planning permission from a competent “building office”⁴. Planning permission is a positive decision of the building office:

- a) on structure location,
- b) on land use,
- c) on preserved area or protective zone,
- d) on building ban, or
- e) on consolidation or partition of plots.

The application for planning permission shall include information proving compliance with planning documentation in force and assessing the impacts on the environment.

Planning permission shall define the conditions for the development of the proposed activity, regarding protection of public priorities, public health and the environment. Furthermore, a building permit from a competent building office is required for the construction and alteration of any structure. Minor structures and alterations may only require a notification to the building office.

In the building permit, the building office specifies binding conditions for the construction and use of the structure.

The planning permission, the building permit, the proposal rejection, as well as a decision suspending the proceedings, are administrative decisions, which may be revised using both regular and extraordinary instruments.

⁴ The term “building office” is used, instead of “building authority” for the purpose of maintaining the terminology found in the English translation of the Building Act.

4.1.2. *Exceptions or exemptions*

The Building Act determines the cases (minor construction activities) when planning permission and the building permit are not necessary, or when simply a notification to the building office is sufficient.

4.1.3. *Institutions involved: inter-government relations*

According to the Building Act, the “building offices” with power to issue planning and building permissions are the districts, the administrative regions, the capital City of Prague and some municipalities which have traditionally worked as building offices and whose competence has been approved on the basis of certain conditions.

The Building Act also defines the concept of “special building offices”. In case of transport (including airports) and water management structures, the powers of the building office (except those related to planning decisions and expropriation) are exercised by the State authority responsible for the operation or use of the infrastructure (in case of airports, the Civil Aviation Authority under the Ministry of Transport). In these cases, planning permission must still be obtained from the ordinary “building office”, which should also analyse compliance of the building permit with the conditions imposed by the planning permission.

The planning permission procedure begins with proposal by the applicant to the building office, a suggestion by a different authority of the State administration or on the initiative of the building office itself.

The procedure for obtaining a building permit, or joint building and planning permission permits, is always initiated by the applicant.

The building office shall then notify the municipalities and State administration authorities concerned and all known participants (owners of affected land and neighbouring properties) about the opening of the planning permission or building permit procedure and shall call a meeting, connected usually with a local inquiry. The affected parties can submit their objections at the meeting, or, in cases when a meeting is not considered necessary, within a 15 day term. When the application concerns linear infrastructures or very large projects, preserved areas or decisions to ban construction in very large areas, the building office must issue a public notice.

All the participants will also be notified when the planning permission or building permit is granted, and they will be published by public notice. When the procedure has been initiated with a public announcement the decision is also made public by posting an announcement for a period of 15 days, in the manner customary in the locality.

4.1.4. *Relationship with planning*

During planning permission procedure, the building office shall consider, on the basis of the attached documentation, whether the application corresponds to the approved planning documentation for the area where it is located.

In the building permit procedure, the building office shall examine firstly whether the documentation attached to the application complies with the conditions of the planning permission. Secondly, the building office shall check compliance with the requirements concerning public priorities, primarily environmental protection, health and life protection, and with general technical construction requirements and other specific regulations.

4.2. **Environmental permits**

4.2.1. *Environmental Impact Assessment*

The assessment of the impacts of determined activities on the environment was originally covered by the “Act 244/1992 on Environmental Impact Assessment”.

Several assessments and a National Environmental Policy have been approved in accordance with that legislation.

These matters are now regulated by the “Act 100/2001 on Environmental Impact Assessment”, which entered into force on 1 January 2002. This Act falls within the competence of the Ministry of Environment and includes transposition of the Council Directive 85/337/EEC⁵ (the “EIA” Directive) as amended by the Council Directive 97/11/EC⁶.

It splits environmental impact assessment into two parts:

- Assessment of buildings, activities and technologies (modified in new act No. 100/2001)
- Impact assessment of developing policies and plans (modified in original act No. 244/1992)

A new “Act 93/2004 on guidelines for environmental assessment for conception plans” entered into force on 1 May 2004 amending Act 100/2001 to transpose Directive 2001/42/EC⁷ (the “SEA” Directive).

⁵ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁶ Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment

⁷ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

According to the above-mentioned legislation, construction of airports with basic runways of 2,100 m or more shall always be subject to an assessment (EIA). Construction of airports with basic runways up to 2,100 m must go through a declaratory procedure to decide whether a full EIA is necessary.

In the field of transport, several national strategic plans have already been subject to a Strategic Environmental Assessment.

4.2.2. Other environmental controls

Waste management and water treatment activities are controlled by the municipalities if they are not considered during in any EIA.

4.2.3. Institutions involved

The Ministry of Environment and relevant state administrative bodies of environment are involved in EIA. The responsibility for the EIA procedure may fall on the national or regional authorities depending on the project or plan.

These authorities are “affected State administrative bodies” in the process regarding airport infrastructure projects (by means of EIA, SEA or statement).

4.2.4. Integration with other permits

There is no form of permit integration. The developer has to obtain all the necessary permits separately.

The Building Act only determines some cases when it is possible to merge planning permission proceedings with other proceedings, particularly the planning permission proceedings with the building permit proceedings.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

In general, the main participants in airport planning and development are the aerodrome operators/owners of the airport, the affected municipalities and the Civil Aviation Authority.

In the case of Prague airport, the owner is the state, which is represented by the Ministry of Transport. Airport Prague (former CSL), a state-owned company created to operate the airport, is responsible for drafting airport plans.

The remaining international airports are now owned by the regions, which are therefore responsible for drafting airport plans.

Participation of other relevant authorities follows the rules in compliance with valid legislation.

5.1.2. Instruments

There are no specific airport development plans officially approved in the Czech Republic. Airport planning takes place through integration of internal airport plans into general spatial planning instruments, which are a responsibility of the local and regional authorities.

Airport development plans are prepared by the airport companies as working documents. In the case of Prague airport, this plan is prepared by the Development Department of Airport Prague (former CSL) (which was part of the Environmental Department until last year) and sent to the surrounding municipalities and the Ministries of Transport and Environment whenever it is updated.

Even if there are no airport plans or detailed planning documentation (regulatory plan or other non-binding materials) for the airport area, there is a regional plan in most cases. Regional plans generally include each existing airport in their territory, although at a lower level of detail.

At the national level, a new “National Transport Policy 2005-2013” has been recently approved by the Government (13 July 2005). This includes a proposal for the development of Prague airport, as the only one currently owned by the state, with a new parallel runway.

5.1.3. *Process*

Airport planning documentation is prepared by the airport company and approved by the owner of the airport. In the case of Prague, it is the state (the “Minister’s Advisory Board” of the Ministry of Transport in particular) which approves the plan while in the case of the other three regional airports, Brno, Ostrava, Karlovy Vary, that is a responsibility for the relevant region (the regional council). This is not, however, an official approval.

Airport plans are not subject to citizen participation until the time when they are proposed as part of a draft general spatial planning instrument, such as a regulatory plan of a city. During that general process, citizens may submit comments and opinions on the airport future developments.

The plan then needs approval from the relevant building authorities (in order to obtain planning permission and building permit). The building permit will be issued by the Civil Aviation Authority, but the planning permission which must precede it is issued by the State construction administration (building authority) according to the Building Act 50/1976. The Civil Aviation Authority, as a special building authority, is not entitled to issue planning permissions.

With regards to the “National Transport Policy”, in which the development of a new runway at Prague airport is considered, the draft document prepared by the Ministry of Transport was sent and discussed with other ministries and state administrations and was finally subject to Strategic Environmental Assessment before approval by the Government.

5.2. **Spatial impact**

The Czech Republic has developed and promulgated specific legislation issued by the Aeronautical Information Service (part of Air Navigation Services of the Czech Republic) to enable the implementation of the provisions of ICAO Annexes to the Convention on International Civil Aviation (in accordance with section 102 of the Act 49/1997 on Civil Aviation). The State has also established a system for implementing amendments to SARPs (Standards and Recommendation Practices) of ICAO Annexes and there are no differences between ICAO Annexes 14 and 16 and national regulations in the Czech Republic.

5.2.1. *Implementation of ICAO Annex 14 requirements*

There are “protective zones” established around the airports and other aviation structures by the relevant building authority on the proposal of the airport operator, in accordance with section 37 and the following sections of the Civil Aviation Act.

Airport operators are responsible for preparing maps showing obstacle limitation surfaces. Those maps are part of the airport plans, but can also be prepared for new airport developments such as a new runway, and sent to the affected municipalities for its consideration in their spatial planning instruments.

The Civil Aviation Authority is responsible for supervising of compliance with ICAO Annex 14 requirements. According to the Civil Aviation Act, “...*within the protective zone of airports or aviation structures, the construction of structures or the carrying out of activities may be undertaken only with the approval of the CAA. The Authority shall grant an approval provided the equipment or the activity does not obstruct the air traffic nor endanger its safety.*”

5.2.2. Noise Impact

Noise contours, calculated on the basis of mathematical modelling, are included in airport plans submitted to the municipalities. However, this is not the only way of integrating noise impacts into land-use planning.

According to “Act 258/2000 on protection of the public health, as amended by later regulations”, the following are basic duties of the airport operators:

- to ensure that the airport traffic noise does not exceed legal limits as set by implementing regulations for the protected outside space, protected internal space of structures and protected outside space of structures;
- on a step by step basis, to implement or ensure the implementation of anti-noise measures in such extent that the legal limits are adhered to at least inside residential houses, family houses, structures for school and pre-school education, structures for health and social purposes and functionally similar structures;
- the operators of public international airports handling more than 50,000 aircraft operations/year shall suggest a “noise protective zone”.

The only airport exceeding that limit of annual operations is Prague airport. Noise contours (65 dB L_{Aeq} day and 55 dB L_{Aeq} night) were calculated by Airport Prague (CSL) following a mathematical methodology agreed with the Ministry of Health. They considered the forecast traffic for 2010 and the future airport developments (a new parallel runway), as well as future runway use, aircraft fleet, typical wind directions in the area. The resulting noise contours were discussed and finally agreed upon with the municipalities and the Public Health Institute.

On the basis of those contours, the “noise protective zone” was negotiated and established as an area limited by polygonal lines delimiting the whole settlements touched by the noise contour. The noise protective zone was then integrated step by step into every regulatory plan for the area, and it is now

binding on all affected parties. It comprises two different areas: the first, subject to noise levels over 75 dB L_{Aeq} day – 65 dB L_{Aeq} night, where no new residential development is permitted, and a second, subject to noise levels over 65 dB L_{Aeq} day – 55 dB L_{Aeq} night, where special construction materials and conditions are required to obtain the building permit.

5.2.3. Risk prevention

Third-party risk areas are not considered in the Czech Republic.

5.2.4. Land reserve for future construction

The only way to reserve land for future airport developments is by including those terrains as part of the airport in a general spatial planning instrument, so no other use can be proposed in those areas. It is not enough to include that proposal in the non-binding parts of the plan. It is necessary to include it in the binding parts of the plan.

Airports are considered “public utility buildings (constructions)”. This concept comprises buildings defined in published planning documentation for public utilities (public infrastructure) or environment protection, or for development and protection area of the municipality, region or state.

In the case of these public utility buildings (constructions), expropriation or restriction of property rights of land or building is possible. This power can only be used under certain and stated condition established by law.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: Building permits for new buildings and constructions at the airport are granted by the Civil Aviation Authority, but the prior planning permission is issued by the State construction administration (building authority) in accordance with the Building Act 50/1976. The Civil Aviation Authority, as the special building authority, is not entitled to issue planning permission.

The Civil Aviation Authority shall issue a decision on a structure's compliance with the Building Act 50/1976 on the basis of an evaluation of the aviation structure's operating adequacy from the point of view of air traffic safety, in accordance with section 36 of the Civil Aviation Act.

- b) Environmental permits: In cases when an EIA has been necessary, the approval at the end of the process shall serve as environmental permit, including conditions and comments to be considered during the planning permission proceedings.

Where an EIA has not been necessary for the type of construction proposed, the “state administrative body of environment”, part of the local building authority, is always consulted during the planning permission proceedings, and it will issue a statement with conditions related to the potential impacts on the environment.

- c) Other permits: According to the Building Act, a certificate of practical completion of the construction shall be issued by the building authority which granted the building permit before the construction can be used.

The Civil Aviation Authority, as special building authority, shall issue the certificate of practical completion on the basis of an evaluation of the new infrastructure from the point of view of air traffic safety.

5.3.2. *Institutions and processes involved*

- a) Authorization: Planning permission is issued by relevant State construction administration (building authority) (e.g. for Prague Ruzyně Airport it is the City of Prague). A building permit is issued by the Civil Aviation Authority, acting as the special building authority (for whole area of the Czech Republic).
- b) Supervision: State construction supervision is defined by section 98 and the following sections of the Building Act 50/1976. The process is coordinated by state construction administrations (building authorities).

5.3.3. *Integration with planning and environmental controls*

The authority issuing the planning permission or building permit shall control compliance with conditions stated by the EIA or by the State administrative body of environment in its statement.

5.4. **Airport operation**

5.4.1. *Operating permit*

The Civil Aviation Authority is responsible for granting the operating permit for a new infrastructure, in accordance with the Civil Aviation Act.

5.4.2. *Airport certification*

Airport certification is not yet fully regulated in the Czech Republic, although it is under development and the legal system already accepts ICAO Annexes as Czech regulations.

Aerodrome manuals already exist, in accordance with ICAO requirements.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

Noise impacts are regulated in the Czech Republic by the “Act 258/2000 on protection of the public health, as amended by later regulations”. This Act falls under the authority and responsibility of the Ministry of Health.

Sections 30 and 31 of this Act deal with protection against noise and set several obligations on airport operators:

“Section 30 (1) ..., operators of airports, ... shall be obliged to ensure, through technical, organizational and other measures stipulated by this Act and an implementing regulation, that the noise does not exceed the hygienic limits specified in an implementing regulation for outer premises, protected inner premises of structures and protected outer premises of structures and that transferring of vibrations to natural persons exceeding the set limits is prevented.

...

Section 31(2) If hygienic limits for noise from the operation of public international airports providing for more than 50,000 take-offs or landings per annum and military airports are exceeded, the operator of the airport shall be obliged to propose a protective noise zone. The competent administrative authority pursuant to the special regulation⁸ shall establish the protective noise zone.

(3) For apartment buildings, family homes, structures for school and pre-school education, structures for health and social purposes and functionally similar structures located in a protective noise zone, the operator of an airport, on the basis of an expert assessment carried out at his(her) cost, shall be obliged to gradually implement or ensure implementing of anti-noise measures in such scope that the hygienic limits for noise are complied with at least inside the structures. For structures set forth in the first sentence, in which, according to an expert assessment, anti-noise measures would not ensure compliance with the hygienic limits, the competent administrative authority may decide on expropriation thereof or commence a procedure on a change in the use of the structure or removing thereof, as appropriate.”

⁸ Section 120 of the Building Act 50/1976

“Hygienic” limits for noise are set out by the “Government Regulation 502/2000 on the protection of health from adverse noise and vibration impacts”. According to section 12.4 of this Regulation, the hygienic limits for noise from air transport are 65 dB L_{Aeq} during day-time and 55 dB L_{Aeq} during night-time.

Currently the Ministry of Health is preparing a new Government Regulation which should replace the existing one in 2006 and in which the noise limits will be made stricter: to 60 dB L_{Aeq} day and 50 dB L_{Aeq} night.

EU Directive 2002/49/EC⁹ (the “noise” Directive) has not yet been transposed into Czech legislation, although it has been already discussed in the Parliament. This is the responsibility of the Ministry of Health.

EU Directive 2002/30/EC¹⁰ (the “noise-related operating restrictions” Directive) will be incorporated into Czech legislation through an amendment to the Civil Aviation Act, already approved by the Government on 20 July 2005. It is the responsibility of the Ministry of Transport, and is expected to enter into force next July 2006.

With regards to air quality, “Act 86/2002 on protection of air, as amended”, and its implementing “Decree No. 356/2002” falls under the authority and responsibility of the Ministry of Environment.

6.2. Institutions

Participation of the state administration in the protection of public health is stated by the same Act 258/2000. The Ministry of Health, the regional hygiene stations, and the Ministries of Defence and Interior are involved in this area.

The Ministry of Health is the overall coordinator of the performance of the State administration in the area of protection of public health. It is responsible for preparing and implementing national policies in this area.

The regional hygiene stations are administrative authorities established in each of the 8 administrative regions to deal with protection of public health within their territories.

⁹ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

¹⁰ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

Finally, the airport operators (the State in case of Prague and the regions in the rest of airports) are responsible for implementing the obligations stated in national policies.

The Ministry of Environment is the central body responsible for air pollution.

6.3. Instruments

- a) Planning: Noise and air quality are always considered in airport development plans prepared by the airport operators. Noise contours, on the basis of measurements and mathematical modelling are included as guidance for the spatial planning authorities when developing their land-use planning instruments.
- b) Land use restrictions: According to Section 31.2 of the Act 258/2000, airport operators expecting more than 50,000 aircraft operations/year are obliged to propose a “noise protective zone” for the areas where the hygienic limits for noise from air transport are exceeded.

Those zones shall be established by the competent building authority in each case, so every municipality affected is responsible for including that area and the agreed conditions in its spatial planning instruments. It must be remembered that the planning permission of the building office is required to approve a decision on a preserved area or a protective zone, in accordance with the Building Act.

The only case in the Czech Republic where a noise protective zone is necessary, according to the regulations mentioned above, is Prague airport.

The airport operator (Airport Prague owned by the state) proposed “noise protective zone A” limited by the noise contours expected in 2010 for the hygienic limits of 65 dB L_{Aeq} day and 55 dB L_{Aeq} night and a more restrictive “noise protective zone B” limited by the noise contours for 75 dB L_{Aeq} day and 65 dB L_{Aeq} night. Those noise contours were calculated considering the forecasted air traffic for 2010 to ensure at least a 10-year validity of the protection (average validity of spatial plans).

The methodology to design the contours was previously discussed and agreed with the surrounding municipalities and the Public Health Institute.

On the basis of those contours, bilateral negotiations took place with each affected municipality, reaching agreements on the shape and limits of the protective zone, including the whole terrain of the settlements touched by the contours.

Then, each municipality was responsible for incorporating those noise protective zones into its land-use plans and for granting the planning permission, imposing conditions on any development within the two different areas.

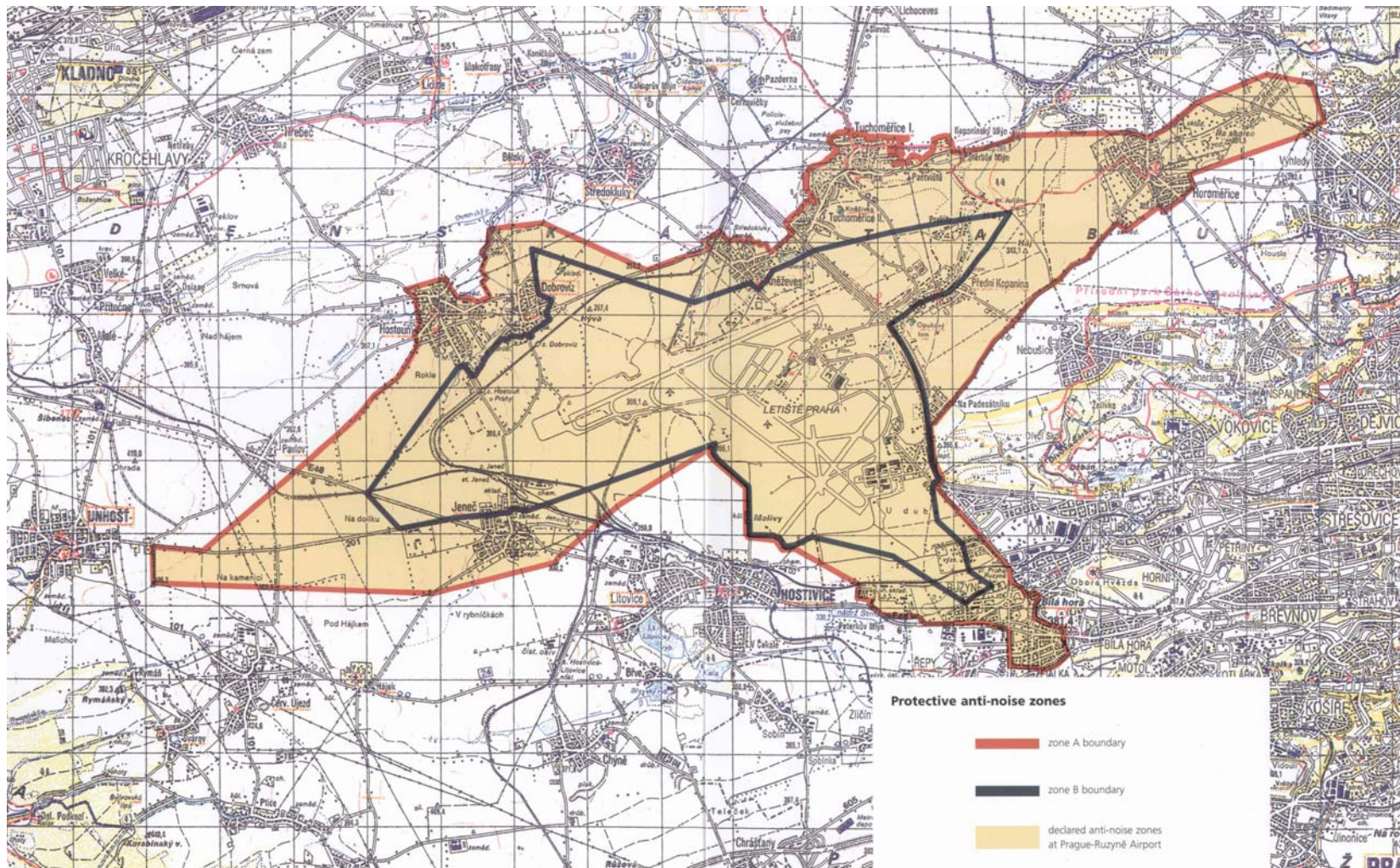


Figure 7. Noise protective zone around Prague Airport (Source: Airport Prague)

In Zone A (warning zone), the existing structures designed for housing, schools, hospitals and other noise sensitive objects should be subject to inspection with respect to compliance with internal noise limits (also set out by Regulation 502/2000). The implementation of noise abatement measures should be suggested in justified cases. The assessment and follow-up measures should be ensured by the airport operator.

Before starting the construction of new structures in Zone A, an in-depth assessment of the design should be performed. The building contractor shall provide the appropriate building authority with a certificate on compliance with internal noise limits in the case of residential buildings and public utilities. The building authority may refuse permission for the construction of pre-school and school facilities, hospitals, spa or recreational facilities and other noise sensitive constructions.

In Zone B, the existing structures designed for housing, schools, hospitals and other noise sensitive objects should be subject to deep and comprehensive inspections with respect to compliance with internal noise limits. Subsequently, the implementation of a noise abatement measure would be suggested.

New house-building and construction of health and educational facilities should not be allowed. New construction would be limited only to industrial zones without housing. This approach makes it possible to prevent the number of permanent residents from increasing within the area of Zone B where the noise from air traffic is higher.

The airport operator should be consulted on possible amendments of land-use plan and during planning permission proceedings within noise protective zones.

These restrictions were included in local land-use documentation made public by the standard procedure during the planning process. This process, starting in 1998, was completed by all the affected municipalities in 2004.

Other airports not requiring the establishment of such protective zones have to prepare a noise study to be considered by the local planning authorities.

There are no land use restrictions based on air quality considerations. Only the requirements of general legislation on air quality have to be met.

- c) **Compensation:** According to Section 31.3 of the Act 258/2000, airport operators where noise protective zones have been established are obliged to implement noise abatement measures to ensure that the hygienic limits for noise are complied with, at least inside the residential and other noise sensitive areas located in the protective zone.

Every year Airport Prague invests in noise abatement measures implemented within the noise protective zone of the Prague Ruzyně Airport. In particular, the measures consist of the replacement of windows in residential houses, family houses, structures for school and pre-school education and structures for health and social purposes.

Investments in those measures have reached 330 million CZK in the period 1998–2004, when 1,399 structures have been isolated. Additional 100 millions CZK are scheduled for 2005.

The same Section 31.3 of the Act 258/2000 provides building authorities with the power to expropriate and change land-uses in those cases where it is not possible to ensure compliance with hygienic limits inside the buildings.

6.4. Integration with spatial planning

Noise protective zones are integrated into general spatial planning instruments.

Airport operators are consulted during the planning process for developments within noise protective zones. They check compliance with noise restrictions agreed for the area. Their report is not binding on the building authority, but other State administrative bodies responsible for public health, such as the regional hygiene stations, are also responsible for ensuring compliance with the conditions established for the protective zones.

Construction administrations (building authorities) are obliged to ensure the enforcement of those conditions.

6.5. Integration with development, construction or operation controls

The approval of an EIA process or any building permit can include conditions regarding noise and air quality to be considered during the construction.

The state construction administration (building authority) that issued permission or permit controls compliance with conditions stated by state administrative body of environment in any particular permission. This authority controls compliance during the preparation of construction (planning permission); during the building (building permit); and also during the operation (the certificate of practical completion).

Furthermore, the airport operators are taking several measures to ensure compliance with noise limits and the specifications of the noise protective zones.

Noise abatement procedures are designed together with the Air Traffic Services and published in the AIP. Night flight restrictions are also published for Prague airport. Noise charges, according to aircraft category, are imposed to finance noise abatement measures.

A noise monitoring system is in operation in the vicinity of Prague airport since 1995. The measurements are carried out at 12 monitoring stations, 11 of which are located in the area around the Airport while 1 station is located at the Airport itself. This monitoring system makes it possible to accurately identify each aircraft and its noise levels when flying over any monitoring station.

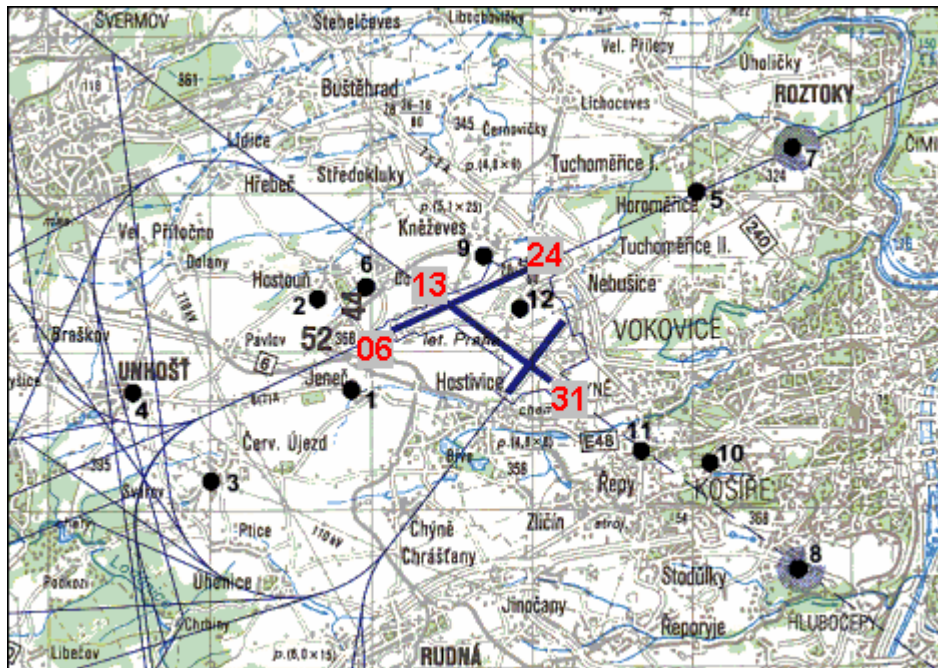


Figure 8. Noise monitoring stations around Prague Airport (Source: Airport Prague)

There is another type of noise charge introduced recently (since 1 January 2005) as special noise fee (not a fine, but a charge also published in the AIP) related to any excess over the following noise limits by each individual aircraft: 85 dB L_{Amax} day and 75 dB L_{Amax} night outside the protective zones and 87 dB L_{Amax} day and 77 dB L_{Amax} night within the protective zone A.

7. CASE STUDY – PRAGUE AIRPORT

Prague Airport is the largest international airport in the Czech Republic. It is managed by Airport Prague, a state owned company.

Airport Prague is responsible for preparing airport development plans to guarantee a good quality of service to the forecast air traffic demand. Air traffic growth during past years has forced Airport Prague to react and update the Master Plan for the airport.

This is an internal working document, to be discussed with all relevant authorities and organizations (neighbouring municipalities, all ministries...) and approved by the Ministry of Transport. However, that does not constitute official approval, as airport planning in Czech Republic can only take place through consideration in local plans.

The Master Plan was most recently updated in 2004. Due to the high traffic growths, it includes now the requirement for a new parallel runway to be operating at the airport on 2010.

This new runway was already considered in previous planning documents, but it was not expected to be needed so soon, so was simply indicated as a future development, and was included in the Local Plan of the capital City of Prague in its guiding parts (non binding). It was planned to be built at a distance of 1,800 m of the current main runway 06/24.

The Master Plan, updated in 2004, proposes a new parallel runway at 1,525 m of the current one. It was sent to all affected municipalities and discussed during several meeting, before its approval by the Ministry of Transport. It was sent to the capital City of Prague for consideration in the binding parts of the Local Plan, to avoid land speculation in the area where the future runway is to be located.

As the City of Prague does not yet intend to review its Local Plan, the inclusion of the new runway in the binding parts could be achieved through a change to the Local Plan, in accordance with the Building Act and the “Decree 135/2001 on non-statutory planning materials and planning documentation”.

In accordance with those regulations, a specification of the change, a conception draft and a change draft were prepared by Airport Prague and subject to public inquiries, when the new airport plans were explained to all affected parties.

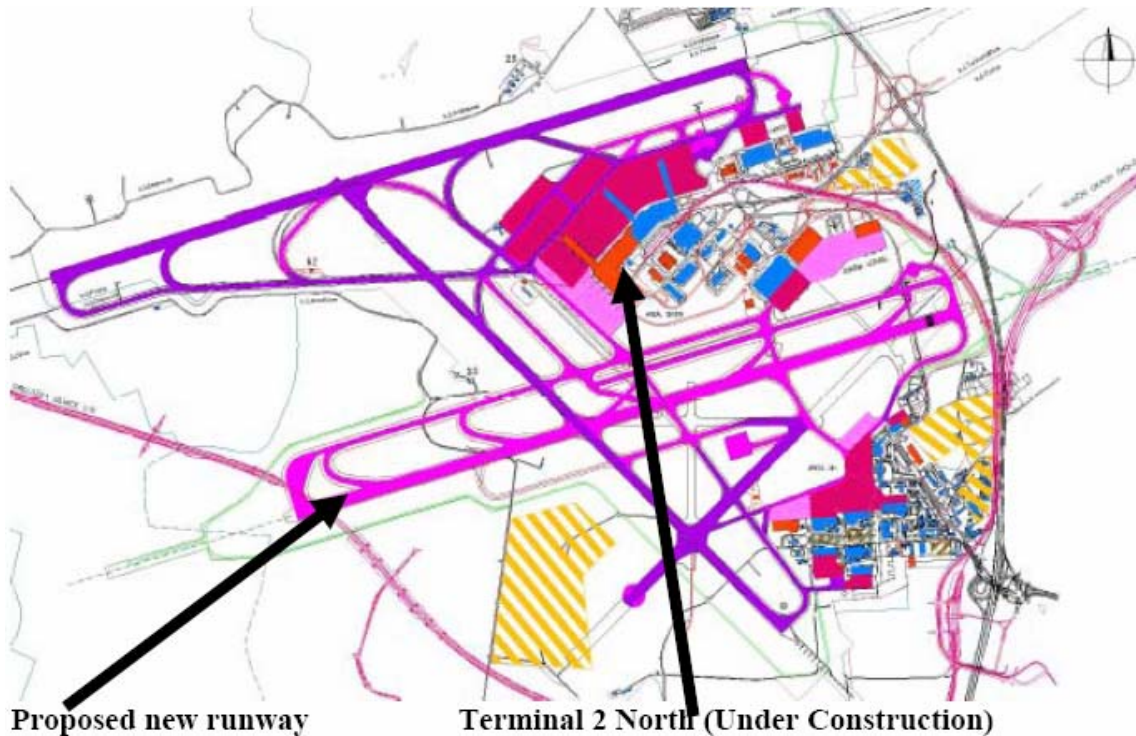


Figure 9. Proposed new parallel runway at Prague Airport (Source: Airport Prague)

This new runway, at a different distance of the existing one and expected to be built before 2010, has been proposed as Change n°5 to the Local Plan of the capital City of Prague. It is expected to be approved and included in the binding part of the Local Plan on October 2005.

Another possibility for reserving the land for the future runway would be a specific decree of the Ministry of Transport, taking advantage of the classification of the airport as a “publicly beneficial site”. This alternative would be considered if Change n°5 to the Local Plan is rejected.

The spatial impact of the airport will change when the new runway is operating, including the obstacle limitation surfaces and the noise contours. These matters have therefore also been included in the change to the Local Plan, so that it would include the new obstacle limitation surfaces maps and a new noise protective zone.

In this way, the future noise protective zone could be approved in one single step, as it will be binding to all regulatory plans around the airport. The current noise protective zone was only approved, in a very hard and lengthy process, after bilateral negotiations and agreements with each municipality affected.

The new noise protective zone will be proposed in the Environmental Impact Assessment of the new runway, currently under development by Airport Prague.

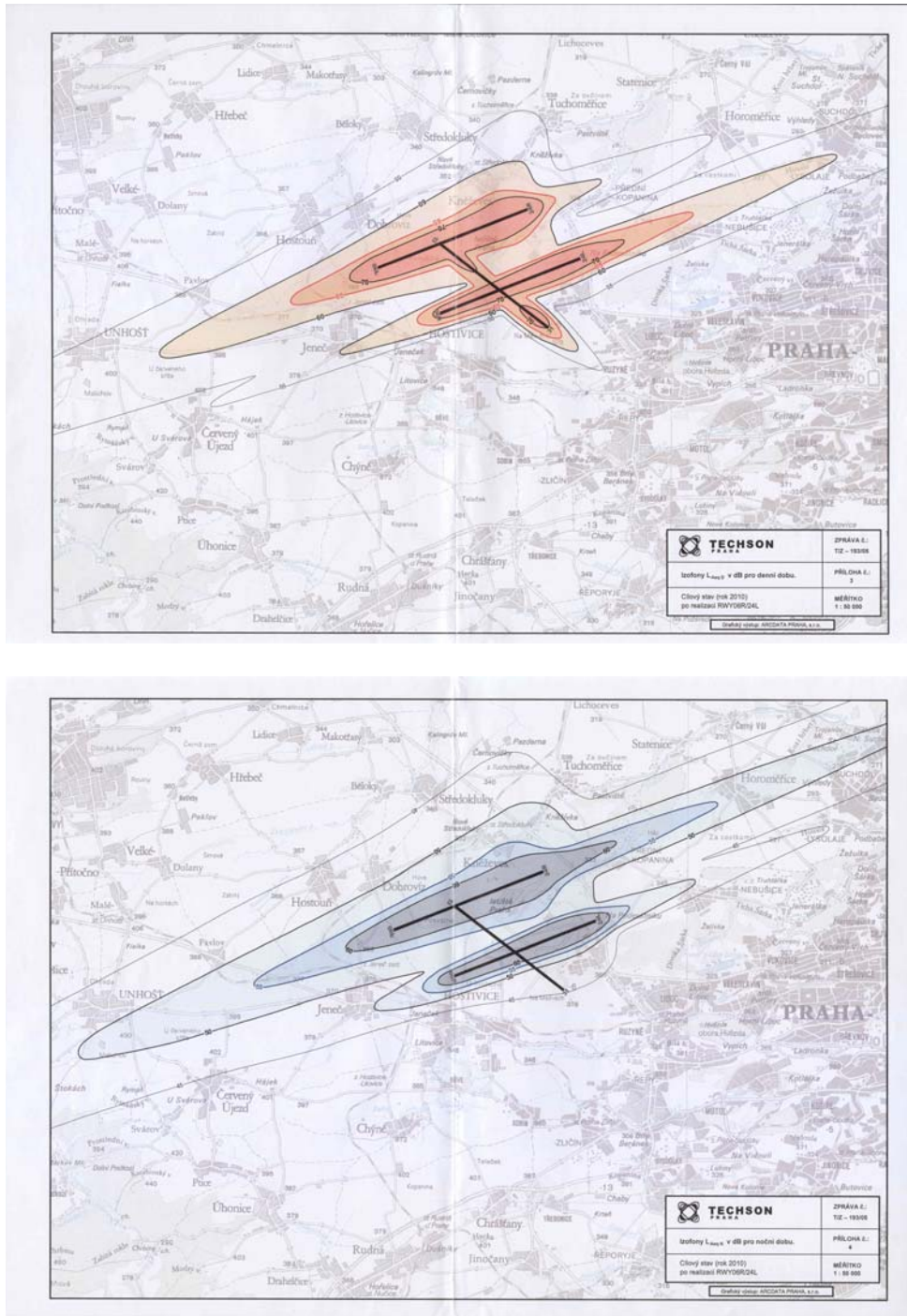


Figure 10: Noise contours for the future runway system of Prague Airport (Source: Airport Prague)

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹¹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹¹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

Kraje

Regions

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- European Directives
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http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Czech laws:
 - Czech Constitution: <http://www.psp.cz/cgi-bin/eng/docs/laws/constitution.html>
 - Aviation Act
 - Decree implementing the Aviation Act
 - Act on EIA

- Clean Air Act
- Public Health Act
- Act on IPPC
- Building Act



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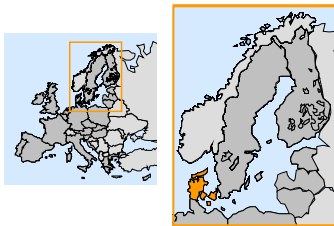


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DENMARK		Location Map												
Population	5.4 mill. (127.7 inhabitant per sq. Km)													
Airports network	Danish airports are owned and managed by different private companies on an individual basis, except two of them which are managed by the SLV (Civil Aviation Authority). The most important airport is Copenhagen Kastrup, located close to Copenhagen city, owned and operated by Copenhagen Airports A/S													
Spatial planning system														
<p>The local authorities play a central role in spatial planning, taking into account the regional and national planning directives and guidelines</p> <ul style="list-style-type: none"> • Institutions <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">National level</td> <td>Ministry of the Environment (Spatial planning department). Provide the counties and municipalities with “national planning directives”</td> </tr> <tr> <td>Regional level</td> <td>Responsible for issuing regional planning directives</td> </tr> <tr> <td>Local level</td> <td>Draft and adopt “municipal plans” and “local plans”</td> </tr> </table> • Instruments <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">Strategic plans</td> <td>“National planning report” issued after every election. National planning directives</td> </tr> <tr> <td>Framework plans</td> <td>“Regional plans” covering 12 years and updated every fourth year and “municipal plans”, as a framework for the contents of the local plans</td> </tr> <tr> <td>Regulatory plans</td> <td>“Local plans” containing detailed provisions on land use. Binding on the owners</td> </tr> </table> • Process: every spatial plan is subject to consultation and citizen participation and must agree with any other plan at a higher level. The central government can call in the responsibility for spatial planning to protect the “public interest” 			National level	Ministry of the Environment (Spatial planning department). Provide the counties and municipalities with “national planning directives”	Regional level	Responsible for issuing regional planning directives	Local level	Draft and adopt “municipal plans” and “local plans”	Strategic plans	“National planning report” issued after every election. National planning directives	Framework plans	“Regional plans” covering 12 years and updated every fourth year and “municipal plans”, as a framework for the contents of the local plans	Regulatory plans	“Local plans” containing detailed provisions on land use. Binding on the owners
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Airport planning														
<ul style="list-style-type: none"> • Instruments: airport development plans drafted by the operators, subject to environmental impact assessment • Spatial Impact: obstacle limitation surfaces implemented through easements recorded in the land registry • Construction: authorisation required from the municipal planning authority and the SLV. Environmental approval required from the County (or the Danish EPA, if the State assumes the responsibility) • Operation: operating permit granted by the Ministry of Transport and Energy (airport certification included) 														
Airport noise and air quality														
<ul style="list-style-type: none"> • Noise: noise contours included in airport development plans and EIA reports, then considered by local plans • Air Quality: considered by EIA reports. Monitoring. 														

1. SUMMARY

SPATIAL PLANNING SYSTEM

National spatial planning policy is stated by means of a “national planning report” submitted by the Minister of the Environment to Parliament after each election.

The Ministry of the Environment may also issue general guidelines and “national planning directives” on particular issues or adopt specific orders and circulars establishing binding rules on the content of regional, municipal or local plans.

County councils (plus Greater Copenhagen Authority and Bronholm Municipal Council) must prepare a regional plan with guidelines for the location of major projects with a potential impact on the environment, such as airports. Regional planning authorities may also adopt “regional plan supplements” in order to complement or modify the regional plan with provisions regarding specific topics or projects. Regional plans may include the delimitation of noise zones.

Municipalities are required to prepare a “strategy for municipal planning” and a “municipal plan” establishing the general structure for land use, transport, services and recreational areas within the municipality. These plans are implemented by means of “local plans” for specific areas providing specific regulations.

The system operates in a hierarchic way and regional or local plans can not run counter to national policy.

The CAA must be consulted prior to the adoption of any spatial plan.

REGULATIONS AND PERMITS

Construction permits

All construction, subdivision or change of use of existing buildings and undeveloped areas require a permit from the municipal council. Permits for areas outside the built-up areas designated in the municipal plan and in areas not covered by a local plan also require consultation with the regional planning authority.

For projects requiring Environmental Impact Assessment it may also be necessary to adopt specific guidelines in the regional plan or a supplement to the plan. They may also require a permit from the regional planning authority.

There are no exceptions for large infrastructures or public projects, but the Minister for the Environment may adopt regulations that take the place of regional plans and allow some projects to be initiated without a municipal or local plan or without a building permit.

Environmental permits

EIA is regulated according to EU legislation, with an added requirement that for large projects it is necessary to prepare a supplement to the regional plan which provides guidelines on location and design.

There is a list of “heavily polluting enterprises, plants and activities” which shall not be extended or modified without environmental approval from a “competent permit authority”. This list includes airports in general. The permits are issued by regional or municipal authorities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National:

There is no national airport planning document.

- Airport:

Airport development plans are drafted by the airport operator but they are not statutory documents. In the case of Copenhagen airport, development is part of the Business Plan required by company law from the operator.

Airport development plans are implemented through regional planning directives and a local spatial plans. In Copenhagen they are prepared and adopted by the Ministry of the Environment.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

The Air Navigation Act defines safeguarded areas which are represented in a plan showing the area covered by obstacle limitation surfaces and the height

limitations. The Ministry of Transport and Energy adopt one such plan for each airport.

In areas where building heights apply to constructions under 25 m, the safeguarded zone is protected by an easement. In the remaining safeguarded area any construction above 25 m requires prior consultation with the CAA.

Safeguarded areas are integrated into spatial plans and recorded in the land registry.

- Noise Impact

The Environmental Impact Statement for airport projects includes all the noise-related requirements, including the noise contours for the surrounding area. Spatial plans must integrate the contours and prohibit any incompatible development.

In Copenhagen Airport the decision to expand the airport included a commitment not to exceed the noise values of 1976. A TDENL (Total Day-Evening-Night Level) value is calculated every year to describe the noise impact of the airport and ensure that it will never exceed the value for 1976.

- Risk prevention

There are no legal requirements for third-party risk areas.

- Land reserve for future construction

Land for future expansion has to be included in regional and local spatial plans.

Construction

New airport facilities require a building permit from the Municipality.

Airport development must also be approved by the Ministry of Transport and Energy.

Operation

Airport operation requires a permit from the Ministry of Transport and Energy.

In general, airports are required to obtain an environmental permit from the county, but Copenhagen Airport is a special case, where environmental permits for water, sewage, run-off and waste are issued by the Greater Copenhagen authority and permits in relation to aviation (air quality and noise) are within the competence of the Danish Environmental Protection Agency.

AIRPORT NOISE AND AIR QUALITY

Noise

Danish legislation establishes recommended values for noise limits according to land uses in the vicinity of airports. These values must be taken into account in the preparation of the spatial plans for these areas and whenever the Environmental Impact Assessment of the airport is carried out.

In the case of Copenhagen, noise and air pollution are regulated by the “Copenhagen Airport Expansion Act”, under which all night flights must obtain prior approval from the airport, and no aircraft may emit more than 80 dB during the night hours. The Act requires also that the runway creating most noise problems be closed between 23:00 and 06:00.

The Copenhagen Act also includes a noise abatement plan dividing the area affected by noise into three zones where homeowners could receive financial assistance for soundproofing.

The regional planning directive adopted for Copenhagen airport defined noise areas where land uses are restricted.

Air quality

Results from the monitoring stations do not evidence air pollution problems as a result of air traffic.

2. CONTEXT

Denmark is the southernmost of the Scandinavian countries, located in the north of Europe, between the Baltic and the North Sea. Denmark proper includes: most of the Jutland peninsula; several major islands, notably Sjælland, Fyn, Lolland, Falster, Langeland, Als, Møn, Bornholm, and Amager; and about 450 other islands.

The country was unified in the 10th century by the Viking king Harold Bluetooth (died 985) who converted the people to Christianity. Denmark controlled England briefly in the 11th century and was united with Sweden and Norway in 1397. The union with Sweden lasted until 1523, and the union with Norway until 1814. Denmark joined the European Union in 1973, but it has opted out of some elements of the EU such as the euro. The currency in Denmark is the Danish *Krone*.

Denmark is divided into 14 counties (*amter*) and 2 boroughs* (*amtskommuner*): Aarhus, Bornholm, Fredericksberg*, Frederiksberg, Fyn, København, Københavns*, Nordjylland, Ribe, Ringkøbing, Roskilde, Sønderjylland, Storstrøm, Vejle, Vestsjælland, and Viborg. The Faeroe Islands and Greenland, in the North Atlantic, are self-governing dependencies within the Danish realm.



Figure 1. Map of Denmark

Denmark's modern market economy features high-tech agriculture, up-to-date small-scale and corporate industries, extensive government welfare measures, comfortable living standards, a stable currency, and high dependence on foreign trade. Denmark is a net exporter of food and energy and has a

comfortable balance of payments surplus. Currently, the GDP per capita is 22% higher than the EU average (22,400¹).

Characteristic	Description
Population	5,397,600
Latitude / Longitude	56° 00' N, 10° 00' E
Land area	42,394 sq Km
Coastline	7,314 Km
Capital City	Copenhagen (1.1 million)
GDP per capita (PPS at market prices)	27,400
GDP real growth rate	2.1 %
Inflation rate	0.9 %
Unemployment rate	5.4 %

Table 1. Denmark: Main facts and figures (2004)²

2.1. Population and statistics

The population of Denmark is approximately 5.5 million with an average density of 127.7 inhabitants per sq Km, which is a bit higher than the European (115) average.

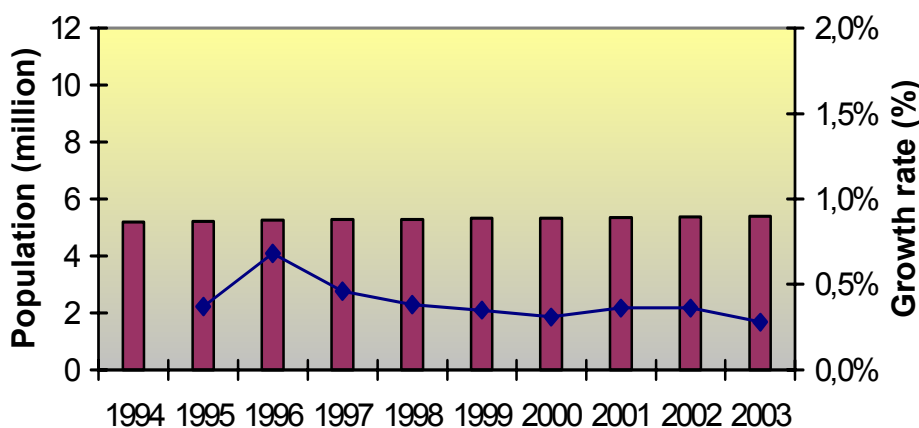


Figure 2. Population growth

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices 2004

Source: EUROSTAT

² Source: EUROSTAT

There has been a very low increase in the population of Denmark, with a growth rate of under 1%, even less than 0.5% during last 7 years, although the birthrate is one of the highest in Europe with 11.59 births/1,000 population. The Danish median age is 39.2.

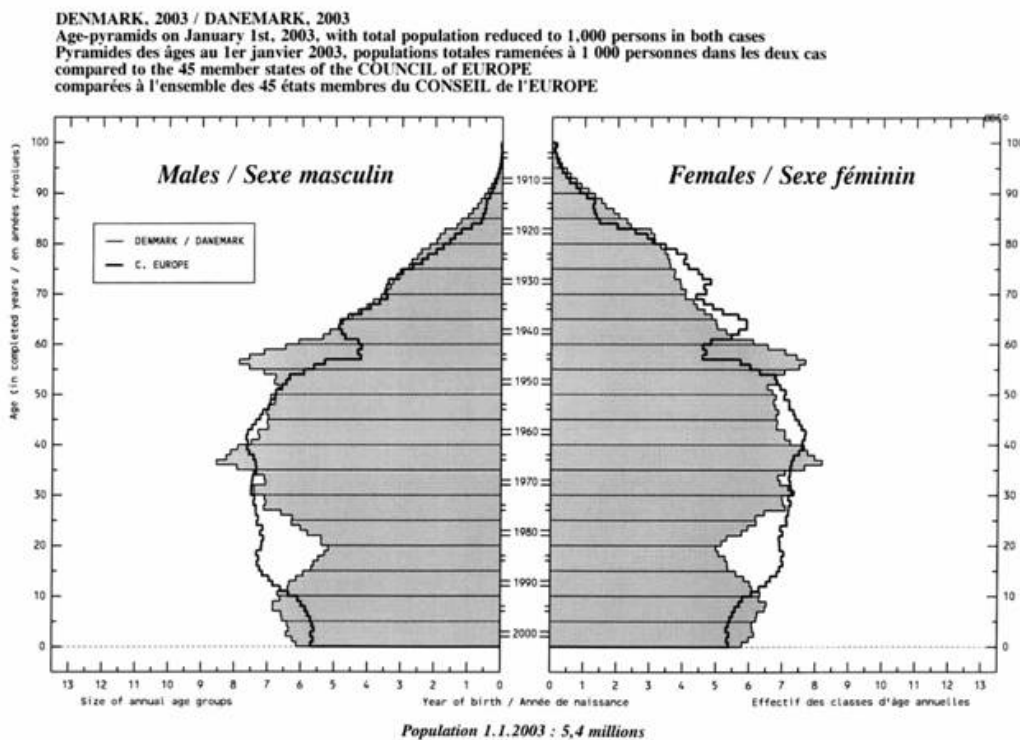
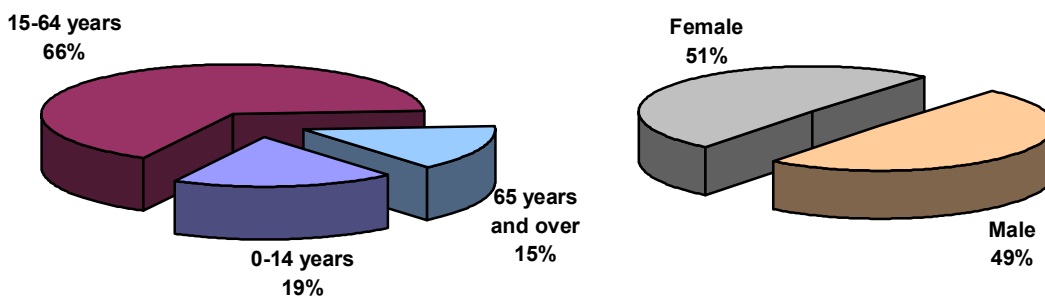


Figure 3. Age-pyramids (1.1.2003)³

The figure above shows the low Danish birthrate during the 80's and the age-groups, with the bulk of population between 15 and 64 (66%).



Figures 4 and 5. Population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Denmark is a constitutional monarchy, governed according to the 1953 constitution. Legislative power is vested in the monarch, who is also head of state, in conjunction with the unicameral Parliament (*Folketing*) of 179 elected members. Executive power is exercised by the monarch through his or her ministers, led by the prime minister, who is the head of government. The cabinet of ministers is appointed by the Prime Minister and it must have the support of the majority of the members of Parliament.

There are three levels of public administration: national, regional and municipal, with public elections to all of these levels.

With regard to aviation and airports, the Civil Aviation Authority under the Ministry of Transport and Energy is the regulatory and supervisory body. Most of the airports are owned and operated by private companies.

In the environmental field, local authorities are the primary decision-making bodies. The Danish Environmental Protection Agency, under the Ministry of the Environment, is the central government body responsible for coordinating Danish environmental administration.

With respect to spatial planning, the Spatial Planning Department under the Ministry of the Environment is the central body responsible for establishing national planning directives and guidelines. The regional planning authorities are responsible for the regional planning directives while the municipalities have the central role in spatial planning.

2.3. Main airports

In Denmark, there are around 100 aerodromes but only 10 have a paved runway longer than 2,400 m.

Danish airports are managed by private companies, sometimes with participation of the local authorities.

The most important airport in Denmark is Copenhagen Kastrup airport, located close to Copenhagen city. This airport is operated and owned by Copenhagen Airports A/S, a listed company which also operates the nearby airport of Roskilde in Denmark and several others all over the world.

Billund airport ranks second in Denmark. This airport handles less than 2 million passengers. The owner and operator is Billund Airport Ltd., a private limited company, although the former members of the co-operative society Vejle county and the local authorities of Vejle, Kolding, Grindsted, Billund and Give are now stockholders.



Figure 6. Main airports in Denmark

Airport	Passengers/year	Cargo (Tons)
Copenhagen Kastrup	18,966,000	335,000
Billund	1,850,000	48,400

Table 2. Main Danish airport data (2004)

3. SPATIAL PLANNING SYSTEM

The Spatial Planning System in Denmark is regulated by the Planning Act (Consolidated Act n° 763 of 11 September 2002). Decision-making is decentralized and most of responsibilities are given to the Counties and the Municipalities. The competent Government body with regard to these matters is the Ministry of the Environment, through its Spatial Planning Department.

3.1. Institutions

3.1.1. *National*

In accordance with the Planning Act, the Ministry of the Environment “*is responsible for the overall national spatial planning...*”

In principle, this means that the Spatial Planning Department of the Ministry will provide the counties and municipalities with information and very general guidelines (usually in the form of “national planning directives”) to ensure the protection of “national interests”.

Only in very special cases of major importance, may the Ministry take over the more detailed matters that are normally within the competence of the counties and municipalities as provided by the Act. The Ministry may also veto the plans proposed or adopted by counties and municipalities or order a municipality to prepare a plan with a specific content.

3.1.2. *Regional*

Regional planning in Denmark is in the hands of 12 regional planning authorities: 10 County Councils, the Greater Copenhagen Authority and the Bornholm Municipal Council.

These authorities are also responsible for issuing “regional planning guidelines and directives” for projects with a potential impact on the environment, and must be given an opportunity to comment on the location or implementation of any major project within their jurisdiction.

3.1.3. *Local and area wide*

The Municipal Council is the municipal planning authority in charge of “municipal plans” and “local plans”. There are 271 municipalities in Denmark.

In many respects, The Greater Copenhagen Authority can be considered a metropolitan institution, as it comprises representatives from the counties of Copenhagen, Frederiksberg and Roskilde, and the cities of Copenhagen and Frederiksberg. For planning purposes, it is included at the same level as counties and is considered a part of the “regional” organization of the country.

3.2. Instruments

3.2.1. *Strategic plans or policy documents*

The national spatial planning policy is established by means of a “national planning report” submitted by the Minister of the Environment to Parliament after each election. This report, which is debated and subjected to a public hearing, is used as a framework for the national views on regional and municipal planning proposals.

The Ministry of the Environment may also issue general guidelines and “national planning directives” which provide binding guidance on issues such as the location of gas pipelines and electric power lines or the construction of new wind turbines.

More specific regulations may also be issued by the Ministry through orders or circulars, establishing binding rules on the content of regional, municipal or local plans.

Municipalities are required to prepare within the first 2 years of each legislature a “strategy for municipal planning”, in which the municipal council examines the evolution since the last planning revision and decides whether it is necessary to review the municipal plan totally or partially, or whether it is adopted for another 4 years. (Section 23, Planning Act 2002).

3.2.2. *Local (framework) plans*

There are two types of framework plans in Denmark, at different levels of government.

At regional level, the county councils (as well as Greater Copenhagen Authority and Bornholm Municipal Council) must prepare a regional plan, covering a period of twelve years, which is revised and updated every fourth year. It must not contradict national planning regulations nor the public interest. The regional plan shall include, amongst other topics, guidelines for the designation of urban zones or areas for summer cottages, the location of major transport facilities and projects with a potential impact on the environment, such as airports. In Greater Copenhagen the regional plan must also include provisions on the location and timeframe of future urban development.

Regional planning authorities may also adopt “regional plan supplements” in order to complement or modify the regional plan with provisions regarding a very specific topic, such as wind turbine construction, or a large construction project with important environmental consequences.

Regional plans play an important role in coordinating the implementation of sector-oriented legislation or policies, specially in rural areas. In this respect, for

example, regional plans would include the delimitation of noise zones in the vicinity of some facilities.

Regional plans shall be reviewed every 4 years. (Section 22, Planning Act 2002)

At municipal level, the municipal councils (except Bornholm) must prepare a “municipal plan”, which must not conflict with regional planning, establishing a general structure for land use, transport, services and recreational areas within the municipality. Municipal plans also include the framework for the content of detailed local plans, including land use, type of construction, urban renewal, provision of public and private services, infrastructures, transportation, and rules for the location and timeframe of new urban development.

3.2.3. *Regulatory (detailed) Plans*

Municipal plans are implemented through “local plans” produced by the municipal councils, which contain detailed provisions on the use of specific parts of the municipality. Local plans may regulate both specific areas and precise subjects, such as building design, detailed land use, road construction or noise abatement measures for residential areas.

Municipalities are free to decide when and where they need a local plan, but certain projects require the prior adoption of this kind of plan, for example, in the case of new residential areas, by-pass roads in urban areas, high-rise buildings or major business constructions.

A local plan must not conflict with a municipal or a regional plan and must comply with any specific regulation established by the Ministry of the Environment. Actually, every local plan must be accompanied by a report stating how it fits in with municipal and regional planning. Local plans are binding on property owners and may give rise to development rights, but they are not usually subject to compensation.

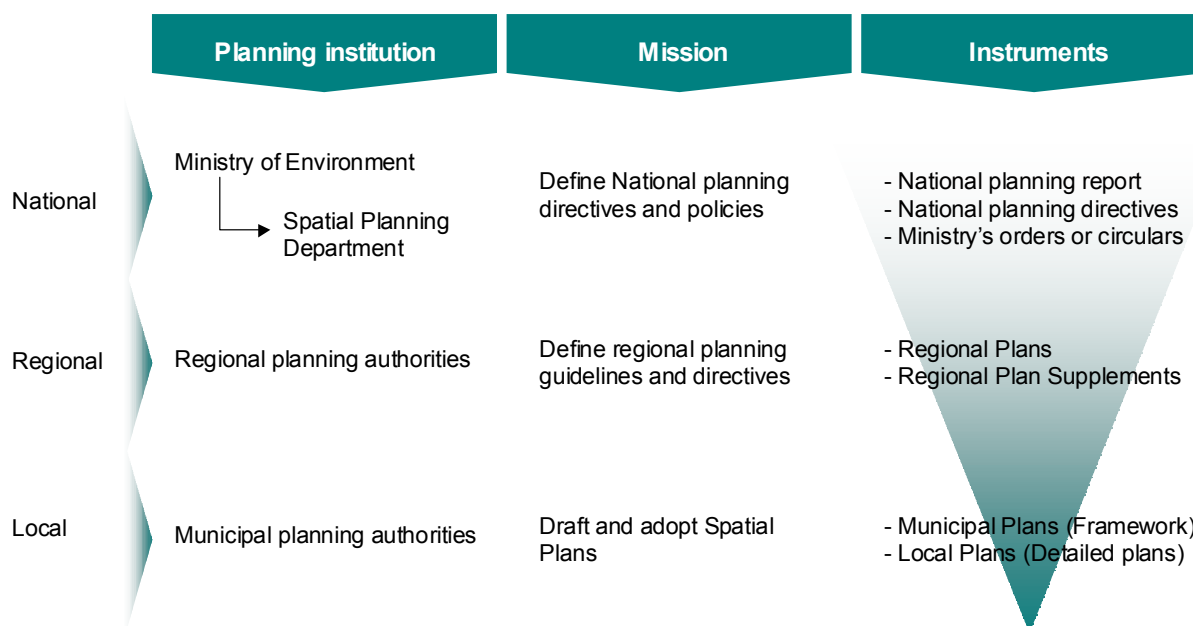


Figure 7. Danish planning instruments

3.3. Process

3.3.1. Inter-government consultation

The first step in order to review or amend a planning instrument (a regional, municipal or local plan) is a public request for ideas, suggestions, proposals, etc. After that period, which is described below in Citizen Participation, the county or municipal council must prepare a consolidated version of the proposed plan. It must be published and sent to the Ministry of the Environment and any other state or local authority whose interests are affected by the proposal, setting a time limit of at least 8 weeks for objections to the plan to be submitted.

During that period, the Ministry of the Environment may submit objections to a regional plan proposal, while a regional planning authority may submit objections to proposals for both local or municipal plans. A copy of such objections shall also be sent to the Ministry of the Environment. Any state or local authority which is affected may submit written objections to both municipal and regional plans.

If these objections are not considered or if public interests are clearly harmed, the Ministry of the Environment, as the government body in charge of spatial planning, may veto a regional plan proposal. Any other state authority may veto a local plan proposal if its activities are clearly affected.

A plan which has been proposed can not be adopted until an agreement has been reached on every objection submitted within the time limit or the veto has

been overridden. Unresolved issues may be submitted to the Ministry of the Environment by the parties in conflict.

Finally, the county or municipal council will adopt the plan; if there are major modifications during the process, the parties which submitted objections must be given the opportunity to comment on the new version before the plan is adopted.

The decision to approve the plan may be appealed to the Nature Protection Board of Appeal; such appeals may only be based on legal grounds.

3.3.2. *Policy Integration*

The Danish planning system is clearly hierarchic, so every spatial plan must be consistent with plans at higher levels and must integrate with the framework established through guidelines or directives issued by the Ministry of the Environment or the regional planning authorities.

Pursuant to the Planning Act, county and municipal councils are obliged to implement the guidelines of every regional plan with regard to major transport facilities and projects with a potential impact on the environment, among others. Their planning and development activity must not contradict regional planning on these matters.

Local plans must include a report describing how the plan relates to the municipal plan and any other planning for the area covered.

3.3.3. *Citizen participation*

In Denmark, citizen participation is the first step for any planning instrument to be revised or amended. When the time comes for regional or municipal plans to be reviewed (at least once every 4 years) or when a local plan is required to ensure implementation of a municipal plan, the authority concerned must solicit ideas, proposals and suggestions in order to prepare for the drafting of the plan.

The public announcement of the request must contain information about the previous plan and any previous proposals, together with the major issues to be resolved by the plan. A time period of at least eight weeks must be allowed for comments to be submitted.

The planning authority must encourage a public debate on the objectives and contents of the future plan.

After that, a consolidated draft must be prepared with the opinions of other public authorities, citizens, nongovernmental organizations etc.

When the plan is finally approved, after inter-governmental consultation, it must be made available to the public.

In the case of local plans, a copy of the public announcement must be sent to all property owners affected.

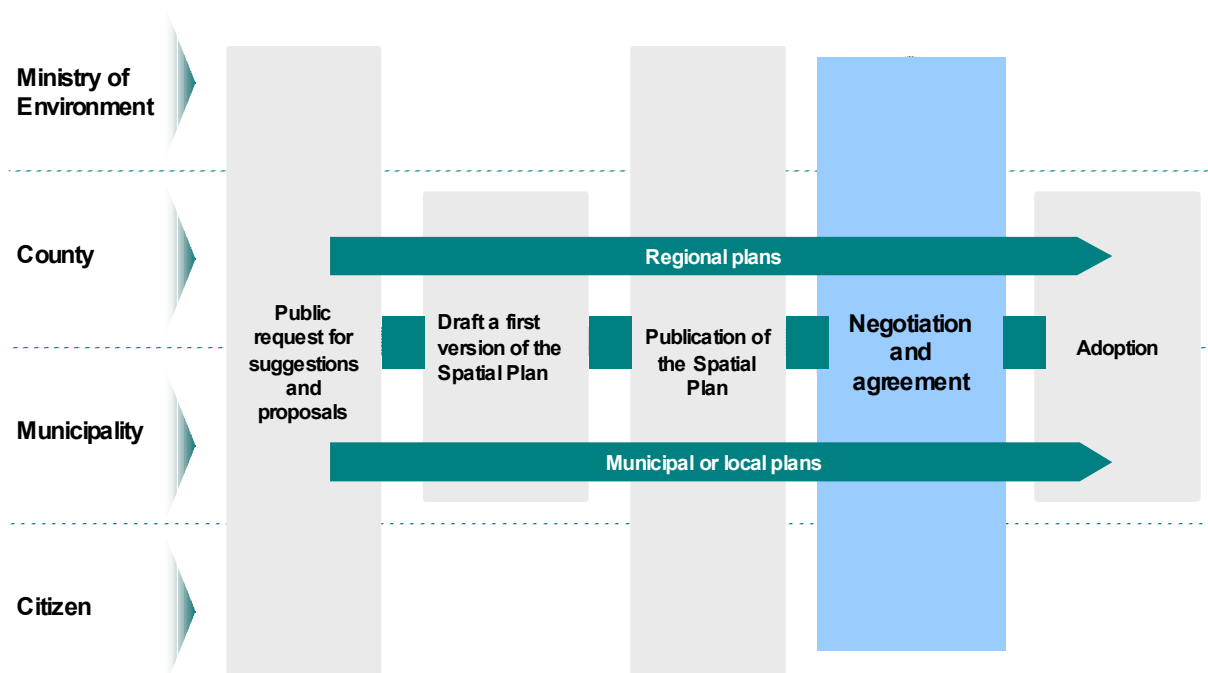


Figure 8. Danish spatial planning process

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

Pursuant to Section 35 of the Planning Act 2002, any construction, subdivision or change of use of existing buildings and undeveloped areas requires a permit from the municipal council. Permits outside built-up areas designated in the municipal plan and in areas not covered by a local plan also require consultation with the regional planning authority.

For a project which requires an Environmental Impact Assessment it will be necessary to adopt specific guidelines in the regional plan or a supplement to the plan; it may also require a permit from the regional planning authority.

Applications for permits must be notified to the owners of adjoining properties who have 2 weeks to express their opinion. Once the permit is granted it has to be made public unless it has been granted in accordance with a local plan.

A permit shall lapse if it is not used within three years of the decision by the municipal council.

Airports need building permits like any other enterprise or citizen, which means that normally they shall be issued by the municipal council, but in the case of important buildings the permit is issued by the county.

4.1.2. *Exceptions or exemptions*

The Planning Act 2002 provides for some exceptions such as minor constructions or renovations to existing buildings, some activities in rural areas, mining, and the like.

Nevertheless, pursuant to Section §3 of the Act, the Minister for the Environment can adopt regulations that take the place of regional plans and may allow some projects to be initiated without a municipal or local plan and without a building permit.

4.1.3. *Institutions involved: inter-government relations*

Building permits may be granted two weeks after the municipal council has given written notice about the application to the neighbours affected.

The regional council must be notified in writing of any building permit granted by the municipal council.

The Ministry for the Environment and any other person affected by a project which has been approved may appeal to the Nature Protection Board of Appeal against a decision by the municipal council to grant a building permit. The permit will not be valid until the time limit for the appeal has expired, which is usually four weeks after the decision by the municipal council.

4.1.4. *Relationship with planning*

The municipal council is the supervisory authority for all the regulations included in the Planning Act, and must ensure compliance with spatial plans. Permits must always be in accordance with plans, although minor deviations may be allowed when the content of the plan is not compromised.

In the case of projects subject to EIA, the regional plan has to include specific provisions on the subject. If this was not provided for in the original plan, then a supplement to the plan will have to be approved.

4.2. Environmental permits

4.2.1. *Environmental Impact Assessment*

In Denmark, Environmental Impact Assessment (EIA) is regulated by the Planning Act, which sets out the main principles and a number of statutory orders regulating the list of projects which require an EIA and the information that must be presented.

The transposition of EU legislation on environmental impact assessment into Danish law, fulfils all requirements of Directive 85/337/EEC⁴ (the “EIA” Directive) as amended in 1997, but the way it has been implemented by means of the Planning Act is quite different from what can be encountered in other countries.

Section §6c of the Planning Act 2002 states that “...*projects that are likely to have significant effects on the environment shall not be initiated before guidelines are produced in the regional plan ... on the location and design of the project with an accompanying environmental impact statement...*”

This means that the regional planning authority shall collaborate with the developers in conducting the assessment and prepares a supplement to the regional plan with an accompanying environmental impact statement. To ensure this collaboration and the protection of the environment, the Ministry for the Environment can stipulate that a particular project can not be executed without a permit from the regional council.

⁴ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

Strategic Environmental Assessments have been conducted in Denmark for a long time, but Directive 2001/42/EC⁵ (the “SEA” Directive) was transposed by Act No. 316 of 5 May 2004, on the Environmental Assessment of Plans and Programmes.

4.2.2. *Other environmental controls*

According to the powers given by the Environmental Protection Act to the Ministry for the Environment, published in “Statutory Order 794/1991 on the approval of listed activities”, the list of “heavily polluting enterprises, plants and activities” shall not be extended or modified without an environmental approval from a “competent permit authority”. Decisions taken by that approval authority can not be appealed to other administrative authorities.

The competent permit authority is either the regional or theand municipal council, depending on the activity. This is established in each case by the same Statutory Order 794/1991.

The approval is issued for an indefinite period, but after 8 years the enterprise/activity operator can be required by the “competent supervision authority” to adopt measures to improve if there are Best Available Techniques.

Airports are included in the list of polluting activities at point H.2, and according to the Order are subject to approval from the county environmental authorities.

However, there is a special regime for Copenhagen Airport. Making use of the power granted to the Ministry of the Environment by the Environmental Protection Act to establish rules on the approval scheme, the Danish Environmental Protection Agency (EPA) called in the competence for environmental matters pertaining to aviation. Consequently, environmental permits for water, sewage, run-off and waste in this airport are issued by the Greater Copenhagen authority and permits relating to air quality and noise are within the competence of the Danish EPA.

4.2.3. *Institutions involved*

The Ministry of the Environment, which operates mainly through the Danish EPA, represents the interests of the State in this process. Several agencies and bodies such as the Danish Commerce and Companies Agency also take part and must periodically receive “green accounts” from the listed activities, in some cases together with the financial statement).

⁵ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

The environmental authority which handles most environmental permit issues is usually the regional or municipal council through its Committee for Environmental and Technical Affairs, in charge of both permits and supervision.

4.2.4. Integration with other permits

Environmental approvals cover both the construction and the operation of a specific facility. The required permits are dealt with separately from building permits, except in the case of large projects requiring EIA where the permits may be authorized in a single procedure.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

According to the Air Navigation Act, the Ministry of Transport and Energy is responsible for establishing the requirements to be fulfilled by airports and other facilities servicing aviation, if they are open to the public.

The Ministry of the Environment is responsible for the national planning directives which state where future airport developments can be considered.

Airport operators are responsible for drafting airport development plans and environmental impact reports in collaboration with the regional authorities and, in the case of Copenhagen, with the Ministry of Transport and Energy and the Spatial Planning Department under the Ministry of the Environment. In the case of the two airports operated directly by the State, the Civil Aviation Authority (SLV) is the body which is responsible for airport planning.

Counties are responsible for the environmental approvals of airport activities, except for Copenhagen airport, where the Danish Environmental Protection Agency is responsible for the environmental permit associated with aviation activities, while the County is responsible for the environmental permit needed for the rest of activities at the airport.

Counties and municipalities are responsible for considering and including airport plans when revising regional and municipal plans, and the municipal council is responsible for the local plan for the airport area.

In the specific case of Copenhagen, the Spatial Planning Department was responsible for drafting the regional plan directives, in accordance with the environmental approvals issued by the Ministry of the Environment. Finally, the Ministry of the Environment assumed responsibility for approving the local plan to regulate the implementation of the airport development plans, although the municipality is still responsible for managing the plan and granting the building permits.

5.1.2. Instruments

Airport development plans are drafted by the airport operator. These plans include the current airport area layout and its future capacity, to be developed in response to the projected demand.

Airport master plans are not regulatory instruments and have no prescribed form or effect. As most of the airports in Denmark are private, airport development plans are often part of the Business Plans requested by the

Danish Shareholders Law on the activities to be carried out by the company over the following ten years.

When such business plans propose airport extensions or forecast a significant traffic increase, they are treated like any other plan which includes projects that may have considerable environmental effects and are required to attach an Environmental Impact Assessment report and undergo the Environmental Impact Assessment procedure. This was Danish policy even before the “SEA” Directive was adopted.

Finally, a local plan for the airport area is needed to properly implement the projected development.

5.1.3. *Process*

Airport plans are subject to the same procedures which are required for the approval of an Environmental Impact Statement, as these plans are not contemplated or regulated by any law.

5.2. **Spatial impact**

5.2.1. *Implementation of ICAO Annex 14 requirements*

The Air Navigation Act (Act no. 252 of 10 June 1960) defines how the arrival and departure operations at airports open to the public must be secured.

The Ministry of Transport and Energy must approve a plan for each airport in Denmark, where the area covered by obstacle limitation surfaces and the height limitations imposed must be clearly shown. This plan will be valid for the period stated by the Ministry.

In areas covered by the obstacle limitation surfaces where the height limitations are up to 25 m above the terrain, the limitation is secured by an easement preventing the establishment of “*aeronautical obstacles exceeding the heights mentioned in the plan*”. For the rest of the area covered by the plan, but subject to height limitations greater than 25 m, the Act states that every project implying constructions above that height must be submitted to the Civil Aviation Authority (SLV) for analysis. The Authority will check compatibility with the plan and will issue a certificate approving the project if it respects the height limitations. If that is not the case, the matter will be reported to the Ministry of Transport and Energy, who may authorize the construction making an exception for the plan.

Outside the areas covered by obstacle limitation surfaces, any project implying constructions higher than 100 m above the terrain must be notified to the SLV for safety analysis. If it is proven that the new obstacle will not be a risk to aviation safety, a certificate will be issued by SLV. If there is a risk, the matter is

reported to the Ministry, who shall negotiate with the owner the conditions for the certificate, including marking or reduction of the height.

Airport safety plans must be integrated into spatial planning instruments and the resulting limitations are recorded in the land registry. It should also be noted that the Civil Aviation Authority is among the agencies that must be consulted before any spatial plan is adopted in the country.

Land use and construction restrictions resulting from these plans are subject to compensation in accordance with Danish Law. Only in cases where an obstacle has to be removed does the Air Navigation Act prescribe that compensation shall be paid in accordance with the applicable expropriation rules.

5.2.2. *Noise Impact*

Noise impact is considered in the Environmental Impact Assessment report accompanying an airport development plan, in the description of the consequences of its implementation.

At the time the Environmental Impact Statement is approved by the county environmental authority (or the Danish Environmental Protection Agency for Copenhagen Airport) it shall establish the environmental terms that shall apply during the construction and operation phases, and define the limits for noise caused by aircraft operations at the airport. It will usually fix a year in the first instance and it will prohibit exceeding those noise levels.

Regional plans, or national planning directives issued by the Ministry of the Environment for Copenhagen, will then prohibit urban developments which are not compatible with the approved noise contours. These national directives are binding on the Counties and Municipalities and must be considered and incorporated into the regional and municipal plans.

When the Government took the decision to expand Copenhagen Airport in 1980, acoustic conditions and noise levels in the surrounding areas were calculated for the year 1976 and an agreement was reached to respect those levels and never to exceed them. Since then, a TDENL (Total Day-Evening-Night Level) value is calculated every year to describe the noise impact of the airport and to ensure that it will never exceed the value for 1976.

5.2.3. *Risk prevention*

There is no legal requirement for third-party risk areas in Denmark.

It must be taken into consideration, that as a result of regional plan directives issued by the Ministry of the Environment in order to avoid noise pollution (Circular letter of 12th June 1981), no residential areas are permitted within a wide zone along the prolonged axes of the runways in Copenhagen.

5.2.4. Implementation of restrictions derived from easements

Easements established as result of the obstacle limitation surfaces are included in the property register of every property around an airport.

Every local plan in Denmark must take into account the obstacle limitation surfaces , as restricted areas defined in the plans.

The Ministry of Transport and Energy may grant exceptions to the restrictions , provided that the obstacles are marked or the heights of the projected buildings are reduced.

5.2.5. Land reserve for future construction

When an airport development plan requires new land for the proposed extensions and it obtains the Environmental Approvals and the local plan for the airport area is approved, the Municipality shall be responsible for managing the implementation of the plan.

The new land can be acquired directly by the airport operator, commonly a private company. The Air Navigation Act states that compulsory acquisition can take place for airport extensions, even when the beneficiary is a private company, but permission is required from the Ministry of Transport and Energy. The company concerned will pay the State for the land.

5.3. Airport construction

5.3.1. Permits and authorisations required for airport construction or development

- a) Building permit: Just like any other construction activity in the country, a new airport facility requires a building permit from the Municipality together with the environmental approval described below.
- b) Environmental permits: Any construction activity at an airport requires an Environmental Approval granted by the County where the airport is located or by the Danish Environmental Protection Agency for aviation activities in Copenhagen Airport.
- c) Civil aviation: Pursuant to the Air Navigation Act, the Ministry of Transport and Energy must approve any airport development carried out in Denmark, taking into account the requirements established by the Ministry itself.

5.3.2. *Institutions and processes involved*

a) Authorisation

The Ministry of Transport and Energy shall check the compatibility of the airport infrastructure with the “public interest”.

Municipalities shall grant building permits to any construction activity in the airport in accordance with the standard procedure; the Danish Environmental Protection Agency and the County where the airport is located shall grant the environmental permits after reviewing and approving the Environmental Impact Assessment report attached to the airport extension plan.

b) Supervision

Compliance with the terms of the environmental approval and any other environmental regulations is monitored by the municipality, which is the competent supervisory authority according to the Environmental Protection Act.

The municipal council must notify the regional council of any conflict with regional regulations, even for enterprises operated by the counties.

5.3.3. *Integration with planning and environmental controls*

The airport operator is responsible for taking into account any requirements or conditions imposed by the environmental approval for the construction.

As these approvals are granted on the basis of the EIA report attached to the airport development plan, full integration of planning, environmental controls and construction activities is guaranteed.

5.4. **Airport operation**

5.4.1. *Operating permits*

A special permit by the Ministry of Transport and Energy is required to operate an airport in Denmark, according to the Air Navigation Act. This operating permit, which is only valid for a specific period of time, includes conditions that must be complied with.. Subsequent to any airport development, it is necessary to obtain a permit for the new infrastructure.

When granting the permit, the compatibility of the airport with the “general interest” will be checked.

5.4.2. Airport certification

Airports are certified by SLV, as part of the approvals and operating permits.

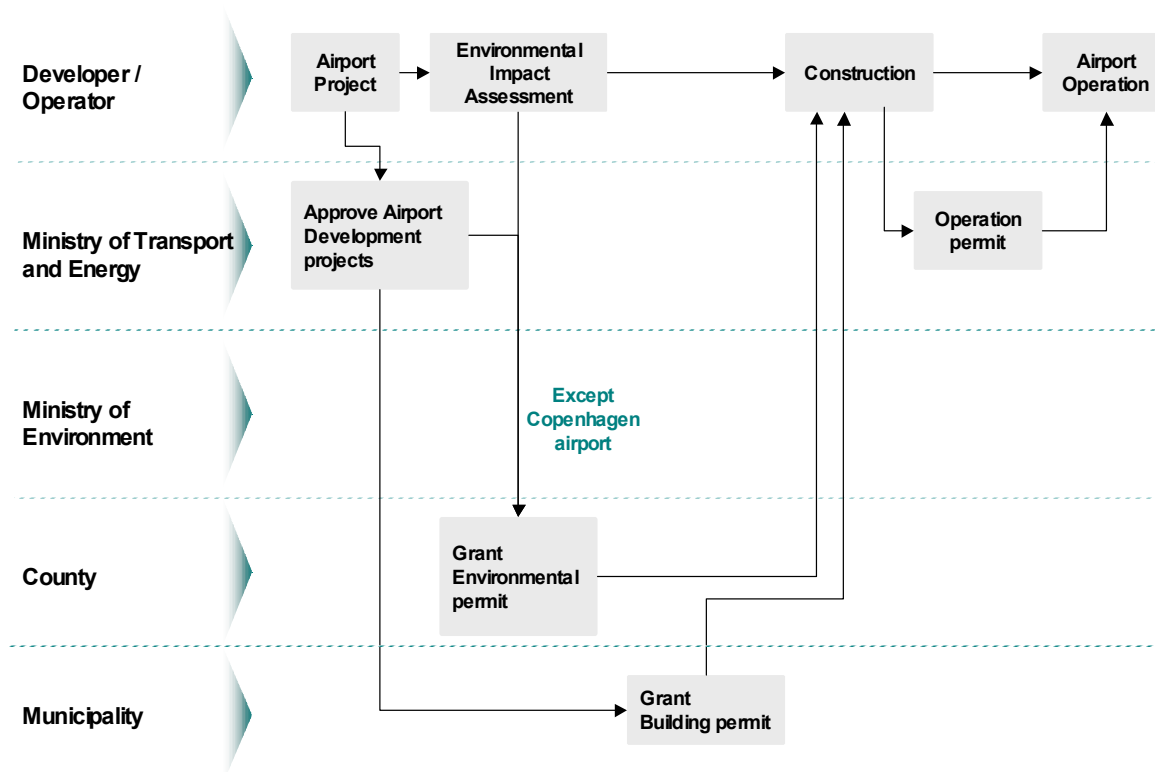


Figure 9. Airport development process

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

General regulations on noise and air pollution are included in the “Environmental Protection Act” (Consolidated Act n° 698/1998, amended by Acts n° 369/1999, n° 373/1999 and n° 447/2000), and are consistent with the “polluter pays principle”.

Pursuant to the provisions in the framework Act, “Statutory Order 794/1991 on the approval of listed activities” included a list of “particularly polluting enterprises” whose activities were subject to approval. Airports are included in this list and, according to the Order, their activities are subject to approval by the county environmental authorities. A long list of regulations sets individual limit values for different kinds of air pollutants or especially contaminating industries such as waste incineration.

With regard to specific legislation, the “Guidelines on Industrial Air Pollution Control n° 9/1992” implemented the air pollution concerns into Danish administration, while the “Danish Environmental Protection Agency Guidelines n° 5/1984” regulated external noise from enterprises (including airports). Guidelines 5/1994 on noise from airfields sets recommended values for noise limits according to land uses in the vicinity of airports. These Guidelines are taken into account when preparing spatial plans for these areas and at the time of the Environmental Impact Assessment of the airport.

Noise and air pollution caused by Copenhagen Airport, the most important airport in Denmark, are regulated by the “Copenhagen Airport Expansion Act” n° 271/1980 (now Consolidated Act n° 252/1992).

EU Directives 2002/30/EC⁶ (the “noise-related operating restrictions” Directive) and 2002/49/EC⁷ (the “noise” Directive) have been already transposed into Danish legislation.

In Copenhagen, all night flights must obtain prior approval from the airport, which requires that during night hours no aircraft may emit more than 80 dB(A). Likewise, the Law for the Expansion of Copenhagen Airport prescribed that the runway which creates most noise problems would be closed between 23:00 and 06:00, thereby establishing an effective restriction on operations.

⁶ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

⁷ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

6.2. Institutions

Local authorities are the primary decision-making bodies in the environmental field. Counties and municipalities should have a “committee for environmental and technical affairs”, responsible for the environmental administration within their territory, including environmental approvals and supervision.

The Danish Environmental Protection Agency is the central government body, under the Ministry of the Environment, responsible for orchestrating Danish environmental administration. It controls and advises local authorities by publishing Guidelines and Circulars, and as it is the first body of appeal in cases under the Environmental Protection Act, it receives complaints and appeals from citizens and enterprises against the decisions taken or the plans proposed by local authorities. According to the Act, it can also be the competent permit-issuing authority in some cases..

Finally, certain cases can be appealed to the Environmental Board of Appeals, which is independent of the Ministry of the Environment.

Danish legislation on the environment empowers the authorities to intervene whenever the environment is at risk.

6.3. Instruments

a) Planning:

Noise contours are included in the airport development plans and the EIA reports attached. Once the plans are approved and the proposed extensions receive environmental approval from the Danish EPA, they should be considered by the local authorities when drafting regional, municipal or local plans.

The Law for the Expansion of Copenhagen Airport included a noise abatement plan which delimited 3 zones in which homeowners would be entitled to financial assistance to install soundproofing. In the first zone the State paid 50% of the cost, in the second zone 75% and in the third zone 90%. The sound insulation work had to be assessed by a certified professional who would ratify that the project had been correctly implemented on completion. The costs were borne by the Ministry of the Environment, although the Ministry of Transport and Energy administered the program.

b) Land use restrictions:

Appropriate land uses according to noise levels are recommended by the abovementioned Guidelines 5/1995.

Restrictions may be imposed by national or regional plan directives issued by the Ministry of the Environment, such as the Circular of 12 June 1981 regarding Copenhagen Airport Expansion. These regulations are binding on the local authorities and on individual owners, thereby preventing the construction of new housing around the airport.

c) Compensation:

No compensation is paid for land use restrictions arising from noise.

6.4. Integration with spatial planning

The case of Copenhagen Airport expansion was the first time in Denmark that noise zoning and associated land uses were defined by the Danish Government. Once the sound insulation program was negotiated, the noise zones (polygonal noise contours) were approved by the regional planning directive issued by the Ministry of the Environment in its Circular of 12th June 1981.

Due to the hierarchic nature of the planning system in Denmark, regional and local plans had to respect those provisions, so future urban developments which were not compatible with the airport extensions were prohibited.

This is not the typical process in Denmark, where spatial planning at this level of detail is defined in the municipal plans, according to very general guidance from the central level. If noise contours have to be integrated into these plans, the airport operator needs to reach an agreement with the Municipality where the airport is located.

Nevertheless, these municipal plans should consider recommendations on land uses according to noise levels from the Danish Environmental Protection Agency.

6.5. Integration with development, construction or operation controls

Noise and air pollution around the airport are only integrated with urban development if noise contours are incorporated into the municipal general plans, as is the case in Copenhagen. Noise levels are not included in land registry.

Noise and air pollution at the time of construction are considered in the EIA report.

A TDENL (Total Day-Evening-Night Level) value is calculated every year to describe and control the total noise impact for air traffic at Copenhagen Airport. In particular, according to the Airport Expansion Act, urban areas on both sides of the parallel runways must not be subjected during the night period to more

than 85 dB(A) L_{Amax} outdoors and 45 dB(A) L_{Amax} indoors (the difference is possible thanks to the high construction standards in Denmark, due to the harsh climate conditions). It would have been desirable 35 dB(A) indoors, as in the rest of Denmark, but it was considered compensated for by the presence of the airport and the potential economic development of the area around it. Since 1 January 2005, the outdoor noise level must be lower than 80 dB(A) L_{Amax} . These levels are controlled by monitoring every aircraft operation at 6 measuring points located in residential areas around the airport. This monitoring system is also used to approve or retire the permission of certain aircraft models to operate during the night. The system logs all noise events above 85 dB(A) L_{Amax} (80 dB(A) since 2005) which, in turn, are reviewed by the SLV. There were 4 reported events in 2004.

With regard to air quality, there are three monitoring stations around Copenhagen Airport. Measurements show there is no relationship between them and air traffic, but there is a clear correlation between them and highway traffic. Measurements at the airport are usually between 1/3 and 1/10 of the levels at the city centre.

7. CASE STUDY – COPENHAGEN AIRPORT

Copenhagen was the first civil airport in Europe (since 1924) and is the only airport in Denmark with more than 50,000 scheduled operations per year. Billund may achieve that amount of air traffic in the near future. So Copenhagen is the only airport subject to all EU Directives.

In 1975, a Parliamentary Commission was established to analyse all the potential alternatives for the Copenhagen Airport System, including a brand new airport on Saltholm island which had been proposed in 1973. The analysis included a detailed Environmental Impact Assessment comparing the different alternatives in terms of its impact on the environment. This analysis lasted for three years.

In 1978, a decision was taken to expand the airport at Kastrup. By that time, however, urban areas around the airport had developed in the five years since the proposal had been formulated, and these communities asked for compensation.

As a result of the subsequent negotiations with the Local Authorities, Law 271 of 16 June 1980 “Copenhagen Airport Expansion Act”, proposed by the Ministry of Transportation and Energy, was passed by the Danish Parliament. The Law established that the airport should be expanded in order to secure its international position but also that neighbours should be compensated by providing noise abatement measures and a compromise should be reached never to exceed the noise levels calculated for 1976.

A TDENL (Total Day-Evening-Night Level) value is calculated every year to describe and control the total noise impact for air traffic at Copenhagen Airport. In particular, according to the Airport Expansion Act, urban areas at both sides of the parallel runways must not be subject during the night period to more than 85 dB(A) L_{Amax} outdoors and 45 dB(A) L_{Amax} indoors (that difference is possible thanks to the high construction standards in Denmark, due to the harsh climate conditions). It would have been desirable 35 dB(A) indoors as in the rest of Denmark, but it was considered that the presence of the airport and the potential economic development of the surrounding area compensated for it.

A sound insulation programme was established, subsequent to the negotiations with different groups of residents. Three noise zones were considered, based on the 65, 70 and 75 dB(A) noise contours. The Danish State would contribute 50%, 75% and 90% of the insulation costs (up to a maximum of 25,000, 37,000 and 50,000 kr respectively) but further developments would be prohibited and there would be no leave to appeal. Some groups of residents accepted but others did not (they preferred being able to develop, and to renounce any claim for insulation): this resulted in the “polygonal noise contours” which are still valid today.

A provision of 105 Million kr was made by the State. The Ministry of Transportation, which was the aviation authority and airport operator at that time, was responsible for transferring the money to the Ministry of Environment which, in turn, was responsible for the insulation programme. Each homeowner was required to apply for sound insulation, before the Ministry of Environment sent an expert consultant to take measurements and to approve the insulation process which was then paid for. The programme was initiated in 1980 and should have lasted for 5 years, but it was eventually expanded until 1987.

This insulation programme was accepted by 80% of the neighbours (only 85 million kr were finally needed). Some operating restrictions, such as the prohibition of using reverse thrust (except for safety) and the closure of the crossing runway during the night period (23h-6h), were also agreed.

The Ministry of the Environment then issued a national planning directive (Circular in 1981) which included building regulations for areas outside the airport. This directive is binding on local authorities, which must comply with these provisions when developing their municipal plans.

Subsequent to the privatisation of Copenhagen Airport between 1990 and 1994, the new company Copenhagen Airports A/S produced a Business Plan on its activities for the following ten years, the so-called "The 2005 Plan", in compliance with the Shareholders Law. It included several actions to be taken in each of the five sections of the airport defined by the Expansion Act in 1980 (the law was revised in the 1992 "Consolidated Act n° 252/1992", to increase planning flexibility), as well as an Environmental Impact Assessment report, taking 1994 as the basis for the description of the foreseeable consequences of the extension plan.

The assessment, based on the proposed airport extensions defined by Copenhagen Airports A/S, was prepared in collaboration with the Ministry of Transport and Energy and the Ministry of the Environment. Some ideas and suggestions from the public were also incorporated into the report (three public meetings with experts are held within the public hearing period of an EIA).

The Environmental Approvals for the execution of "The 2005 Plan" were granted by the Danish Environmental Protection Agency (as the Central Government had called in the responsibility for noise impact) and the Copenhagen County in 1997. The first approval was appealed to the Environmental Appeal Board which upheld the approval in 1999 with just some minor adjustments.

The local plan for the airport area was prepared, negotiated and approved by the Ministry of the Environment in 1997, setting up regulations to implement the expansion plan.

According to the Expansion Act, the noise level in urban areas on both sides of the parallel runways must be lower than 80 dB(A) L_{Amax} (outdoors) since 1 January 2005. These levels are controlled by monitoring every aircraft operation at 6 measuring points located in residential areas around the airport. This monitoring system is also used to approve or withdraw the permission to operate certain aircraft models during night hours. The system logs all noise events above 85 dB(A) L_{Amax} (80 dB(A) since 2005), that are reviewed by the SLV. There were 4 reported events in 2004.

COUNTRY CONTACTS

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”⁸)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

⁸ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

amter

Counties

amtskommuner

Boroughs

Folketing

Parliament

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- Council of Europe: www.coe.int
- EUROSTAT. <http://epp.eurostat.cec.eu.int>
- European Directives
 - Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
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<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>
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<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML>
 - Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Danish laws:
 - Danish Constitution
 - Danish Air Navigation Act
 - SLV Regulations on Aerodrome Management
 - SLV Regulations on Noise Abatement
 - EPA Guidelines on noise
 - Danish Planning Act
 - Environment Act
 - Environmental Information Act

- Environmental Protection Act
- Amendments to certain Environmental Acts



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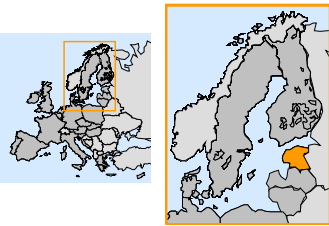
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ESTONIA		Location Map
Population	1.3 mill. (30.8 inhabitant per sq. Km)	
Airports network	5 international airports managed by Tallinn Airport Ltd, a state owned company under private law (the four local airports were transferred to Tallinn Airport Ltd in 2005)	
<p>Spatial planning system</p> <p>Hierarchical spatial planning system based on recent legislation</p> <ul style="list-style-type: none"> • Institutions <ul style="list-style-type: none"> National level: Ministry of Internal Affairs Regional level: Counties Local level: Municipalities • Instruments <ul style="list-style-type: none"> Strategic plans: National Spatial Plan. County plans Framework plans: Comprehensive plans Regulatory plans: Detailed plans • Process: Detailed processes for preparation and approval defined by the Planning Act, including supervision by a higher level authority. High degree of citizen participation. 		
<p>Regulation and permits</p> <p>Building permit and permit of use, to be obtained from the municipality, is required for every construction activity in Estonia.. EIA approval and other environmental permits are a competence of the Environmental County Boards, as deconcentrated offices of the Ministry of the Environment.</p>		
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: Non statutory airport plans, developed by the operators and sent to the municipalities for their integration into comprehensive plans. Detailed plans may also be prepared by airport operator for specific airport developments, and sent to municipalities for adoption. • Spatial impact: Safeguard maps and noise contours integrated into comprehensive plans • Construction: Building permit and permit of use granted by the municipality, after written consent from the CAA • Operation: Airport certification 		
<p>Airport noise and air quality</p> <p>No land use restrictions on the basis of the contours. Restrictions imposed through the binding opinion of the Health Protection Inspectorates under the Ministry of Social Affairs, which are consulted within the development control system.</p>		

1. SUMMARY

SPATIAL PLANNING SYSTEM

The spatial system is hierarchically organized in a pyramid with the “National Plan” (adopted in 2000) at the top, then the “county comprehensive plans” and, finally, comprehensive and detailed local plans. Local plans shall determine the location of new infrastructure and other projects falling under the category of “objects of significant spatial impact”.

Municipalities can also prepare thematic plans. That is the case, for instance, for the city of Tallinn with the “Skyscrapers plan” in areas around the airport, where the maximum heights in each area are established.

Local plans are prepared to regulate development and building conditions in detail in a portion of the municipal territory, and are the instrument prescribed by the law for the construction of new airports.

REGULATIONS AND PERMITS

Construction permits

All construction, demolition, or reconstruction activities require a “building permit” before the works begin and a “permit of use” for the utilization of the building.

There are no exceptions for large infrastructures or public projects.

Environmental permits

Environmental Impact Assessment regulation follows the provisions of EU legislation closely, both for projects as well as for plans and programs.

Separate permits are required for water use, air emissions and waste management.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

A Transport Development Plan for the period 2007-2013 is being drawn up by the Ministry of Economic Affairs and Communications, although it has not yet been adopted. It focuses mainly on the allocation of funds and investment.

The current National Spatial Plan includes some very general strategic guidelines for the development of the transport network in Estonia. It originally proposed the expansion of a military airport, but this proposal was abandoned.

- Airport

Airport operators prepare “master plans” as internal documents for technical and budgetary purposes. However, these plans have no other value. Airport construction and development require a “detailed plan” approved by the CAA.

According to the Planning Act, international civil airports are considered (to be) objects of national importance. This fact allows central Government to make proposals for their location and open a special negotiation procedure with local authorities in order to include them in the spatial plans. It also allows the State to act unilaterally when an agreement can not be reached, forcing modification of the spatial plan in order to accommodate the proposed development.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

A ministerial Regulation defines the obstacle limitation surfaces following Annex 14 and requires aerodrome owners to have a map of the vicinity of the airport in a scale of 1:50 000 approved by the CAA, who will check the conformity of the measurement and other parameters and forward the map to the relevant local governments, who shall then take it into account when preparing spatial plans.

In addition to the obstacle navigation surfaces, the law requires all construction works exceeding 45 m of height to be approved by the Civil Aviation Administration before the local government grants a building permit. In the case of constructions exceeding 100 m, the written consent of the CAA is required before the use permit can be issued. These restrictions apply to the entire territory of the country.

- Noise Impact

Noise impact should be taken into consideration by integrating noise contours into comprehensive and detailed plans adopted by the local governments.

- Risk prevention

Third-party risk areas are not defined in Estonian legislation. However, there is a Risk Plan for the entire territory of the country coordinated by the Ministry of Internal Affairs, in which the CAA wishes to include some provisions about airport vicinity.

- Land reserve for future construction

Land reserves for all major infrastructures such as airports can only be established in spatial plans. This was the case with the Detailed Plan for Tallinn Airport.

Construction

Airport construction, as well as any construction works within an airport, are subject to the general provisions of the Building Act and must therefore obtain a building permit from the local government, once the building design documentation is approved by the CAA.

The same applies to environmental permits, which obtain environmental permits with regard to ambient air pollution, waste management and water treatment.

Operation

A permit of use is required before any building can be put into operation. This permit is issued by the Municipality with the written consent of the CAA.

The CAA considers that the operating license is included within the certification procedure.

AIRPORT NOISE AND AIR QUALITY

A Ministerial Regulation sets the limit values of aircraft noise at 85 and 75 dB L_{Amax} during day and night, respectively. The critical values are 90 and 80 dB L_{Amax} during day and night, respectively. The same Regulation prescribes noise limits of 60 dB L_{day} and 55 dB L_{night} for residential areas, with critical limits of 70 dB L_{day} and 65 dB L_{night} .

Local governments are empowered to establish standard levels for ambient noise which are up to 50 per cent more stringent than the standards set by the Ministry of Social Affairs.

There are no land restrictions or protection zones on the basis of noise or air quality issues, but local authorities submit detailed plans to the Health administration for consultation. In Tallinn the city administration takes noise contours into consideration when issuing building permits.

2. CONTEXT

Estonia is a country in north-central Europe, west of Russia, bordering on the Baltic Sea. Settled before the 1st century A.D., Estonia became an independent republic in 1918 but was annexed by the USSR in 1940. After World War II, it reverted to Soviet control and was known as the Estonian Soviet Socialist Republic.

Estonia regained its independence on 20 August 1991. Since the last Russian troops left in 1994, Estonia has been free to promote economic and political ties with Western Europe and outside, becoming a member of NATO and joining the European Union on May 2004.

Estonia is divided into 15 counties (with respective capital cities) : Harjumaa (Tallinn), Hiiumaa (Kardla), Ida-Virumaa (Johvi), Järvamaa (Paide), Jõgevamaa (Jõgeva), Laanemaa (Haapsalu), Lääne-Virumaa (Rakvere), Parnumaa (Pärnu), Polvamaa (Polva), Raplamaa (Rapla), Saaremaa (Kuressaare), Tartumaa (Tartu), Valgamaa (Valga), Viljandimaa (Viljandi), and Vorumaa (Voru)



Figure 1. Map of Estonia

Estonia's GDP per capita is one of the lowest of the European Union (average 22,400¹) with 11,300 PPS. The Estonian economy is growing fast, however, partly due to a number of Scandinavian companies relocating their routine operations and Russian oil transit using Estonian ports.

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	1,351,100
Latitude / Longitude	59°00' N, 26°00' E
Land area	43,211 sq Km
Coastline	3,794 Km
Capital City	Tallinn
GDP per capita (PPS at market prices)	11,300
GDP real growth rate	7.8 %
Inflation rate	3 %
Unemployment rate	9.2 %

Table 1. Estonia: Main facts and figures (2004)²

2.1. Population and statistics

Currently, the Estonian population is 1.3 million, with an average density of 30.8 inhabitants per sq Km.

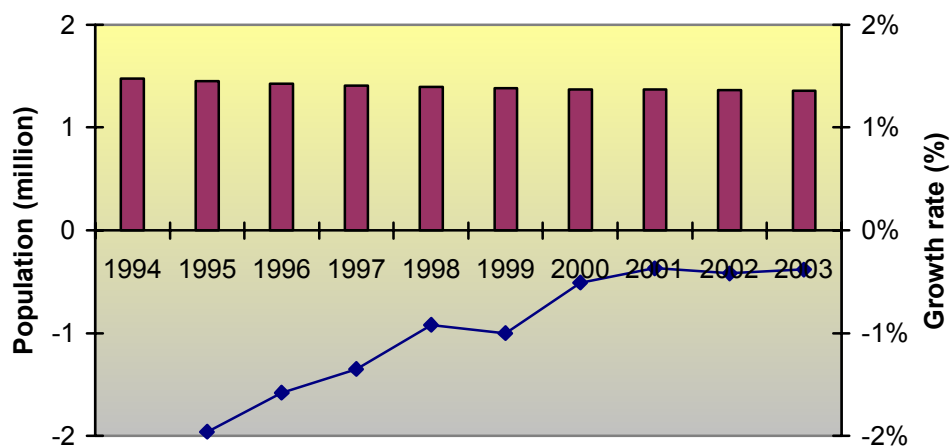


Figure 2. Estonian population evolution

During the last 10 years the Estonian population has declined. The main causes of this downturn are emigration, with the negative net migration during 1990's, and a drastic fall in the birth rate in the same decade.

² Source: EUROSTAT

The Estonian median age is 39.06 years, but population growth is threatened by a very low birth rate, with just 9.91 births/1,000 population (2004 est).

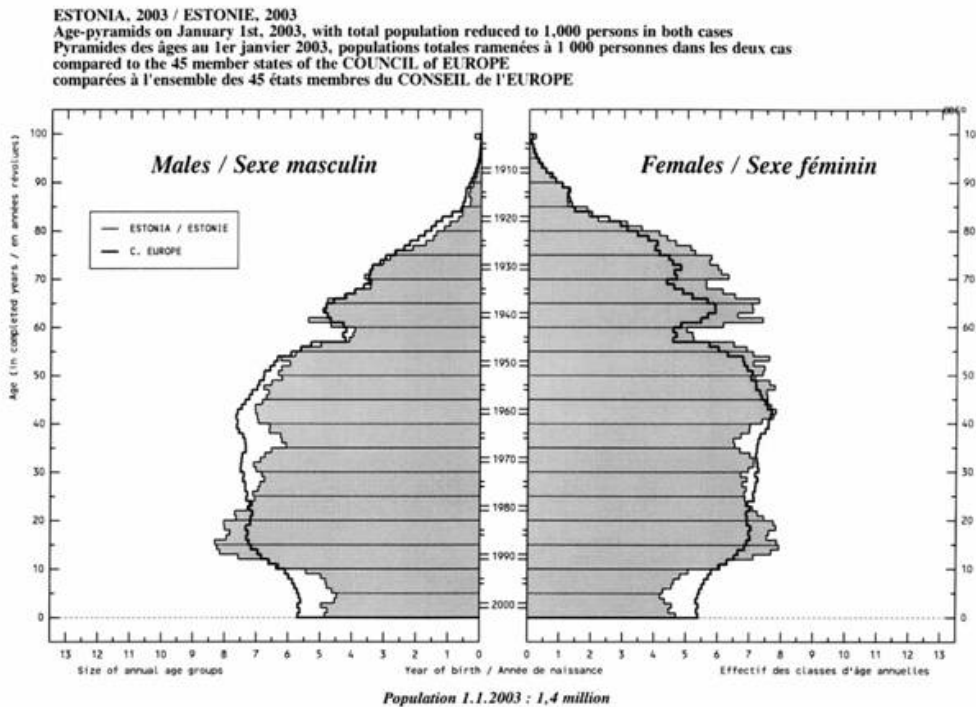


Figure 3. Estonian age-pyramids (2003)³

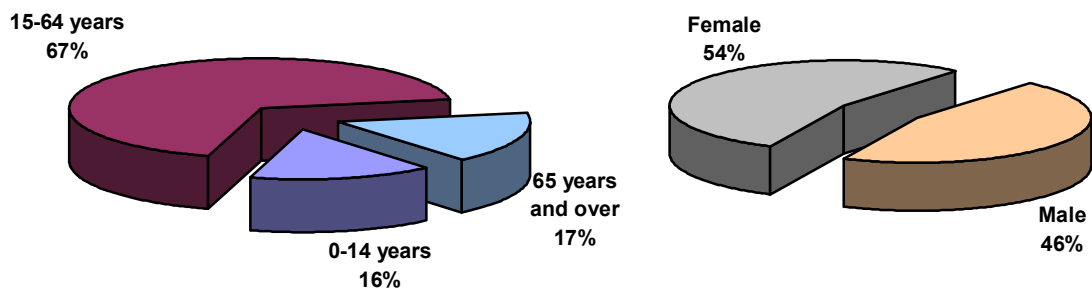


Figure 4 and 5. Estonian population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Estonia is a democratic parliamentary republic. The Head of State is the President of the Republic. The *Riigikogu* – State Assembly (Parliament) is elected by referendum and it is comprised of one hundred and one members. Executive power rests within the Government.

Administratively, the country is divided into 15 counties (*maakond*). County government is a State institution, and there is no second level self-government in Estonia. There are 247 local governments in Estonia, of which 42 are towns and 205 rural municipalities. Municipalities have self-governments elected every three years.

The spatial planning system operates hierarchically from local to national level. The Ministry of Internal Affairs is responsible for spatial planning activities within the country. It has two Ministers, the Minister of Interior (mostly concerned with security issues) and the Minister of Regional Affairs, involved in planning issues. At local level, Municipalities are fully responsible for local planning, although they must take into account State and Regional policies.

Environmental protection is the responsibility of the Ministry of the Environment and the Environmental County Boards, acting as deconcentrated agencies of the Ministry. Noise issues fall within the competences of the Ministry of Social Affairs, which executes them through its Health Protection Inspectorate.

The Estonian CAA carries out civil aviation State inspection and has supervision over the implementation of national laws and regulations. It is integrated within the Ministry of Economic Affairs and Communications.

2.3. Main airports

There are 5 international airports in Estonia. The national airport network is owned by the Republic, managed through the Ministry of Economic Affairs and Communications.

A State company was created under private law to operate the most important airport of Estonia, Tallinn International Airport, The remainder of the international airports (Tartu and Parnu, as well as Kardla and Kuressaare in the islands) were also transferred to “Tallinn Airport Ltd” in 2005.

In 2004, Tallinn Airport handled 997,475 passengers, 26,501 aircraft operations and a cargo traffic of 5,238 tons.

3. SPATIAL PLANNING SYSTEM

The Estonian spatial planning system is regulated by the Planning Act of 13 November 2002, which entered into force on 1 January 2003. This Act has already been amended several times during 2004 and 2005.

3.1. Institutions

3.1.1. National level

Until May 2004, the body responsible for spatial planning in Estonia was the Ministry of Environment. At that time, all the departments in charge of land-use planning and management were transferred to the Ministry of Internal Affairs.

This Ministry has two Ministers: the Minister of Interior and the Minister of Regional Affairs. The Spatial Planning Department, integrated within the Minister of Regional Affairs, is responsible for the regulation and coordination of planning and building.

3.1.2. Regional

At the regional level, the counties function as deconcentrated offices of central Government. In each of the 15 counties there is a delegate from the Minister of Regional Affairs who is responsible for the administration and supervision of planning activities in its territory.

3.1.3. Local and area-wide

There are no metropolitan or area-wide administrations in Estonia. Municipalities are fully responsible for local planning of their territories.

According to the Planning Act, they must *“ensure that there are plans which serve as the basis for land use and building, ensure, as a prerequisite for adoption of a plan, that the interests of the people are taken into consideration in a balanced manner, and ensure that adopted plans are adhered to.”*

3.2. Instruments

The Planning Act establishes a hierarchical system in which the highest level is occupied by the National Plan. This Plan is then developed further by means of county plans, which in turn must serve as a basis for municipal plans (comprehensive and detailed plans).

Planning activities are public and public disclosure is mandatory. Under specific circumstances, plans have to be reviewed. For instance, the Minister of Regional Affairs has to submit a review of the National Plan to the Government no later than 6 months after general elections have been held.

Plans may modify other plans of a superior level. In the event of justified need, a comprehensive plan may include proposals to amend an adopted county plan and a detailed plan may equally include proposals to amend a comprehensive plan.

Expropriations are foreseen and regulated through the “Immovable Property Expropriation Act” of 1995, amended in 2002. Immovable property may be expropriated in the public interest for the construction or enlargement of airports. Since 2004 the airport network has been owned by a private entity (under public ownership) which has no expropriation powers.

3.2.1. Strategic plans or policy documents

The National Spatial Plan

The National Spatial Plan is a strategic plan which provides the basis for all other plans, and must be observed both by county and local plans.

The Plan is prepared by the Spatial Planning Department under the Minister of Regional Affairs and is adopted by the Government. It should be prepared in co-operation between the county governors, county local governments associations and the ministries.

The National Spatial Plan is prepared with the aim of defining the prospective development of the entire territory of the State and the settlement systems located therein in a generalised and strategic manner.

Once the Plan is approved, it becomes binding on both public and private persons, although, due the nature of its contents, it has little direct effect on land uses or property rights.

The current National Plan was prepared between 1995 and 2000 and approved by the Government in September 2000. It was prepared according to the previous regulations on this matter (Planning and Building Act of 1995), for the period 2000-2010. The second “implementation programme” of the National Spatial Plan is now being carried out.

County Plans

Administration and supervision of planning activities in a county lies within the competence of the county government, although plans must be approved by central Government. If there is agreement between counties, a plan may be drawn up for more than one county. If there is no agreement, the Ministry of Internal Affairs will administer the preparation of the plan.

A county plan should be prepared in co-operation between the local government affected, the county governors of the neighbouring counties, and the Ministries.

The county plan is prepared with the aim of defining the prospective development of the territory of a county (or a part thereof) in a generalised manner and determining the conditions for the development of settlement systems and the location of the principal infrastructure facilities.

Once a county plan is adopted, local comprehensive plans have to be based on it. In the absence of an adopted comprehensive plan, the county plan also serves as the basis for the preparation of detailed plans. At the same time, adopted comprehensive plans have to be taken into account when a county plan is being prepared, or, when, upon agreement with the local governments, a proposal has to be made to amend the comprehensive plans.

According to the Planning Act, the county plan must determine the location of airports and other technical infrastructure. It also establishes protected areas, as well as the termination of the protection.

3.2.2. *Local (framework) plans*

Comprehensive plans

Administration of planning activities within the territory of a rural municipality or city falls within the competence of the local government. If there is agreement between them, a plan may be drawn up for more than one municipality. These plans should be prepared in co-operation between the neighbouring local governments and the county governor affected.

Comprehensive plans must be prepared and adopted by a local government, stating the principles for the spatial development of the area. Such plans shall determine the future development areas, the general character of buildings and reserve sites for the construction of infrastructures of municipal importance. They shall also determine spaces which are to remain free of structures and other limitation zones.

They should also set out the need and the basis for the preparation of detailed plans and for the establishment of land use and building provisions for areas where detailed planning is not necessary.

All municipalities are required by the Planning Act to have a comprehensive plan by 1 January 2006 in the case of urban areas, and 1 January 2007 in the case of rural areas.

These plans should include not only existing major infrastructures, like airports, but also projects for new ones and areas where land uses or constructions are limited or subject to special regulations, as is the case of areas affected by noise or airport related restrictions.

The preparation of a comprehensive plan is also mandatory when the location for an “object” of significant spatial impact⁴, like an airport, is selected.

Municipalities can also prepare thematic plans. That is the case, for instance, for the city of Tallinn with the “Skyscrapers plan” in areas around the airport, where the maximum heights in each area are established.

Municipal comprehensive plans are not legally binding on private citizens or entities, but are the basis for detailed planning.

3.2.3. *Regulatory (detailed) plans*

Detailed plans

Detailed plans are prepared for part of the territory of a municipality as the basis for building activities and land use of the area in the short term. They should be prepared in co-operation between the owners of the terrains within the planning area.

Detailed plan preparation can be mandatory according to an adopted comprehensive plan or to the Building Act.

A detailed plan may include proposals to amend an adopted comprehensive plan.

According to the Aviation Act (as amended by the Building Act), a detailed plan is required for the building of any new airport.. Local institutions must obtain approval from the CAA for detailed plans which either include an airport or allow constructions higher than 45 m .

A local government may enter into a contract for the preparation of a detailed plan with a person interested in the preparation thereof. The contract has to determine the respective obligations of the local government and the private person in the course of preparation of the plan, as well as in the financing of its preparation.

3.3. **Process**

3.3.1. *Inter-government consultation*

When a decision to prepare or review a plan has been taken, the Ministry, county governor, or local government responsible for its preparation shall notify all affected institutions of the decision,, providing them with information on the size and location of the planning area and the objectives of the plan.

⁴ The list of objects of significant spatial impact is established by the Government

In the case of a national plan, this information will be published in the State Gazette. In case of a county plan, the information should be sent to all local governments affected. In case of a comprehensive plan, the information should be sent to county governors affected. In case of a detailed plan, the information should be sent to the owner of the terrains affected.

The respective authority responsible for the preparation of a national, county, comprehensive, or detailed plan is obliged by the Planning Act to seek concertation from all affected state administration institutions. All institutions concerned are to be consulted and may oppose the plan if it differs from national or county policies, regulations, or plans.

The Planning Act also regulates the supervision of the preparation of plans, to be exercised before their adoption. Supervision consists of monitoring the legal compliance of the plan with regulations in force, national interests, or other plans already adopted at higher levels. It shall also include supervision of the public consultations, to ensure that all objections and comments received are analysed and considered.

Supervision of county plans is exercised by the Ministry of Internal Affairs and of comprehensive and detailed plans by the county governor.

The supervisory authority shall approve the plan once it has been reviewed according to the previous conditions and shall make a proposal to the appropriate authority for its adoption. It shall also include consent for the amendment of other plans already adopted if proposed and justified in the supervised plan.

3.3.2. *Policy Integration*

The concept of “national importance” is defined by Planning Act, which provides specifications for the planning of this type of objects. International civil airports are included on the list of “objects of national importance”.

Proposals for the location of national importance objects and their consideration in planning instruments should be made by the Ministry under whose area of government it is included. These proposals should include economic and technical justification and an environmental impact assessment.

On the basis of that information, the Ministry and the affected municipalities should enter into negotiations on how to consider the object of national importance in comprehensive and detailed plans. When agreement is not reached, the Government may decide on the inclusion of an object of national importance in a plan.

A temporary building ban for up to two years may be imposed by a local government on a certain area while a comprehensive or detailed plan affecting that area is under development.

3.3.3. *Citizen participation*

Local governments shall inform the public of any proposed comprehensive and detailed planning process at least once a year in the relevant media.

The Planning Act establishes the need for public consultation of any planning instrument. It must be organised by the authority in charge of the preparation of the plan.

In the case of a national spatial plan, the ministry responsible should publish a notice with the main planning outline.

In the case of a county plan, the county governor responsible for its preparation should organise a public display of the proposal in the county offices and in other cities and municipalities affected by the plan.

In the case of a comprehensive or detailed plan, the local government should organise the public display in the settlements and city centres affected.

This public display must be announced through a public notice including information on the size and location of the planning area, a brief overview of the contents of the plan and the date for a public discussion of the proposal, to be held at the county or local government offices. In the case of a detailed plan, it must also provide information on the nature of the buildings and land use provisions included.

During the public display, all interested persons shall have access to all planning materials and information related to the plan, and everyone has the right to present proposals and objections and to be informed about how those objections have been considered or why they have been rejected.

On the basis of the outcome of the public display and public discussions, the county governor or the local government shall prepare a final draft of the plan to be submitted to the supervisory authority.

Once a plan has been adopted, a notice must be published by the approving authority in the relevant media, depending on the type of plan, and a copy of the decision must be sent to all affected state administration authorities.

In the case of adoption of a comprehensive or a detailed plan, the local government must send a letter informing those persons whose written proposals and objections made in the course of the public display were not taken into consideration, or whose land use or building rights are restricted by

the plan or by any temporary building ban established during the preparation of the plan, of the decision.

4. REGULATIONS AND PERMITS

The Estonian permitting system is regulated by the Building Act of 15 May 2002, which entered into force, together with the Planning Act, on 1 January 2003.

4.1. Development control system

4.1.1. *Activities subject to development control:*

According to the Building Act, construction, demolition or reconstruction activities require a “building permit” before the beginning of the works and a “permit of use” for the utilization of the building.

In order to obtain a building permit, a person must submit an application together with the building design documentation including technical drawings, specifications, instructions on maintenance and other documents relevant to the construction.

According to the Aviation Act, the building design documentation for construction works whose height exceeds 45 m above ground level must be approved by the Civil Aviation Administration.

Building permits are granted for an indefinite period, but they will become invalid if construction has not begun after two years of the date of the issue of the permission. Permits may include conditions and technical requirements for the construction.

Furthermore, a permit for use of construction works is required to certify that they conform to the requirements prescribed by general regulations or by the specific building permit. Permits for use of construction works whose height above ground level exceeds 100 m require a written consent of the CAA.

Permits are granted for an indefinite period, except in cases of temporary constructions, which will obtain a permit for use for up to five years.

4.1.2. *Exceptions or exemptions*

Only small or temporary constructions do not require a building permit. Constructions of more than 20 m² and up to 60 m² with no public use, or to be used as auxiliary buildings linked to public utilities, need only to obtain written consent. Public infrastructures receive the same treatment as private undertakings.

4.1.3. Institutions involved: inter-government relations

Both building permits and permits for use are granted by local governments. Applications are examined in order to determine whether the project is in accordance with spatial planning and other technical regulations.

The Civil Aviation Administration must approve the building design documentation and issue written consent for the permits for use of certain construction works, as stated in the Aviation Act.

The requirements for the format of the building permits, written consent and permits for use, and for the procedures to obtain them, are established by the Ministry of Economic Affairs and Communications. This Ministry is also the chief processor of the State register of construction works, where the whole permitting process is recorded.

Construction supervision, including inspections of the compliance of the permitting and construction process with technical regulations, is exercised by the local governments. The State performs a supervisory role through the Technical Inspectorate, including inspection of compliance with national regulations.

Currently, the city of Tallinn issues about 3,000 permits a year, which cannot be handled by the City Council, so most permits are granted directly by the Permit Division of the City Planning Department.

4.1.4. Relationship with planning

Building permits must be in accordance with spatial planning instruments. The local government shall check compliance with comprehensive and detailed plans when receiving applications for the permits and building design documentation.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Environmental Impact Assessment processes in Estonia are regulated by the “Environmental Impact Assessment and Environmental Management System Act”, which entered into force on 3 April 2005.

This Act closely follows the provisions of Directive 85/337/EEC⁵ (the “EIA” Directive). It stresses the importance of comparing different alternatives.

⁵ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

This Act defines a list of activities with a significant environmental impact. Construction activities in airports with runways with length of over 2,100 m are required to carry out EIA before obtaining a building permit. There are no additional references which could affect airport projects other than the general indications.

Directive 2001/42/EC⁶ (the “SEA” Directive) has been transposed into Estonian law by means of the same EIA Act. It includes specifically spatial plans and excludes national defence, civil emergency, or financial plans.

The Planning Act, as amended by the EIA Act, includes also specific provisions for SEA of spatial planning instruments.

4.2.2. *Other environmental controls*

The EIA and Environmental Management Systems Act states that an environmental evaluation is mandatory upon application for a “development consent”. For the purposes of the Act “development consent” is:

- 1) *a building permit or a permit for the use of the building;*
- 2) *an integrated environmental permit, a permit for special use of water, an ambient air pollution permit, a waste permit, a hazardous waste handling licence or a radiation practice licence;*
- 3) *an extraction permit for mineral resources, a geological exploration permit or a permit for general geological survey;*
- 4) *other documents not specified in this section permitting proposed activities with potentially significant environmental impact.*

The outcome of the environmental assessment is to be integrated in the final decision, but there is no integration of environmental permits other than that required by the Integrated Pollution Prevention and Control Act of October 17 2001, which closely follows the guidelines of the Directive 96/61/EC⁷ (the “IPPC” Directive).

Airports are not included in the list of activities subject to the IPPC process, so they should obtain the specific permits required with regard to ambient air pollution, water treatment and waste management.

⁶ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

⁷ Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

4.2.3. Institutions involved

Most environmental assessment procedures are handled by the Environmental County Boards, as deconcentrated offices of the Ministry of Environment. Only projects with trans-border or trans-regional implications are dealt with directly by the Ministry of Environment.

The environmental permits are also issued by the Environmental County Board, functioning as the deconcentrated office of the Ministry of the Environment, for a period of 5-10 years.

The State also performs environmental supervision through eight Environmental Inspectorates (one for every two counties), whose activity is regulated through the Environmental Supervision Act, passed on 6 June 2001

4.2.4. Integration with other permits

Environmental and building permits have to be obtained separately.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Airport operators are responsible for the preparation of airport development plans in Estonia. Since 2005, when all international airports were transferred to Tallinn Airport Ltd., this organisation has been responsible for their planning and development.

Article 35 of the Aviation Act requires a detailed plan in order to build an airport.

All airport plans must be approved by the Civil Aviation Administration (CAA), while the Ministry of Economic Affairs and Communication supervises planning finance. The permit for use of the airport can only be issued with written consent from the CAA.

Counties and municipalities are responsible for the integration of airports into the spatial planning system. The supervision of EIA processes, if required, is the responsibility of the Ministry of Environment, exercised through the Environmental County Boards.

According to the Planning Act, international civil airports are considered as objects of national importance, and detailed specifications are provided for their development. In these cases, the Ministries of Economic Affairs and Communications and of Environment are responsible for exercising Government competences in this area. The consideration of airports as “objects of national importance” allows central Government to make proposals for their location and open a special negotiation procedure with local authorities in order to include them in the spatial plans. It also allows the State to act unilaterally when an agreement can not be reached, forcing a modification of the spatial plan in order to accommodate the proposed development.

5.1.2. Instruments

A Transport Development Plan for the period 2007-2013 is under development by the Ministry of Economic Affairs and Communications, although it is not yet adopted. It focuses mainly on the allocation of funds and investments.

The current National Spatial Plan includes some very general strategic guidelines for the development of the transport network in Estonia. Its proposal for the expansion of a military airport close to Rakvere (Virumaa County), however, was abandoned.

The Planning Act requires county and comprehensive plans to include the location of airports in their areas of interest.

There are no statutory plans for airport development or construction in Estonia. The Aviation Act, as amended by the Building Act, requires the preparation of a detailed plan for airport construction. In accordance with the same Aviation Act, the local government needs to get approval from the CAA for detailed plans and building design documentation affecting airports.

In the case of new airports, if they are considered as objects of national importance, the municipalities and the national government should agree on their exact location. If that agreement is not reached, the Government has the power to take a decision and force the local government to draw up the detailed plan for the selected solution.

In the case of Tallinn, the airport operator prepared a Development Master Plan, where investments are listed and quantified. This is only a technical and budgetary internal document, not subject to participation or coordination.

The most recent detailed plan for the Tallinn Airport area was adopted in 1997, delimiting the airport boundaries, including a small reserve of terrain for future developments. This boundary, including the reserve, was later integrated in the current comprehensive plan of the City of Tallinn, adopted in 2001.

At the time of writing, the future expansion of the airport terminal, which already has obtained an environmental approval after an EIA, will be defined by a specific detailed plan for that part of the airport area. This is not strictly necessary, as the expansion is of an existing building and therefore could obtain a building permit without a specific detailed plan. However, the City Planning Department has decided to require the detailed plan and is waiting for the proposal from the airport operator.

5.1.3. Process

Airport development requires integration into the general spatial planning system. County and comprehensive plans including the location of airports, detailed plans for airport areas or detailed plans for a specific airport development are all subject to the same process already described in chapter 4, including public participation, and adopted according to the provisions of the Planning Act.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The requirements of ICAO's Annex 14 were integrated into Estonian legislation by a Regulation of the Ministry of Economic Affairs and Communication in 2003, on the "Procedure for Determination and Use of Immediate Vicinity of Aerodromes". The Regulation defines the obstacle limitation surfaces following Annex 14 and requires aerodrome owners to have a map of the vicinity of the

airport in a scale of 1:50 000 approved by the CAA, who will check the conformity of the measurement and other parameters and forward the map to the relevant local governments, who shall thus take it into account when preparing spatial plans.

Aerodrome operators and/or local authorities must notify the CAA of any construction or object that penetrates the obstacle limitation surfaces. The aviation authority checks whether the object does or not penetrate the limitation surface, or may prevent the efficient use of radio navigation facilities, and then decides whether the object has to be declared an obstacle. Prior to the completion of any construction in the area affected by obstacle limitation surfaces, owner must notify the CAA one month before the date when the completion is to reach its final height for verification purposes. The decisions of the CAA must be based on ICAO Annex 14 and manuals.

In addition to the obstacle navigation surfaces, to which the Aviation Act makes only indirect reference, there are other building limitations affecting a much wider territory, since, according to the Aviation Act, as amended by the Building Act:

“Local governments are required to obtain approval from the Civil Aviation Administration for detailed plans which include construction works whose height above ground level exceeds 45 m. Before granting approval, the Civil Aviation Administration has the right to perform expert assessment of the detailed plan regarding air-navigation, air traffic and air safety.”

In the same way, all construction works whose height exceeds 45 m above ground level require the approval of the building design documentation by the Civil Aviation Administration before the local government grants a building permit.

The same Act states that construction works whose height exceeds 100 m above ground level require the written consent of the Civil Aviation Administration before the local government grants a permit for use:

“Before the grant of written consent, the Civil Aviation Administration has the right to perform expert assessment of the construction works regarding air safety.”

It should be observed that the Aviation Act does not delimitate the areas where those restrictions are imposed. It only defines the height over which approval from the CAA is required. This means that the whole territory of the country is subject to the CAA's control.

The following image shows the obstacle limitation surfaces included in the current comprehensive plan of the City of Tallinn, adopted in 2001.

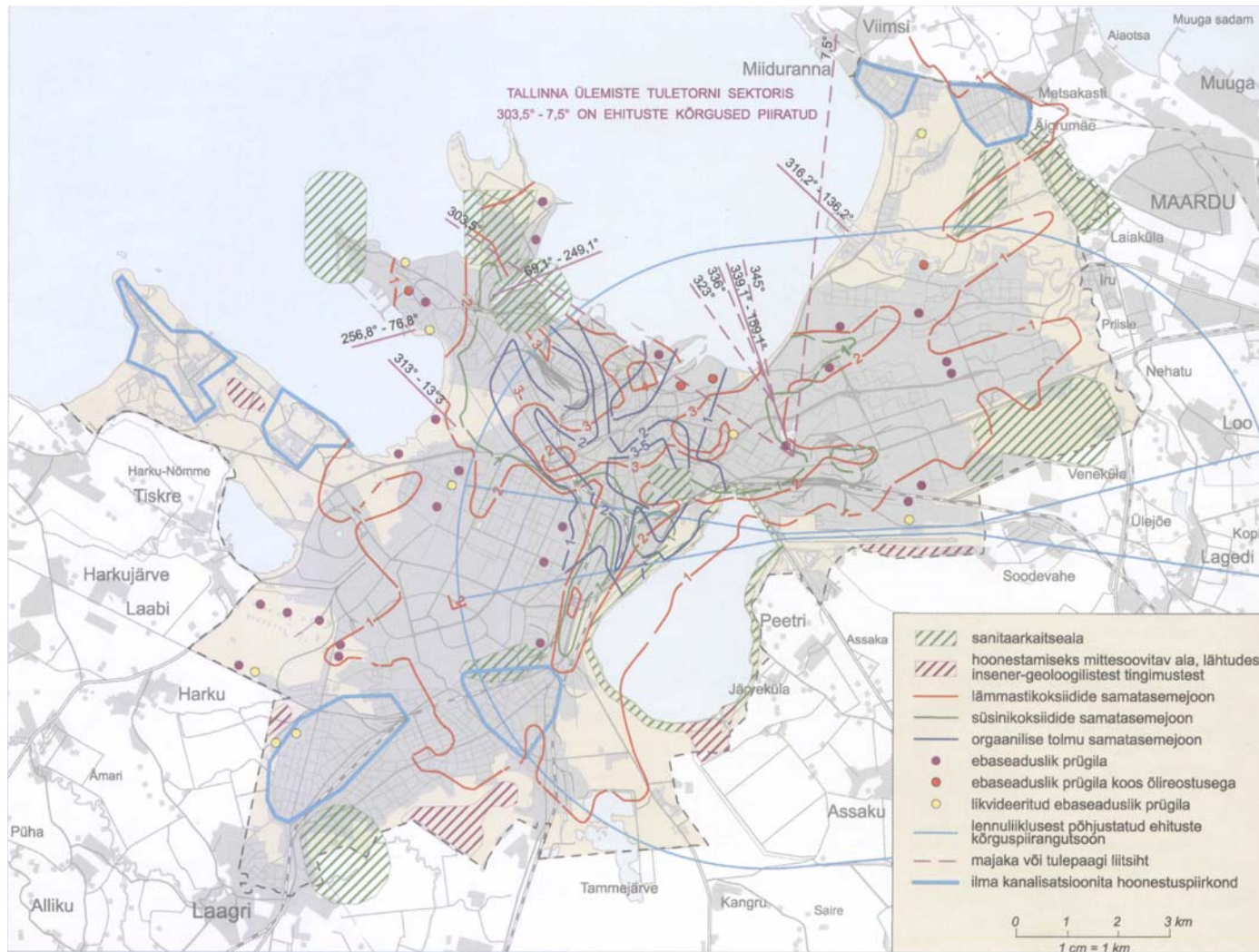


Figure 6. Obstacle limitation surfaces at the Comprehensive Plan of the City of Tallinn (2001)

5.2.2. *Noise Impact*

Noise impact should be taken into consideration by integrating noise contours into comprehensive and detailed plans adopted by the local governments.

In 1997 noise contours for Tallinn Airport were calculated, on the basis of measurements, for inclusion in the comprehensive plan of the City of Tallinn currently in force (adopted in 2001). Unfortunately, those contours do not reflect the real situation.

The contours were later updated following a more detailed methodology and were re-sent to the Tallinn and R ae municipalities, but they were not integrated into comprehensive plans (they have not, in fact, been reviewed yet).

However, the contours are considered by the City Planning department in Tallinn to restrict urban developments in certain areas close to the airport. Applications for detailed plans or building permits in those areas are rejected on the basis of the high noise levels expected, although there is no official map showing those contours.

5.2.3. *Risk prevention*

Third-party risk areas are not defined in Estonian legislation. However, there is a Risk Plan for the entire territory of the country, coordinated by the Ministry of Internal Affairs, in which the CAA aims to include some provisions for the airport vicinity.

5.2.4. *Land reserve for future construction*

Land reserves for all major infrastructures such as airports can only be established in general spatial plans.

A small land reserve for future development was established by a Detailed Plan for the Tallinn Airport area adopted by the City of Tallinn in 1997. Therefore, it is also considered in the comprehensive plan of the City of Tallinn, adopted in 2001.

Expropriation for the public interest is considered by the Planning Act and regulated by the "Immovable Property Expropriation Act". However, since airports are currently under private law, expropriation can not be used for expansion projects.

5.3. Airport construction

5.3.1. Permits and authorisations required for airport construction or development

- a) Building permit: Airport construction, as well as any construction works within an airport, are subject to the general provisions of the Building Act and must, therefore, obtain a building permit from the local government, after approval of the building design documentation by the CAA.
- b) Environmental permits: Airports are subject to the same legislation and requirements as any other construction work and must therefore obtain environmental permits with regard to ambient air pollution, waste management and water treatment.
- c) Other permits: All construction works within an airport are subject to the general provisions of the Building Act and must, therefore, obtain a permit for use, once the construction is finished, from the local government. Written consent must be obtained beforehand from the CAA, which will check compliance with air safety requirements.

5.3.2. Institutions and processes involved

According to the Building Act, building permits and permits for use are issued by local governments, although the CAA must be consulted. Environmental permits may be issued directly by the Ministry of the Environment or the County Environmental Boards, depending on the project.

5.3.3. Integration with planning and environmental controls

Building permits and permits for use shall only be granted for construction works included in an adopted detailed plan or in compliance with specifications considered in a comprehensive plan.

Those detailed plans adopted should, in accordance with the Planning Act, have been subject to Strategic Environmental Assessment. Environmental Impact Assessment should, in accordance with the Planning Act, be conducted before granting a building permit for those construction works with a significant impact on the environment. The report giving approval of the EIA shall include environmental requirements during the construction.

Construction works are supervised by the Environmental Inspectorate, which is answerable to the Ministry of the Environment.

5.4. Airport operation

5.4.1. Operating permit

The general permit for use is required once the construction of a new infrastructure has finished, including the written consent of the CAA. This permit would function as a permit for use of new infrastructures.

A specific operating permit from the CAA is included in the airport certification process.

5.4.2. Airport certification

Airport certification is already regulated in Estonia, following ICAO requirements.

Aerodrome certification was already required by the Aviation Act adopted in 1999. The first procedures for the certification of aerodromes were enforced by a regulation of the Ministry of Roads and Communication on 23 December 1999. The most recent regulation on certification of aerodromes was adopted on 22 June 2005 by the Ministry of Economic Affairs and Communications. Among other matters, it also includes specific requirements for aerodrome manuals.

The CAA will supervise compliance with regulations of the Ministry of Economic Affairs and Communications and shall issue an airport certificate for up to 3 years.

.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

The Public Health Act, which entered into force in 1995, states that the Ministry of Social Affairs is the central body responsible for establishing legislation on health protection, including limiting values of levels of noise and air pollution.

In fact, the Regulation of the Minister of Social Affairs n° 42 of March 2002 sets limit values of noise in residential and recreation areas and defines the methods of measurement of noise levels. This Regulation already considers part of the requirements of the Directive 2002/49/EC⁸ (the “noise” Directive), as it was written on the basis of the proposal for the Directive.

Later, the Ambient Air Protection Act, which entered into force in September 2004, transposes the “noise” Directive into Estonian legislation.

The same Ambient Air Protection Act establishes the regulatory framework for the area of air quality

Directive 2002/30/EC⁹ (the “noise-related operating restrictions” Directive) seems to be transposed into Estonian legislation, although this was not properly communicated, causing a reasoned opinion to be sent by the European Commission in July 2005.

6.2. Institutions

The Ambient Air Protection Act states that the standard levels of ambient noise and the methods for determination and assessment of noise levels shall be established through regulations from the Ministry of Social Affairs.

However, the Act also empowers local governments to establish, with regard to their administrative territories or parts thereof, standard levels for ambient noise which are up to 50 per cent more stringent than the standard levels established by the Ministry of Social Affairs through its Public Health Department.

Furthermore, the same Ambient Air Protection Act states that the Ministry of the Environment is responsible for the regulations to establish the requirements for preparation of plans to limit ambient noise.

⁸ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

⁹ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

The Health Protection Inspectorate (HPI), under supervision of the Ministry of Social Affairs, is the body responsible for coordinating noise issues through its Department of Planning and Monitoring. The four regional Health Protection Services, depending on the HPI, supervise noise-related complaints together with the Laboratory Units of HPI, which undertake noise measurements.

Tallinn Airport handles only around 21,000 commercial aircraft operations every year, so it is still a long way from the 50,000 established by the Ambient Air Protection Act to require noise maps. The airport operator will be responsible for sending those noise maps to the HPI when they are required.

The Civil Aviation Administration cooperates with the Health Protection Inspectorate with regard to noise measurements undertaken to answer complaints.

Finally, local governments are responsible for considering noise matters when executing their powers on planning. The City of Tallinn participates as observer in several projects regarding noise levels around the airport.

6.3. Instruments

- a) Planning: The only official noise contours in Estonia are those calculated in 1997 for Tallinn Airport by the Tallinn Technical University, on the basis of measurements. Those contours were integrated into the comprehensive plan of the City of Tallinn adopted in 2001, and currently in force. Other noise contours have been calculated and sent to the local government since then, but the comprehensive plan has not been amended or reviewed.

The Ambient Air Protection Act defines the following concepts:

“Limit values of noise: The limit value of noise is the maximum permitted level of noise the exceeding of which requires enforcement of mitigation measures.

Critical level of noise: The critical level of noise is a level of noise the exceeding of which creates an unsatisfactory noise situation, causes a significant annoyance to persons and requires the application of measures for the protection of human health.”

The noise limit values for aircraft noise defined by the Regulation of the Ministry of Social Affairs n° 42 of 2002 are 85 and 75 dB L_{Amax} during day and night, respectively. The critical values are 90 and 80 dB L_{Amax} during day and night, respectively.

The same Regulation prescribes noise limits of 60 dB L_{day} and 55 dB L_{night} for residential areas, with critical limits of 70 dB L_{day} and 65 dB L_{night}

Up to now, the local government have not established stricter maximum noise levels for their territories than those regulated by the Ministry of Social Affairs.

The Health Protection Inspectorate conducts noise measurements on the basis of the complaints received,. If the results indicate that the noise levels stated above have been exceeded, the polluter is required to pay for the costs of the measurements.

- b) Land use restrictions: There are no land restrictions or protection zones on the basis of noise or air quality issues. The only way to restrict urban developments on the basis of noise impacts is through the binding opinion of the Health Protection Inspectorate on the detailed plans submitted by the local governments for consultation. That binding opinion includes conditions regarding the insulation and materials required for a construction to be authorised. However, as it is not obligatory to send detailed plans to HPI, some are not submitted,.

The City Planning Department of the City of Tallinn also considers noise impacts when analysing applications for building permits or outlines of detailed plans for areas around the airport

- c) Compensation: There is no compensation or fine scheme defined in Estonia on the basis of noise or air quality infringements. The Ministry of Social Affairs is the body responsible for regulation of this.

6.4. Integration with spatial planning

Noise contours and air quality impacts should be integrated into comprehensive and detailed plans adopted by the local governments.

6.5. Integration with development, construction or operation controls

Potential noise impacts could be considered by the local governments when analysing applications for building permits, on an individual basis, as is the case in Tallinn.

Conditions can be imposed, in the building permit or in the detailed plan, with regard to the materials and insulation requirements of the buildings, in accordance with the binding opinion of the Health Protection Inspectorate or on the basis of any study considered by the local government.

There is no permanent noise monitoring of aircraft operations; measurements are taken, in response to complaints, by the Laboratory Units of the Health Protection Inspectorate with mobile stations, in coordination with the Civil Aviation Administration.

7. CASE STUDY- TALLINN AIRPORT

The main airport in Estonia, Tallinn, suffers from land restrictions for runway enlargement, since the surrounding property belongs to private owners. Expropriation can not take place, as the airport operator, Tallinn Airport Ltd., operates under private law.

The airport boundaries were defined by a detailed plan for the airport area adopted by the City of Tallinn in 1997. No amendments nor new detailed plans have been prepared for the airport since 1997.

The airport development plan taken into account by the current comprehensive plan of the City of Tallinn was prepared for the period 1999-2014. The comprehensive plan, adopted in 2001, restricts the physical development of the airfield, but does not impose any restriction on air traffic. It also includes a reserve of terrain for the development of the land-side of the airport.

The following image shows that reserved terrain (striped grey area) in the Master Plan of the City.



Figure 7. Comprehensive Plan of the City of Tallinn (2001)

In practice, current bottlenecks derive not from the runway system but from the size of the terminal and parking area, for which development projects are currently (2nd half of 2005) being drawn up.

The expansion of the terminal has already been designed by the airport operator, which has been required by the H rjumaa Environmental County Board to prepare an environmental report, and the project has been subject to environmental impact assessment.

Once the environmental approval was obtained, the airport applied to the City Planning Department of the Tallinn local government for the building permit.

The Planning Department has analysed the application and the building design documentation.

As it is not in accordance with the Detailed Plan of the airport area of 1997 (that plan was prepared only to determine the airport boundaries) and the proposed development is a large project (although it is an expansion of an existing building and it could theoretically obtain a building permit without a detailed plan), the Planning Department has asked the Airport operator to prepare a detailed plan of the affected area, which will be adopted by the City and will be used as the basis for granting the building permit.

There is some concern about the environmental impact on the lake which provides 95% of the running water of the city, owing to the need for aircraft to fly over it when landing.

COUNTRY CONTACTS

- **Tallinn Airport Ltd.**

Tonu Mühle, Head of Property Planning and Management

Raili Allmäe, Environment Protection Specialist

- **Tallinn City Government**

Madis Korvits, Head Environment Management Unit

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- **Ministry of the Environment**

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- **Health Protection Inspectorate**

Mihhail Muzotsin, Deputy Director General

Irina Filippova, Chief Specialist

Ingrid Leemet, Tallinn Regional Inspectorate

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁰)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁰ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Riigikogu</i>	Parliament
<i>Maakond</i>	Counties

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 - Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports (Text with EEA relevance)
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML>
 - Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Estonian laws:
 - Estonian Constitution
 - Aviation Act
 - Procedures for aerodrome certification
 - Procedures for determination and use of immediate vicinity of aerodromes

- Planning Act
- Building Act
- Environmental Impact Assessment and Environmental Management System Act
- Environmental Supervision Act
- Ambient Air Protection Act
- IPPC Act
- National Spatial Plan 2010



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

FINLAND

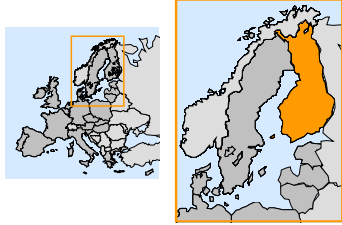


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FINLAND		Location Map												
Population	5.2 mill. (17.2 inhabitants per sq. km)													
Airports network The FCAA's airport network consists of 25 airports. There are other 3 small airports owned and managed by their respective local authorities, although the FCAA still acts as the aviation authority for them.														
Spatial planning system Hierarchical spatial planning system, following very specific guidelines provided by the Minister of Housing, one of the two Ministers of the Ministry of the Environment.														
<ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National level:</td> <td>Ministry of the Environment</td> </tr> <tr> <td style="padding-left: 20px;">Regional level:</td> <td>Regional councils</td> </tr> <tr> <td style="padding-left: 20px;">Local level:</td> <td>Towns, cities and rural municipalities</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>National Land Use Objectives</td> </tr> <tr> <td style="padding-left: 20px;">Framework plans</td> <td>Regional plans. Local master plans</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans</td> <td>Local detailed plans</td> </tr> </table> • Process: Based on negotiation and interaction between all interested parties, including the citizens and all levels of government. Participation and assessment scheme => Plan statement => Approval 			National level:	Ministry of the Environment	Regional level:	Regional councils	Local level:	Towns, cities and rural municipalities	Strategic plans	National Land Use Objectives	Framework plans	Regional plans. Local master plans	Regulatory plans	Local detailed plans
National level:	Ministry of the Environment													
Regional level:	Regional councils													
Local level:	Towns, cities and rural municipalities													
Strategic plans	National Land Use Objectives													
Framework plans	Regional plans. Local master plans													
Regulatory plans	Local detailed plans													
Regulation and permits A building permit granted by the local building supervision authorities is required for every construction activity. EIA coordinated and approved by the Regional Environmental Centres, as deconcentrated offices of the Ministry of the Environment. The local authorities are also deeply involved in the process.														
Airport planning <ul style="list-style-type: none"> • Policy and planning: Non statutory airport plans submitted to the local authorities for their integration into local master plans. The airports are classified as traffic zone, where only development strictly related to aviation may be permitted. • Spatial impact: Safeguard maps and noise contours prepared by the FCAA and sent to the local authorities. Noise contours are integrated into local master plans. • Construction: Ordinary building permit required, besides approval from FCAA. Integrated environmental permit by the environmental permit authorities also required. • Operation: Aerodrome certification 														
Airport noise and air quality <ul style="list-style-type: none"> • Noise: Noise contours integrated into local master plans. Land use restrictions imposed by the Government according to determined maximum noise levels • Air quality: Air pollution monitoring around airports. 														

1. SUMMARY

SPATIAL PLANNING SYSTEM

The current “National Land Use Guidelines”, adopted on 30 November 2000, direct spatial plans to take into account building height restrictions and noise in the vicinity of airports while at the same time safeguarding the possibilities to develop airports of national importance.

Regional plans are binding on local plans and may contain provisions about transport systems. In some cases they include airport grounds and noise affected areas. Local framework plans (master plans) do not regulate building conditions directly but contemplate airport development in accordance with what the operator indicates. They now, in some cases, include the delimitation of noise contours.

Spatial plans are not generally used for airport planning purposes but do reflect airport future growth as a result of a negotiation process. Detailed land use plans are sometimes used for the development of specific portions of an airport.

REGULATIONS AND PERMITS

Construction permits

All constructions require a building permit issued by the municipality.

There are no exceptions or exemptions for airports.

Building permits must be in accordance with land use plans.

Environmental permits

EIA is regulated following closely on the EU legislation. Plans and programs have been evaluated since 1994.

All environmental permits are now integrated within one single environmental permit. Airport environmental permits are issued by the regional environmental administration.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There are no national plans concerning airport planning other than the above-mentioned “National Land Use Guidelines”.

- Airport

Airport plans are internal documents without any legal force but which are submitted to regional and local planning authorities for information purposes.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Obstacle limitations maps are drafted and approved by the CAA. Draft land use plans are reviewed by CAA, who must be consulted before any building permit can be issued within height restriction areas.

- Noise Impact

Airport planning should take into account noise level guidelines approved by Government. Airport development plans include noise contours calculated for future traffic, which may be integrated into spatial plans.

- Risk prevention

There are no specific risk provisions in Finland.

- Land reserve for future construction

Land reserves are included in spatial plans and acquired by the FCAA, who could be the beneficiary of expropriation.

Construction

Airport construction requires a building permit issued by local authorities.

The CAA must authorize airport construction.

Operation

Besides the conditions established in the EIA required for construction, operation of new airports requires an environmental permit, which may also be necessary in the future for existing airports.

The CAA must authorize the operation to ensure compliance with aviation regulations.

Airport certification is already regulated and most airports have been certified by the CAA.

AIRPORT NOISE AND AIR QUALITY

Noise

Noise level guidelines to be applied in land use for different activities were approved by the Finnish Government in 1992. The Finnish policy in this area is to reduce the number of people living in areas affected by noise levels above 55 dB Lden, and spatial plans use these guidelines for zoning purposes.

Environmental permits may include specific conditions regarding noise mitigation.

The “noise” Directive 2002/49/EC has not been transposed yet.

Air quality

There are no specific provisions regarding air pollution in the vicinity of airports.

2. CONTEXT

Finland is a country in northern Europe, bordering on the Gulf of Bothnia and the Gulf of Finland, on the Baltic Sea. It is generally low-lying, with about 50,000 lakes, extensive forests, and peat bogs. The official languages are Finnish and Swedish. It is member of the European Union and joined the Euro system on its initiation in January 1999.

Today, Finland has 6 administrative provinces (State Provincial Offices). The province authority is part of the executive branch of the national government; a system that had not changed drastically from its creation in 1634 to the new division to "greater provinces" in 1997. Since then, the six provinces have been Åland, Etelä-Suomen lääni, Itä-Suomen lääni, Länsi-Suomen lääni, Lapin lääni, and Oulun lääni.

At the regional level, Finland is divided into 19 Regional Councils, which operate according to the principles of local self-government. They articulate common regional needs and work to promote the material and cultural welfare of their regions. 90 state local districts and 444 municipalities complete the administrative division of the country.

Finland has a highly industrialised, largely free-market economy, with GDP per capita higher than the European Union average (22,400 €¹).



Figure 1. Map of Finland

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004.
Source: EUROSTAT

Characteristic	Description
Population	5,219,700
Latitude / Longitude	64°00' N, 26°00' E
Land area	304,473 sq km
Coastline	1,250 km
Capital City	Helsinki
GDP per capita (PPS at market prices)	25,600
GDP real growth rate	3.6 %
Inflation rate	0.1 %
Unemployment rate	8.8 %

Table 1. Finland: main facts and figures (2004)²

2.1. Population and statistics

Currently, the Finnish population is over the 5 million threshold with one of the lowest EU densities of inhabitants per sq km, with 17.15 inhabitants per sq km.

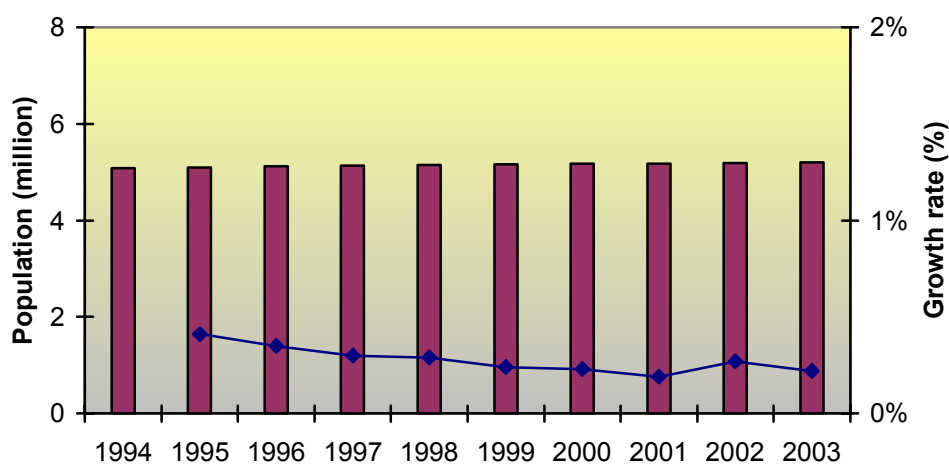


Figure 2. Finnish population evolution

During the last decade the population in Finland has experienced a slight increase, with growth rates under 1%.

² Source: EUROSTAT

The Finnish median age is 40.97 years, but population growth is threatened by a very low birth rate, with 10.5 births/1,000 population (2004 est).

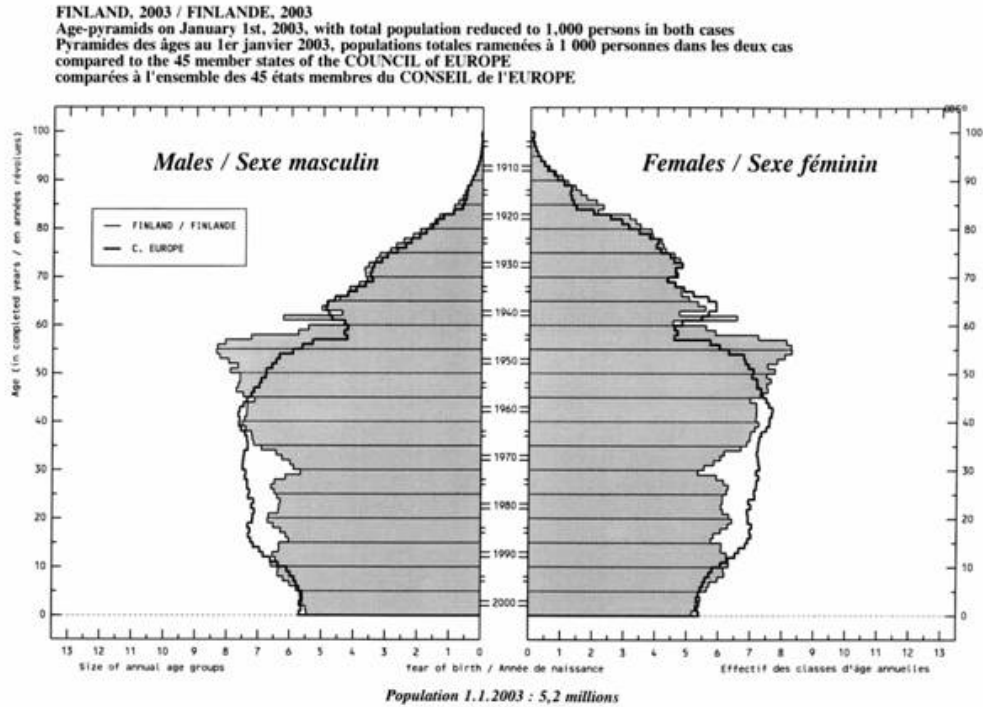
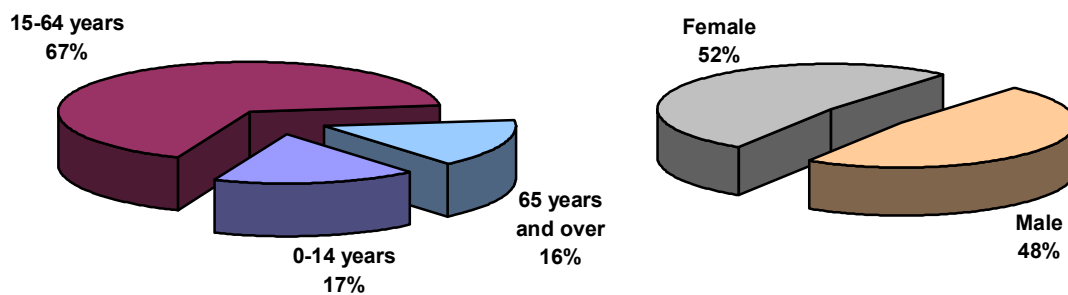


Figure 3. Finnish age-pyramids (2003)³

The figure above shows the Finnish birth rate and the age structure, with the bulk of the population between 15 and 64 years (67%).



Figures 4 and 5. Finnish population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Under the 1919 constitution (as amended), Finland's Head of State is the President, who is elected by popular vote for a six-year term. The President plays an important role in foreign affairs, and can have considerable influence over legislative matters. Legislation is handled by the unicameral Parliament (*Eduskunta*), whose two hundred members are elected for four-year terms by a system of proportional representation. The country's main administrative body is the cabinet (headed by a Prime Minister), which is responsible to Parliament.

Finland consists of six provinces following a 1997 redesign that reduced their number from twelve. The provincial authority belongs to the central government's executive branch. There are twenty regional councils (including the Åland Islands), and 444 local authorities, which are responsible, at a different level of detail, for the spatial development of their respective territories. The local authorities must follow the guidelines prepared by the Ministry of the Environment and adopted by the cabinet. The Ministry of the Environment is also responsible for environment protection, although most of its competences in those areas are exercised through thirteen deconcentrated offices (regional environment centres). There are also three environmental permit authorities.

Aviation falls within the competence of the Ministry of Transport and Communication, although most of executive competences, including functions of aviation authority, are exercised by the Finnish Civil Aviation Administration.

2.3. Main airports

The regulatory aviation authority in Finland is the Civil Aviation Administration. It is responsible for air safety operations and for maintaining the Finnish airport network and air navigation system. The FCAA's airport network consists of 25 airports. There are other 3 small airports, owned and managed by their respective local authorities, although the FCAA still acts as the aviation authority for them.



Figure 7. Finnish airport network

A new official body called Civil Aviation Authority is to be set up in Finland in the beginning of the year 2006. It will be formed from the official regulatory units of the existing Civil Aviation Administration. The Civil Aviation Authority would take responsibility for issuing air safety instructions and regulations and managing the regulatory functions relating to aviation.

The following table shows the commercial passenger traffic and cargo of the main Finnish airports during 2004:

Airport	Passengers	Cargo (Tons)
Helsinki-Vantaa	10,671,000	99,600
Oulu	670,000	1,800
Rovaniemi	364,000	200
Tampere-Pirkkala	304,000	100
Turku	298,000	200
Kuopio	268,000	200
Vaasa	249,000	800
Kittilä	214,000	-
Others	1,035,000	-
Total	14,073,000	-

Table 2. Main Finnish airport data (2004)

3. SPATIAL PLANNING SYSTEM

The spatial planning system in Finland is regulated by the Land Use and Building Act, adopted by the Parliament on 5 February 1999, and the Land Use and Building Decree, adopted by the Cabinet on 10 September 1999. Both came into force on 1 January 2000.

3.1. Institutions

3.1.1. National

At the national level, land use planning is a competence of the Ministry of the Environment. There is a Minister of the Environment and a Minister of Housing.

The Land Use Department and the Housing and Building Department are responsible for the tasks assigned to the Ministry of the Environment by the Land Use and Building Act. Those tasks are “the general development and guidance of land use planning and building activities” and to “promote, steer and monitor regional planning”.

3.1.2. Regional

The 6 State Provincial Offices have no powers with regard to spatial planning.

Finland is divided into 19 regions, each governed by a regional council which is made up of representatives from the municipalities located within the region. Regional councils are responsible, according to the Land Use and Building Act, for carrying out regional planning.

There is a 20th “region”, the autonomous Åland Islands province, which has its own separate planning system. The special self-government status of the Åland Islands is stated in the Finnish Constitution.

However, there is also another division of Finland into 13 regional environmental centres, some of them with the same territory as a regional council and some others covering two or three regions. They function as deconcentrated offices of the Ministry of the Environment. These regional environmental centres are empowered by the Act to “promote and steer the organisation of land use planning and building activity within the areas covered by a local authority”

The main airport in Finland, Helsinki-Vantaa, is located within Uusimaa region. This region, together with Itä-Uusimaa, is controlled by the Uusimaa regional environment centre.

3.1.3. *Local and area wide*

The 444 local authorities (no distinction is made between towns, cities and rural municipalities) are responsible for the spatial development of their territories.

It is worth pointing out that the Land Use and Building Act explicitly obliges those local authorities whose population exceeds 6,000 inhabitants to contract a qualified “planner” to manage their planning functions.

There is a single metropolitan authority in Finland, the Helsinki Metropolitan Area Council (YTV), covering 4 local authorities (Helsinki, Espoo, Kauniainen and Vantaa), with powers over public transport, waste management and air quality monitoring.

3.2. **Instruments**

3.2.1. *Strategic plans or policy documents*

National Land Use Objectives

The Land Use and Building Act directs the Ministry of the Environment to draw up “national land use objectives” indicating which issues, regarding land use planning and management, should be taken into account all over the country.

These objectives should particularly focus on implementation of international considerations, protection of the cultural heritage, the environment and the objects of national importance.

The Act states that these objectives should be prepared by the Ministry of the Environment in cooperation with other ministries, regional councils, and other authorities and parties involved in spatial planning.

The national land use objectives must be adopted by the Council of State (Cabinet of Ministries).

The current “National Land Use Guidelines” were adopted by the Council of State, after a debate in Parliament, on 30 November 2000, and came into force on 1 June 2001⁴.

These guidelines have been grouped “*according to subject matter as follows*”:

- 1) *a well-functioning regional structure,*
- 2) *a more coherent community structure and a quality of the living environment,*
- 3) *the cultural and natural heritage, recreation uses and natural resources,*

⁴ English version available: <http://www.environment.fi/download.asp?contentid=18009&lan=en>

- 4) *well-functioning communication networks and energy supply,*
- 5) *special issues of the Helsinki region, and*
- 6) *areal entities of outstanding interest as natural and cultural sites.”*

The guidelines regarding spatial planning state that: *“The inconvenience of noise should be forestalled by proper land use, and already existing inconveniences should be mitigated”*. Regarding airports the guidelines instruct planners to *“safeguard the possibilities of developing nationally important harbours and airports ...”*

The specific guidelines on communications state that *“Land use in the vicinity of airports should take into account safety risks in air traffic, particularly the height restrictions on flight barriers and the restrictions caused by air traffic noise. The planning of new airports and the expansion of existing ones should be made bearing in mind settlements and other noise sensitive functions, so that the indicative noise values approved by the Council of State are not exceeded. Land use planning should safeguard the possibilities of expanding the present air traffic reserve landing fields and the flight security systems ...”*

In particular, the specific guidelines under the article on Helsinki region state that *“land use planning should include reservations for joining the Helsinki-Vantaa airport to the rail network, to the expansion of the underground and to the Vuosaari harbour” and that “alternative locations should be found for the Malmi airport.”*

The Ministry of the Environment is responsible for promoting, guiding and monitoring the implementation of the objectives in the planning activities of regional authorities. The guidelines must be taken into consideration by all levels of government and can have binding effects on spatial planning. When the guidelines refer to regional plans they are only binding for regional planning and do not bind local plans until they are received at the regional level. Consequently, at the local level, the guidelines are in some cases binding on local master plans, but do not bind detailed plans until they have been submitted to the higher level of planning.

3.2.2. *Local (framework) plans*

Regional plans

National land use objectives are implemented through the regional planning instruments developed by the 19 regional councils. These planning instruments, according to the Land Use and Building Act, include the “regional scheme”, the “regional plan” and the “regional development programme”.

The regional scheme establishes the objectives for the long-term development of the territory of the region. The regional plan and the regional development programme are prepared on the basis of those goals.

The regional plan (*maakuntakaava*), which can be prepared for the entire territory of the region or for just part of it, sets out the principles and general structure for the spatial development of each area of the region. It must take into account both the national land use objective and the special requirements deriving from the regional conditions, as well as considering as much as possible the general provisions of the regional plans of adjoining regions.

Graphic materials included in a regional plan are usually designed at a scale of 1:100,000.

Although regional plans are prepared to serve as the basis for the development of more detailed local plans, they can also directly control land uses and even construction through conditional building restrictions and protection regulations. Expropriation can also take place, if required to implement a regional plan in order to meet the common interest, but this requires a special permit from the Ministry of the Environment.

Conditional building restrictions define areas where building permits may not be granted for developments that would hinder the implementation of the provisions of the regional plan.

Protection regulations can be established in a regional plan to limit construction and other land use changes that would endanger valuable natural or cultural features or landscapes.

With regard to transport infrastructures, the Land Use and Building Act states that the regional plan should pay *“special attention to the environmentally and economically sustainable arrangement of transport and technical services”*.

The regional plans are approved by the regional councils, but they must also be submitted to the Ministry of the Environment for ratification. In that way, they become documents that are legally binding on local authorities.

Local master plans

The local authorities must prepare their local master plan (*yleiskaava*), for the whole area of the municipality or for part of it, taking into account the provisions of the regional plan in force for the region where they are located, since the regional plan, once it is ratified by the Ministry of the Environment, is binding on the local authorities.

The local master plan will establish the principles and the general structure for the spatial development of the municipality, or part of it. Nevertheless, it can

also establish more detailed requirements to guide the land use and building of a certain area. In any case, it may indicate the areas requiring a detailed plan for their development.

Graphic materials accompanying a local master plan are usually designed at a scale of 1:20,000 or 1:10,000.

During the preparation of the plan, the local authority can establish a building prohibition in a certain area to protect the development that will be proposed for that area by the plan.

Several local authorities can reach an agreement to develop a joint local master plan, establishing common options for the development of their territories. A joint local body, which is nominated for the project by the local authorities, will approve such a plan. Such a plan must be submitted to the Ministry of Environment for ratification, as the regional plans.

Local master plans are to be used as guidelines for detailed plans and other decisions on land use, but can also establish conditional building restrictions and protection regulations to protect the implementation of its provisions. The Act contemplates also the possibility that the master plan is drawn with no legally binding consequences other than those related to expropriation.

The local master plan must be approved by the local council.

3.2.3. *Regulatory (detailed) plans*

Local detailed plans

The local authorities shall prepare detailed plans (*asemakaava*) specifying in depth the organisation of the land uses and the buildings to be developed in a certain area of their municipality.

They must take into account the provisions of the regional plan and the local master plan in force for the area where the development is to take place.

Graphic materials included in a detailed plan are usually designed at a scale between 1:2,000 and 1:500.

During the preparation of the detailed plan, the local authority can establish a building prohibition in a certain area to protect the development that will be proposed for that area by the plan.

Detailed plans impose building restrictions, as nothing can be built in breach of the provisions of a detailed plan, and protection regulations to ensure the implementation of its provisions.

The detailed plan is legally binding and serves as a basis for issuing building permits.

The detailed plan must be approved by the local council.

3.3. Process

3.3.1. Inter-government consultation

The spatial planning system established by the Land use and Building Act in 2000 is based on negotiation and interaction between all interested parties, including the citizens and authorities at all levels of government.

The first stage of the planning procedures defined by the Act is the preparation of a "participation and assessment scheme", to make public the initiation of the planning process, outline the different steps and timetable and serve as a basis for the negotiations between the different authorities involved in each type of plan. It should also name the interested parties participating in the planning procedures.

This scheme is agreed by a municipality or regional council. It can be any local (regional) body according the local (regional) planning policy and local (regional) administrative regulations. The other interested parties can propose a negotiation due to the inadequate content of a scheme. The Regional Environmental Centre holds this negotiation.

Planning procedures must be organized and the principles, objectives and goals and possible alternatives of planning publicized so that any interested parties (landowners, inhabitants, NGOs, authorities and corporations) have the opportunity to participate in preparing the plan, estimate its impact and state their opinion on it. In practice a draft plan with possible alternatives is presented in public for from two weeks to a month, and meetings for public discussion are also arranged. During that time it is possible to state one's opinions.

Then, the proposal of the plan can be prepared and it must run through the same process of public discussion and negotiation as the draft of the plan, before being approved and adopted.

In accordance with the Land Use and Building Decree, the following organisations must be consulted in each case:

In the case of the national land use objectives, the Ministry of the Environment should request opinions form the other ministries, the regional environment centres, the regional and local councils and other authorities affected by each particular guideline.

In the case of regional plans, the regional council should consult with the relevant regional environment centre, the adjoining regional councils and the local authorities concerned.

In the case of local master and detailed plans, the local council should request opinions from the relevant regional council and regional environment centre and adjoining local authorities affected by the plan.

3.3.2. *Policy Integration*

As has been already mentioned, all spatial plans must integrate the provisions of higher level planning or policy instruments.

In the case of airports, this means that regional and local plans must implement, if any, those airport development provisions included in national objectives.

In accordance with the current National Land Use Guidelines, regional and local plans are required to take into account the restrictions caused by air traffic noise and the obstacle limitation surfaces.

3.3.3. *Citizen participation*

Public discussion must take place twice during the preparation of a regional, local or detailed plan: once after the participation and assessment scheme is carried out and again when the draft proposal is already prepared.

Negotiations with the regional environment centre and the local authority is held twice, if necessary. First in very beginning of the planning process, usually when the participation and assessment scheme has been prepared, and secondly after the proposal of the plan has been for public hearing and all the objections of citizens and statements of authorities have been obtained. The negotiation is needed if it concerns national or important regional land use objectives, or which are otherwise important in terms of land use, natural values, cultural environment or government authorities' implementing obligations. The main purpose of the negotiation is to clarify how national objectives, and regional and other key goals have considered in the plan. Also other authorities whose sphere of activity the matter may concern shall be invited to the negotiations. Many times it concerns regional council, Finnish Road Administration, the Finnish Rail Administration, the National Board of Antiquities and neighboring municipalities.

After the plan has been approved any interested party has a right to appeal to an administrative court and after that even to the supreme administrative court.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

A building permit (*rakennuslupa*) is required in Finland, in accordance with the Land Use and Building Act and other implementing regulations, for the construction, alteration, change of use or demolition and removal of a building, including those located within airport boundaries.

An application for the building permit must be submitted to the local supervision authority, together with the building design where compliance with the detailed plan can be checked, the construction conditions and materials are described and all the information requested is included. The applicant must also demonstrate the ownership or the agreement with the owner of the terrains.

In place of a building permit, an action permit may be granted for the construction/installation of structures like masts, antennas, mobile equipments, etc.

4.1.2. *Exceptions or exemptions*

Usually a permit is needed for all kind of construction activities. Instead of a building permit there is an action permit for structures and installations such as masts, containers and smokestacks, and also for measures altering the appearance of a building when a building permit is not required, and for rearrangement of dwellings residential building. A municipality can decide in a local building ordinance, whether an action permit is needed at all outside detailed plan areas and in that case whether a notification is anyway required to the local building supervision authority. That institution may decide that the permit is necessary after examining the conditions explained in the notification.

4.1.3. *Institutions involved: inter-government relations*

The “local building supervision authorities”, which are part of the local councils, are responsible for granting the building permits. However, they have to consult with the relevant regional environment centre when the application for the permit concerns areas located within environmentally sensitive zones, areas contained in government programmes or reserved for conservation or recreation purposes in a regional plan.

Neighbours must be also consulted when an application for a permit is received.

Applicants or neighbours who are not satisfied with the rejection or the granting of a building permit, respectively, may appeal first to the local administrative court and, lastly, to the supreme administrative court.

4.1.4. *Relationship with planning*

No permit can be granted against the provisions of a detailed plan or a local master plan.

When there is no detailed plan in force for a certain area, the provisions of the local master plan will be observed when examining the application for the permit.

4.2. **Environmental permits**

4.2.1. *Environmental Impact Assessment*

The Environmental Impact Assessment procedures in Finland are regulated by the “Act on Environmental Impact Assessment Procedure” which came into force on 1 September 1994, as amended in 1999.

This Act was developed in detail later by the “Decree on Environmental Impact Assessment procedures”.

These regulations follow closely the dictates of Directive 85/337/EEC⁵ (the “EIA” Directive), and, since 1 June 2005, also the obligations imposed by Directive 2001/42/EC⁶ (the “SEA” Directive). It must be noted that these regulations do not affect the Åland Islands. In fact, the provincial government of the autonomous Åland Islands exercises all the functions of the Ministry of the Environment within their territories (with the sole exception of international activities).

According to the Decree on EIA procedures, the assessment is required for the “*construction of airports if the main runway is at least 2,100 m long*”.

With regard to strategic environmental assessment, it must be noted that the Act on EIA procedures already included in 1994 a section on the assessment of policies, plans and programmes.

According to that section, the Ministry of the Environment and the Finnish Environment Institute prepared in 1998 the “Guidelines for the environmental assessment of plans, programmes and policies in Finland”, which were adopted by the Council of State.

Those guidelines should be applied to policies, plans and programmes concerning, among others, transport and regional development.

⁵ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁶ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

4.2.2. *Other environmental controls*

In accordance with the “Environmental Protection Act” adopted on 4 February 2000, an environmental permit is required for any activity that poses a threat of environmental pollution, including noise and air pollution.

The Environmental Protection Decree, issued on 14 February 2000, determines those activities requiring the environmental permits. It includes “airfields” among those activities; however, temporary aerodromes are exempted.

According to the same Decree, the relevant environmental permit authority is responsible for granting the permit to airports, while other activities can obtain their permits from the regional environment centre or the municipal environmental protection authorities. Actually, “airfields other than airports” may obtain the environmental permit from the municipality. This is a change with respect to the previous situation, when airports also obtained their permits from the municipalities.

Before these regulations came into force, integrating all the permits regarding environmental impact, permits were obtained separately by the airports. According to the “Act on implementation of the environmental legislation”, adopted on the same day as the Environmental Protection Act, the permit must be applied for with respect to the activity as a whole.

4.2.3. *Institutions involved*

Environmental Impact Assessments are coordinated and approved by the Regional Environmental Centres, as deconcentrated offices of the Ministry of the Environment. The local authorities are also deeply involved in the process.

The Act on Environmental Permit Authorities establish the regulatory framework for the functioning of the three institutions in charge of the permits for activities with a major environmental impact, such as airports.

The territory of the whole country is divided into three different areas falling within the competence of the Western Finland, Eastern Finland and Northern Finland Environmental Permit Authorities

They are regional permit authorities under the Ministry of the Environment, although the Ministry of Justice is also responsible for their operations.

In accordance with the Environmental Protection Act, the Ministry of Transport and Communications will be consulted when an application for a permit for an airport is analysed.

Previous permits were granted to the airports by the regional environment centres and the municipalities. Today the regional environmental centres or municipalities grant environmental permits in minor cases, which are not of

national or larger regional interest, but many airports, especially Helsinki-Vantaa airport, have larger impacts on environment, thus environmental permits are granted by Environmental Permit Authority.

4.2.4. Integration with other permits

Building permits and environmental permits have to be obtained separately from the respective permitting authorities.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

The Ministry of Transport and Communications is the central body responsible for the aviation sector in Finland. 25 airports are managed and operated by the Finnish Civil Aviation Administration (*Ilmailulaitos*), a commercial enterprise as defined in the State Enterprises Act, which came into force on 1 February 2003. Its functions are regulated by the Civil Aviation Act, most recently amended in 1995.

The FCAA also exercises, through two separate departments, the functions of Air Transport Authority and Flight Safety Authority. The provisions of the above-mentioned State Enterprises Act obliges the establishment of independent authorities for those areas, to avoid conflicts of interest in the aviation sector.

Those provisions of the Act should have come into force for the FCAA by January 2005, but the division is expected to happen in 2006. The Civil Aviation Act will have to be amended before then.

There are 3 other airports (Sodankylä, Seinäjoki and Mikkeli) owned and managed by the respective local authorities. They account for only 4% of the total air traffic in Finland.

Many other institutions, such as the regional councils and the local authorities, the regional environment centres and the environmental permit authorities, participate in or are consulted during airport planning process.

5.1.2. Instruments

There are no statutory airport master plans in Finland. Airport planning takes place through integration of future airport developments into the regional and local master plans, when there are reviewed or updated.

The FCAA is responsible for preparing airport development plans for their 25 airports. Once they are approved by the Director General, those plans have a quasi-official character, as the FCAA is a state enterprise.

Airport boundaries delimit the so-called "traffic zones", which should be considered at the regional and local master plans as empty areas where only the FCAA will arrange planning (although there is not complete flexibility as any development will later require a building permit from the municipality). Nevertheless, some local master plans do already indicate the development plans of the FCAA with dotted lines, in order to take them into account for the planning of the land uses in the vicinity of the airport.

Within the traffic zones, only transport infrastructures or equipment could be built or installed.

Beyond airport boundaries, the airport plans can include the spatial impacts of the aerodrome, usually in terms of noise, and those provisions may also be included in the regional and local master plans.

Airport plans are not subject to public consultation until they are included in a spatial plan. Up to now, they have not been subject to Strategic Environmental Assessment either.

5.1.3. *Process*

Airport development plans are prepared by the airport operators (the FCAA or the respective local municipalities for the three small airports at Sodankylä, Seinäjoki and Mikkeli). In the case of FCAA, each airport plan is updated every 3-5 years if necessary.

Those airport plans should take into account the provisions set out in national land use objectives or any other guideline established by the Ministry of Transport and Communications.

For instance, the National Land Use Guidelines stated that the Helsinki-Vantaa airport should be connected to the rail network, the expansion of the underground and the future Vuosaari harbour, and that an alternative location should be found for Helsinki-Malmi airport. Moreover, in 1999, the Ministry of Transport and Communications issued the “Environmental Guidelines for the Transport sector”, wherein several provisions refer to airport planning and operation. The Ministry is now preparing its next environmental programme on the basis of an evaluation of the environmental performance of the organisations under its competence.

The FCAA and the three local authorities managing small airports are bound to take all those provisions into account in their development plans.

When the local authorities or the regional councils decide to review their spatial plans, they are obliged by the same national land use objectives and other national guidelines to take into account airport spatial impacts. Airport operators must send them their development plans, to be considered by the spatial plans.

Airport future developments will then be subject to the whole process of public participation and negotiation with different authorities (in two stages), as the rest of the spatial plan.

Also detailed plans can be prepared by the airport operators, and submitted to the local authorities for their adoption, for the development of specific parts of the airport.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The obstacle limitation surfaces maps, according to the ICAO Annex 14, are prepared and approved by the Flight Safety Authority within the FCAA. This is one of the two authorities which will be separated from the FCAA, possibly by the beginning of 2006, in accordance with the provisions of the State Enterprises Act.

The National Land Use Guidelines enjoins the local authorities and regional councils to develop land use plans taking into account the height restrictions. Drafts of spatial plans are usually sent to the FCAA to check compliance with obstacle limitation surfaces maps, and negotiations on these matters are held before their adoption.

Applications for building permits within those areas affected by height restrictions must be consulted with the FCAA, which can impose conditions on the building permit.

It must be noted that the Flight Safety Authority is also responsible for the height restrictions around the three small airports managed by local authorities.

5.2.2. Noise Impact

According to the National Land Use Guidelines:

“the planning of new airports and the expansion of existing ones should be made bearing in mind settlements and other noise-sensitive functions, so that the indicative noise level values approved by the Council of State are not exceeded”

These noise level values were approved by the Council of State Decision 993/1992.

Airport development plans prepared by the airport operators, and sent to the regional councils and local authorities for their consideration in spatial plans, should include the noise contours calculated for the future traffic and runway use.

The Environmental Guidelines of the Transport Sector issued by the Ministry of Transport and Communications also laid great stress on reducing the number of people exposed to excessive noise levels in residential areas. According to the calculations of the Ministry, approximately one million Finnish inhabitants are exposed to excessive noise levels. Transport is responsible for 90% of that excessive noise level. But 90% of the noise generated by transport is road traffic noise.

The guidelines from the Ministry instruct the FCAA to integrate noise abatement plans into new infrastructure projects, to contribute to effective land use planning, to monitor noise levels at major airports, to provide more information on noise-sensitive areas in the aeronautical charts and to promote better noise exposure evaluation models.

5.2.3. Risk prevention

There are no specific provisions in Finland regarding third party risk areas. Nevertheless, the National Land Use Guidelines stated that the *“land use in the vicinity of airports should take into account safety risks in air traffic”*.

5.2.4. Land reserve for future construction

The terrains required for future airport expansions must be included in spatial plans and acquired by the FCAA.

Expropriation is possible, with the FCAA as beneficiary, with a permission of the State.

It is interesting to note that the FCAA owns land in the vicinity of airports and has been very active, for example in drafting the plans for the so-called “Aviapolis” area by the Helsinki-Vantaa International airport.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: According to the Land Use and Building Act and related regulations, a building permit is required for every building or construction to be erected within the airport boundaries, including runways, aprons, terminals and any other area related to aviation or commercial activities.
- b) Environmental permits: In accordance with the previous legislation on environment protection, the airport operator had to apply for a location permit to the environmental local authorities (environmental committees of the local councils) for any new constructions, such as a new runway. Other permits referring to water treatment, waste management and air pollution had to be obtained separately.

The permits were granted with conditions about environment protection, reporting and monitoring during the construction and the operation of the new infrastructure. Some permits granted to the airports in accordance with that scheme are still in force, such as the

location permit granted in 1992 by the Environmental Protection Committee of the City of Vantaa for the third runway at Helsinki-Vantaa airport.

Nowadays, in accordance with the Environmental Protection Act 2000 and related regulations, an integrated permit from one of the three the environmental permit authorities is required for airports. An inter-ministerial committee on the environmental responsibilities of civil and military aviation concluded in 2002 that already established operational airports did not require new environmental permits. However, the finite nature of previous permits may mean that permits shall have to be applied for again, this time in accordance with the new regulations.

The FCAA has already applied for that integrated permit for 4 of their airports, and is analysing the need for an application for another 6 airports.

- c) Civil aviation: The Flight Safety Authority of the FCAA, through its Airports and Air Navigation Services Division, is responsible for issuing a construction permit after checking compliance with aviation regulations and the approval of the project. They must also approve the installation of light aviation aerodromes.

It must be noted that this permit from the Flight Safety Authority of the FCAA is also required for constructions at the three small local airports.

5.3.2. *Institutions and processes involved*

- a) Authorization: Building permits for airport infrastructures are granted by the local authorities (for instance, the Building Permits section of the City of Vantaa is part of the Environmental Protection Committee of the local government).

The permission of the Flight Safety Authority (Airports and Air Navigation services Division) of the FCAA is also required.

- b) Supervision: Supervision of construction activities, to check compliance with building designs and conditions imposed in building permits is a competence of the local building supervision authorities, part of the local governments.

More detailed provisions on the supervision of construction works are laid down in the National Building Code of Finland.

5.3.3. *Integration with planning and environmental controls*

In principle, the FCAA can apply for a permit for any transport infrastructure within the “traffic zone” delimited by the airport boundaries, even if it is not

contained in the respective local master plan. Nevertheless, sometimes these proposed infrastructures are represented at the spatial plans (in dotted lines) to facilitate integration with land use planning in the vicinity of airports. In those cases, the applications for building permits should correspond to the planned infrastructures.

With regard to environmental controls, the conditions established in the environmental permits by the environmental permit authorities, and the requirement or not for an EIA to be conducted for a certain development, ensures consideration of environment protection during the construction of any airport infrastructure.

5.4. Airport operation

5.4.1. Operating permit

Once the construction of any airport infrastructure is finished, the Flight Safety Authority (Airports and Air Navigation Services Division) must audit it to ensure compliance with aviation regulations.

5.4.2. Airport certification

Aerodrome certification is already regulated in Finland. 21 out of the 25 airports managed by the FCAA are already certified, after approval (audit by the Flight Safety Authority) of their aerodrome manuals and safety management systems (prepared by the FCAA).

The FCAA is also cooperating with the local authorities managing three small airports for the preparation of the manuals.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

According to the Finnish Constitution, everyone has the right to a healthy environment. Many other general regulations and policy documents refer to the noise and air pollution impacts on residential areas, including the Land Use and Building Act, the National Land Use Guidelines and the Environmental Guidelines for the Transport Sector.

The Environmental Protection Act and its related regulations establish that noise and air pollution impact must be analysed when an environmental permit is applied for by an airport operator. Before this Act came into force, a Noise Abatement Act and an Air Pollution Control Act dealt with those matters, but both these have been repealed.

The Council of State Decision 993/1992 established the noise level guidelines for outdoor and indoor environment, setting out maximum noise levels for different areas in L_{Aeq} for the day and night periods. According to the Environmental Protection Act, municipalities can only establish noise limits for activities not covered by the Act.

More recently, the Government decree on noise emission levels from equipment for outdoors use established the maximum noise levels, but this does not explicitly apply to aircraft noise.

There is no specific legislation regarding airport noise or air quality.

Directive 2002/49/EC⁷ (the “noise” Directive), has not yet been transposed into national legislation, although the L_{den} index is already used.

An amendment to the Aviation Act in 2004 transposed into the Finnish legislation the Directive 2002/30/EC⁸ (the “noise-related operating restrictions” Directive). This amendment entered into force on 1 January 2005.

6.2. Institutions

According to the Environmental Protection Act, the Ministry of the Environment is the central body responsible for environment protection in general, including noise and air pollution matters. Its deconcentrated offices (regional environment

⁷ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

⁸ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

centres) and the three environmental permit authorities are also involved in the analysis of noise and air pollution impacts.

The Finnish Environment Institute (SYKE) is involved in compilation of air pollution data. The Finnish Meteorological Institute is the official authority on air quality in Finland.

The Ministry of Transport and Communications is responsible for the evaluation of the environmental performance of the organisations under its competence, such as the FCAA.

Finally, the FCAA is responsible for the preparation of the noise contours and air quality models, and for the implementation of any abatement plan for the impacts caused by noise and air pollution.

Municipalities are also responsible for the integration of any abatement measure or policy into their land use plans.

6.3. Instruments

- a) Planning: Noise contours are drawn up by the FCAA for the major airports. Noise reports have been prepared for 15 airports. They are calculated for the current and future airport infrastructure and traffic. They are submitted to the local authorities for their consideration in the spatial plans.

Although the maximum noise levels are established by a decision of the Council of State in dB L_{Aeq} , the FCAA has evaluated noise in dB L_{den} since the beginning of the 1990s, even though the “noise” Directive has not been transposed.

The Finnish policy in this area, accepted by all the stakeholders, is to reduce the number of people living in areas affected by noise levels above 55 dB L_{den} .

The Ministry of Transport and Communications has calculated, during the review of its environmental guidelines in 2004, that 27,000 inhabitants live in areas affected aircraft noise. This is only 3% of the total number of people living in areas affected by noise caused by all transport modes in Finland.

For instance, the noise report for Helsinki-Malmi airport (small airport for general aviation) has calculated that 300 persons are living within the area affected by more than 55 dB L_{den} .

With regard to air pollution, different analysis and models carried out by the FCAA on the basis of measurements show that the effect of aircraft

emissions on the air quality is only significant within the airport boundaries or in the immediate vicinity. Values fall well below recommended levels.

Noise and air pollution impacts are considered during the application for environmental permits for the airports. Conditions may be imposed by those permits with regard to runway use, noise and air quality monitoring and the models for the calculation of the contours.

Noise and air quality would also be considered in any EIA conducted for an airport development.

- b) Land use restrictions: The Decision of the Council of State in 1992 established the following maximum levels of noise for different land uses:

Outdoors	Existing areas		New areas
	L_{Aeq} (7-22h)	L_{Aeq} (22-7h)	L_{Aeq} (22-7h)
Residential areas	55 dB	50 dB	45 dB
Recreation areas (in urban areas)	55 dB	50 dB	45 dB
Kindergartens	55 dB	50 dB	45 dB
Schools	55 dB	-	-
Recreation areas (outside urban areas) and nature protection areas	45 dB	40 dB	40 dB
Indoors	Existing areas		New areas
	L_{Aeq} (7-22h)	L_{Aeq} (22-7h)	L_{Aeq} (22-7h)
Dwellings, hospitals, hotels	35 dB	30 dB	30 dB
Schools and conference rooms	35 dB	-	-
Offices	45 dB	-	-

The application of these restrictions is a competence of the local authorities, which are responsible for drawing up their local master plans and detailed plans in accordance with these noise levels and for

rejecting applications for building permits in areas incompatible with noise impacts.

For instance, the City of Vantaa, where 69.3% of the total population living within the 55 dB L_{den} contour around Helsinki-Vantaa airport, resides has adopted the following guidelines:

- no new residential areas (only individual houses) nor noise-sensitive activities are allowed in the zone between the 55 and 60 dB L_{den} contours
- in that zone, only building expansions, industrial and business activities are allowed
- no new residential areas (not even individual houses) nor noise-sensitive activities are allowed in the zone within the 60 dB L_{den} contour
- in that zone, only air traffic, industrial and logistics activities are allowed. Offices are allowed provided that the maximum levels indoors are complied with.

c) Compensation: No compensation rights arise out of land use restrictions based on noise limits.

6.4. Integration with spatial planning

The first step for the integration of noise impacts with spatial planning is the integration of the noise contours into the regional plans adopted by the regional councils.

This is the intention of the following parts of the National Land Use Guidelines, already mentioned, which would become binding on local authorities if considered in regional plans:

“Land use in the vicinity of airports should take into account safety risks in air traffic, particularly the height restriction on flight barriers and the restrictions caused by air traffic noise. The planning of new airports and the expansion of existing ones should be made bearing in mind settlements and other noise-sensitive functions, so that the indicative noise level values approved by the Council of State are not exceeded. Land use planning should safeguard the possibilities of expanding the present air traffic reserve landing fields and the flight security systems as well as the needs of military aviation”

Full integration of airport planning, environmental impacts and spatial planning is required by these national guidelines, the highest level spatial planning instrument in Finland.

Regional councils have integrated these guidelines in their planning instruments. For instance, the Uusimaa regional plan included the noise contours around Helsinki-Vantaa airport, making them binding on all local authorities.

It must be noted that the local authorities, particularly the City of Vantaa, have been open to cooperation with the FCAA. Vantaa, for example, has not only integrated noise contours into the local master plan but also takes into account more recent contours for further development of its territory.

6.5. Integration with development, construction or operation controls

Noise levels are considered by the local authorities when analysing applications for building permits around airports. Conditions may be imposed in those permits.

Construction works are supervised by the local building supervision authorities, including compliance with the building permits and also with environmental regulations.

A noise monitoring system is installed around Helsinki-Vantaa airport, with 7 fixed and 2 mobile monitoring stations. It monitors also flight paths and allows FCAA to identify deviations from the noise abatement procedures published in the AIP.

With regard to air pollution, the emissions of all modes of transport are monitored in Finland by a system called LIPASTO, maintained by a research institute. This system incorporates data from FCAA's ILMI model on emissions and energy consumption of aircraft operations in Finland. In that way, emissions caused by different transport modes can be compared.

Energy consumption and CO₂ and NO_x emissions by air traffic account for about 1% of all Finnish emissions.

Air pollution (particles and NO_x particularly) is also monitored by the Helsinki Metropolitan Area Council around Helsinki-Vantaa airport. The Helsinki Metropolitan Area Council is a body of four member municipalities, Helsinki, Espoo, Kauniainen and Vantaa. The principal duties of the Helsinki Metropolitan Area Council comprise transport system planning, regional public transport provision, waste management and air quality monitoring.

7. CASE STUDY – HELSINKI AIRPORT

Helsinki-Vantaa airport accounts for about 75% of the air traffic in Finland. It is located within the City of Vantaa, which belongs to the same region, Uusimaa, as Helsinki, and is also integrated within the Metropolitan Area Council.

The airport is now covered by the Uusimaa Regional Plan, approved by the regional council in December 2004, but not yet ratified by the Ministry of the Environment (ratification is expected by Autumn 2006).

Part of this plan is shown in the following figure. It can be noted that the noise contours, shadowed in grey, also affect the adjoining region. This is the first time that noise contours calculated by the FCAA for Helsinki-Vantaa airport have been included in the regional plan (calculations made in 2002; 55 and 60 dB L_{den}).



Figure 8. Uusimaa Regional Plan

Once the regional plan was approved by the regional council, it was subject to public consultation. At the time of writing, 27 objections (only 2 of which refer to noise) have been submitted by citizens, NGOs and some municipalities to the Regional Court (the Ministry of the Environment in this case). The Uusimaa Region will answer these complaints and take them into account if necessary (this decision can be appealed to the Supreme Court) during this year, and will submit the final version to the Ministry of the Environment.

Once the regional plan is ratified by the Ministry, it will become binding on all the local authorities within Uusimaa Region, as Vantaa. However, this has proved to be unnecessary for the full integration of the airport plans into the local spatial plans.

There is a clear identification of Vantaa municipality with the airport and a good climate of cooperation with the FCAA. In fact, the official slogan of the City is "Vantaa: the Airport City".

The local master plan of the City of Vantaa adopted in 1968 (drawn up in accordance with previous legislation) already included the airport plans for a third runway, although its direction was not the one finally selected. This change in location caused some problems, as land uses were planned in accordance with that wrong direction and building permits were granted in areas that are now affected by the current third runway.

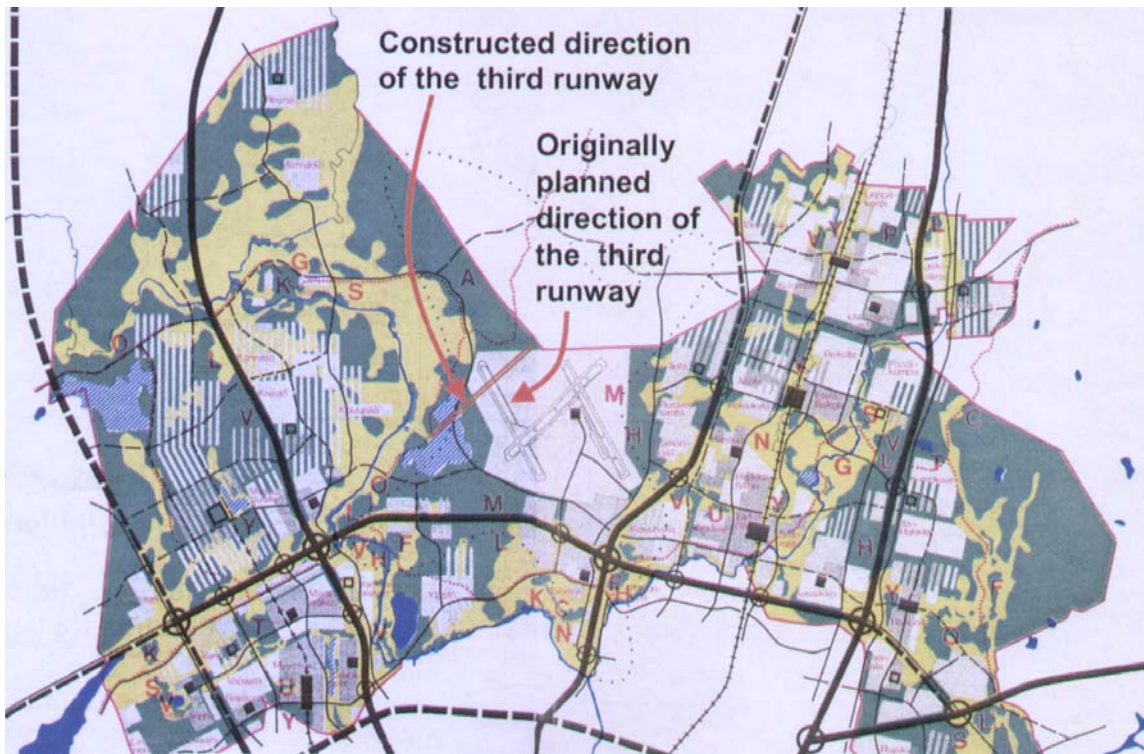


Figure 9. City of Vantaa Master Plan 1968

In the early 1990s, when the City decided to review its master plan, the decision to build the third runway parallel to the direction 04-22 of the second one had been already taken by the FCAA. The location permit had been applied for by the FCAA to the environmental protection committee of the City of Vantaa, including noise contours calculated for the operation of the three runways.

The location permit was granted under several conditions, mainly on the runway use, and the requirement for a noise management plan. Other permits for water treatment, waste management and air pollution were also granted by different environmental authorities for the construction and operations periods of the third runway, which was finally opened on 28 November 2002. An environmental permit has replaced a location permit due to Environmental Protection Act 2000.

All plans and calculations prepared for the application for the location permit were integrated by the City of Vantaa into its Master Plan currently in force. It was adopted by the local council in 1992 and ratified by the Ministry of the Environment (according to the previous legislation) in 1995. At that time, the regional plans had not yet considered these matters.

The following figure shows the City of Vantaa Master Plan currently in force, where the third runway already appeared as it was finally opened in 2002 and the noise contours for the three runways (a thin black dotted line) are included. Industrial and business land uses were planned in areas affected by noise. Those noise contours were calculated by the FCAA in 1992 for the location permit for the third runway.

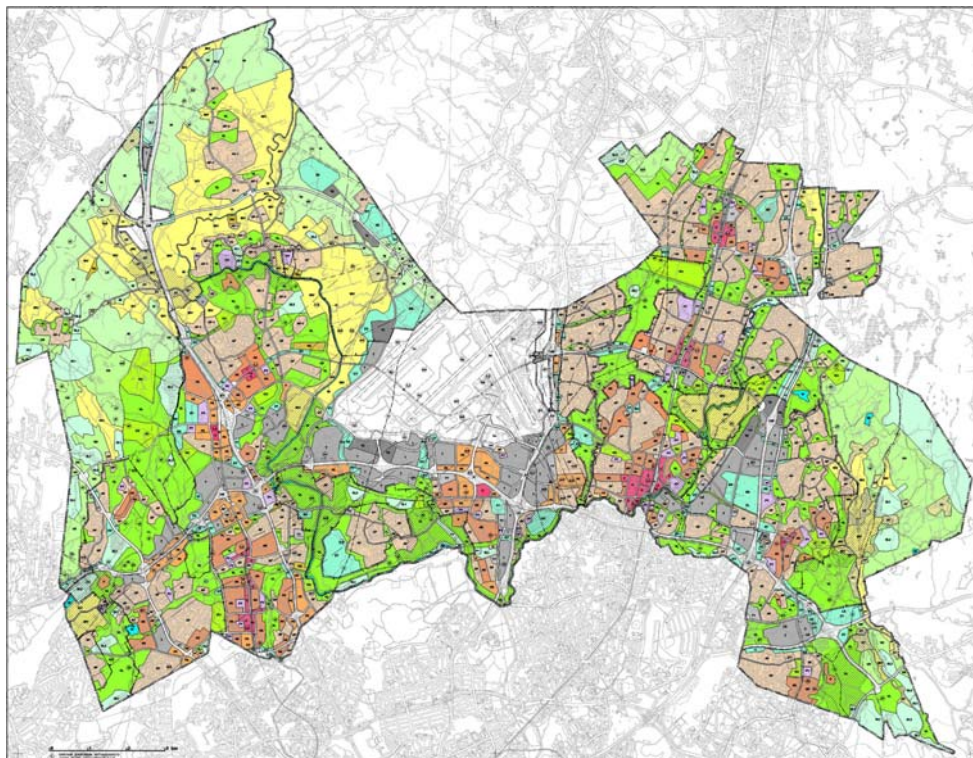


Figure 10. City of Vantaa Master Plan 1995

This Master Plan is also being updated, in accordance with the new land use legislation. A first draft was already subject to public consultation in March 2005. 50 statements from different organisations and 480 opinions were received.

This proposal includes three noise contours around Helsinki-Vantaa airport, for 50, 55 and 60 dB L_{den} . Those contours have been calculated by the FCAA recently, and are already taken into account for the analysis of the applications for building permits. The 50 dB L_{den} is included to establish conditions on the building materials and characteristics for future constructions.

Full integration of airport planning, environmental impact and spatial planning, together with noise abatement plans, are the objective of reducing the number of people affected by aircraft noise. According to FCAA's calculations, the number of inhabitants officially residing within the area affected by more than 55 dB L_{den} has been reduced from 94,000 in 1994 to 15,000 in 2000 and to only 9,000 in 2003, but over 13,000 inhabitants are living within that 55 dB L_{den} which has been compiled for land use planning by FCAA and which is shown on the regional and new master plan.

These compiled aircraft noise areas of 50 dB, 55 dB and 60 dB L_{den} formed part of a noise management plan, which FCAA had to prepare in accordance with the location permit of the third runway, before this runway was opened to air traffic.

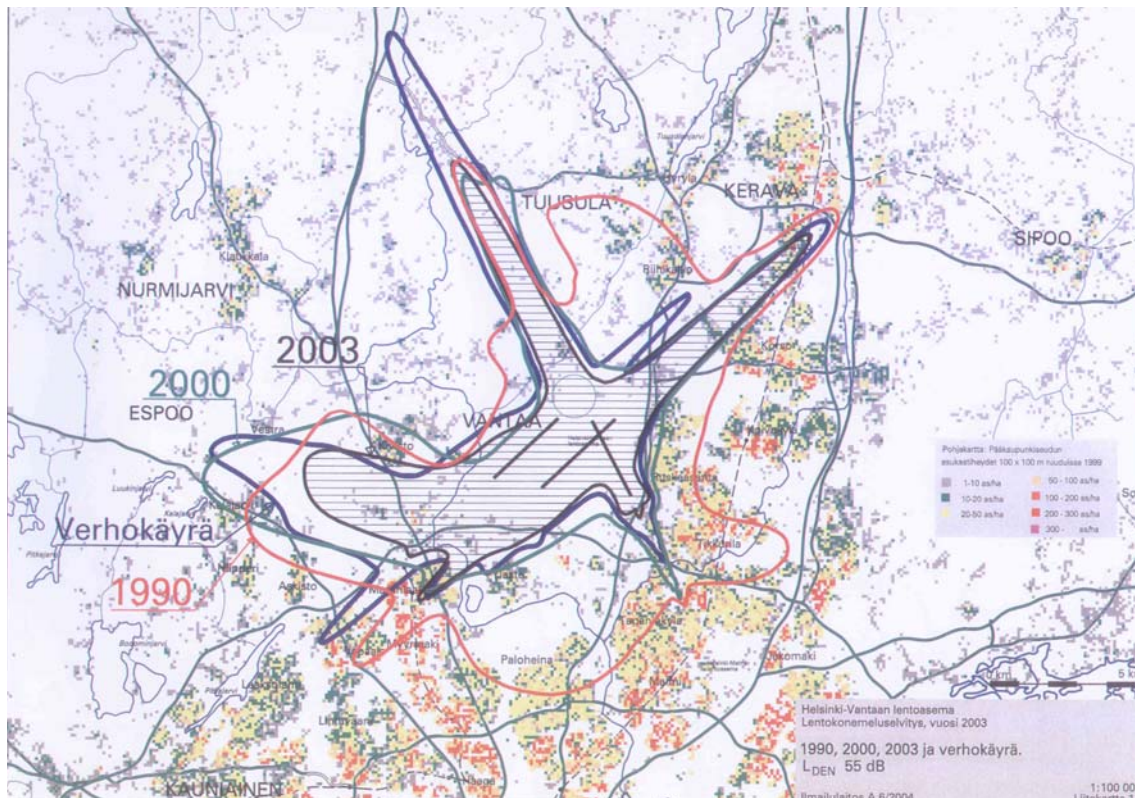


Figure 11. Noise contours

COUNTRY CONTACTS

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”⁹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

⁹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Eduskunta</i>	Parliament
<i>Maakuntakaava</i>	Regional plan
<i>Yleiskaava</i>	Local master plan
<i>Asemakaava</i>	Detailed plan
<i>Rakennuslupa</i>	Building permit
<i>Ilmailulaitos</i>	Finnish Civil Aviation Administration

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- EUROSTAT. <http://epp.eurostat.cec.eu.int>
- Civil Aviation Administration: <http://www.ilmailulaitos.fi/home>
- European Directives
 - Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31985L0337:EN:HTML>
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<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>
 - Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports (Text with EEA relevance)
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML>
 - Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Finnish laws:
 - Land Use and Building Act
 - Land Use and Building Decree
 - Regional Development Act
 - Environmental Protection Act
 - Environmental Protection Decree
 - Act on Environmental Impact Assessment Procedure
 - Decree on Environmental Impact Assessment Procedure

- Act on Environmental Permit authorities
- Nature Conservation Act
- Act on implementation of the legislation on environmental protection
- Decree on noise levels
- State Enterprises Act
- National Land Use Guidelines



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

FRANCE



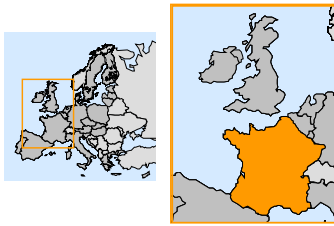
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FRANCE		Location Map
Population	60.6 mill. (111 inhabitants per sq. Km)	
Airports network	Large network owned by the French government, although the airports are managed by Aéroports de Paris (ADP) or the regional Chambers of Commerce under a concession agreement.	
<p>Spatial planning system</p> <p>Spatial planning system in process of decentralisation, although the power and influence of Central Government is still considerable in this field</p> <ul style="list-style-type: none"> • Institutions <ul style="list-style-type: none"> National level: The national government has no competence on spatial planning Regional level: Regions. Provinces Local level: Municipalities • Instruments <ul style="list-style-type: none"> Strategic plans Spatial Planning Directives – Public Services Framework – Planning frameworks Framework plans Territorial coherence frameworks Regulatory plans Local land use plans (<i>PLUs</i>) • Process: Extensive inter-government consultation and citizen participation are requested by law for all plans. In general, the authority in charge of the preparation of a certain plan must define the overall process and notify on its decision to all interested parties. 		
<p>Regulation and permits</p> <p>Building permits granted by the municipality (sometimes based on delegated powers from the State). Long list of exceptions, including airport infrastructure works.</p>		
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: Preliminary Draft Master Plans are non binding documents • Spatial impact: Servitudes plans and noise exposure plans defining permitted land uses • Construction: No building permit is required for the construction of airport infrastructures. Installations require a simplified permit (<i>déclaration</i>) and all other buildings and constructions are subject to ordinary building permit requisites and procedure. • Operation: Decision of the Ministry of Transport 		
<p>Airport noise and air quality</p> <ul style="list-style-type: none"> • Noise: Noise exposure plans (<i>PEBs</i>) Noise nuisance plans for the 10 busiest airports. • Air quality: Regional air quality plans. Air protection plans 		

1. SUMMARY

SPATIAL PLANNING SYSTEM

There are no national spatial plans. At regional level the *Ile de France* Region has had spatial planning instruments for many years. These regional plans have contemplated airport development.

Framework plans are prepared at supra-municipal level and do not regulate airport development.

Local regulatory plans are adopted by all municipalities. Local plans are not used to direct airport development but could be used to regulate building within the airport grounds. Safeguarded areas (*Plans de Servitudes Aéronautiques*) and noise exposure plans (*Plan d'Exposition au Bruit*) must be included as an annex.

REGULATIONS AND PERMITS

Construction permits

In principle all constructions must obtain a building permit, regardless of whether they are public or private. Airport infrastructures are, nevertheless, not subject to this requirement.

Environmental permits

Environmental Impact Assessment is regulated along the lines of EU legislation, with the peculiarity that in addition to the list of projects that are always subject to this procedure, the law also establishes a monetary criterion whereby all projects budgeted over 1,900,000 € must be evaluated.

Both spatial plans and airport development plans must undergo an environmental impact assessment.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no transportation or airport planning at national level, but some policy documents have been prepared in which the role of different airports is contemplated.

- Airport

Airport development plans (*Avant projet de plan de masse*) are not statutory documents and have no binding effect but many airports have adopted them and they are used as a basis to preordain the extension of safeguarded areas and noise exposure zones. Airport plans are internal administrative documents approved by the aviation authority without public participation.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Safeguarded areas comply with ICAO's Annex 14 requirements and are protected by "aeronautical servitudes". These areas are defined for each airport in a plan (*Plan de servitudes aéronautiques de dégagement* or *PSA*) adopted after consultation with local authorities and public participation. The PSA becomes part of the local land use plan. Constructions or installations which do not require a building permit must be authorized by the CAA.

- Noise Impact

Noise Exposure Plans (*Plan d'Exposition au Bruit, PEB*) must be established for most French airports on the basis of projected airport development in the long, short and medium term.

PEBs are prepared by the aviation administration and approved by the Prefect after a public enquiry, and consultations with the local authorities and the airport's environmental consultative commission. The plans for the 10 most important airports are also submitted to the airport noise authority, ACNUSA (*Autorité de contrôle des nuisances sonores aéroportuaires*).

PEBs delimit noise exposure zones which establish permissible land uses. The plan is legally binding and must be annexed to local land use plans.

- Risk prevention

There are no provisions for third-party risk in the vicinity of airports.

- Land reserve for future construction

Land reserves for the construction of airports may be included in spatial planning documents, as local authorities are legally bound to take into consideration the information provided by the representatives of central government on future projects.

Construction

No building permit is required for the construction of airport infrastructures. Installations require a simplified permit (*déclaration*) and all other buildings and constructions are subject to ordinary building permit requisites and procedure.

Construction permits and declarations must be in accordance with spatial plans. Non-State airports require prior authorization or a signed agreement between the operator and the Ministry responsible for aviation.

Operation

Airports as such are not required to obtain an environmental permit for operation, but specific facilities may need a permit if they are not included within a broader EIA.

Flight path modifications are also required to undergo a similar evaluation procedure under certain circumstances.

Airports may not commence operations without an authorization from the Minister in charge of aviation.

AIRPORT NOISE AND AIR QUALITY

Noise

The Airport Noise Control Authority (*Autorité de contrôle des nuisances sonores aéroportuaires, ACNUSA*) is an independent authority performing advisory and control functions regarding airport related noise. The authority must be heard prior to the adoption of noise plans, noise regulations or procedural modifications, and provides independent advice on many subjects such as noise indexes or measuring methods. It also develops the specifications for noise monitoring stations and acts as a mediator between different levels of government, industry and citizens. The Authority has also been given the power to impose fines for violations of airport and aviation noise regulations.

Noise Nuisance Plans (*Plans de Gêne Sonore, PGS*) establish the limits of the areas affected by noise disturbances in the vicinity of the airport whose residents are entitled to receive financial aid for the installation of sound

insulation. All financial assistance related to airport noise is based on these plans.

Sound insulation programmes are managed by airport operators with the resources obtained from a noise tax levied on airlines for each take-off. Night bans and limits to the total number of flights as well as flight path restrictions apply at all Paris airports.

Noise zoning is established in the noise exposure plans PEB.

Air quality

There is no specific legislation on airport air quality.

No specific measures are adopted to limit air pollution in airports. Monitoring results do not indicate any specific problem at or near the airports arising from air traffic.

2. CONTEXT

France is a republic in western Europe, between the English Channel, the Mediterranean Sea and the Atlantic Ocean. It is also the largest country wholly in Europe, generally flat or undulating in the north and west and mountainous in the south and east.

France became a republic in 1793 after the French Revolution and an empire in 1804 under Napoleon; then it reverted to a monarchy (1815-48), followed by the Second Republic (1848-52), the Second Empire (1852-70), the Third Republic (1870-1940), and the Fourth and Fifth Republics (1946 and 1958).

France is divided into 22 regions: Alsace, Aquitaine, Auvergne, Basse-Normandie, Bourgogne, Bretagne, Centre, Champagne-Ardenne, Corse (Corsica is enjoying relative territorial autonomy), Franche-Comte, Haute-Normandie, Ile-de-France, Languedoc-Roussillon, Limousin, Lorraine, Midi-Pyrenees, Nord-Pas-de-Calais, Pays de la Loire, Picardie, Poitou-Charentes, Provence-Alpes-Cote d'Azur, and Rhone-Alpes. In addition, there are 4 overseas regions: Guadeloupe, French Guiana, Martinique and Réunion



Figure 1. Map of France

France's GDP per capita is 24,700. It exceeds the European Union average (22,400¹) by 10%. France is one of the world's major economic powers. France's leading industries produce machinery, chemicals, automobiles, metals,

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices 2004
Source: EUROSTAT

aircraft, electronics equipment, and foods (especially cheese). Tourism is an important industry, and Paris is famous for its luxury goods.

Characteristic	Description
Population	60,200,000
Latitude / Longitude	46°00' N, 2°00' E
Land area	545,630 sq Km
Coastline	3,427 Km
Capital City	Paris
GDP per capita (PPS at market prices)	24,700
GDP real growth rate	2.3 %
Inflation rate	2.3 %
Unemployment rate	9.7 %

Table 1. France: Main facts and figures ²

2.1. Population and statistics

Currently, the population of France is close to the 60 million threshold with an average density of 111.1 inhabitants per sq Km. This means that France is below the European average (EU-15 density: 115 inhabitants per sq Km).

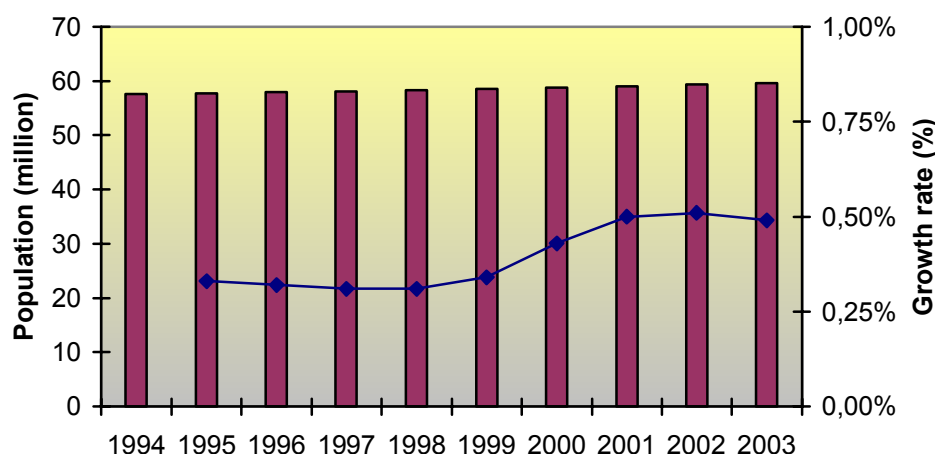


Figure 2. Population growth

² Source: EUROSTAT

During the last 2 decades the population in France has increased slowly, with a growth rate of under 0.5% and 12.15 births/1,000 population (2005 est), in spite of the effort of the government to increase the birthrate. The median age in France is 38.85.

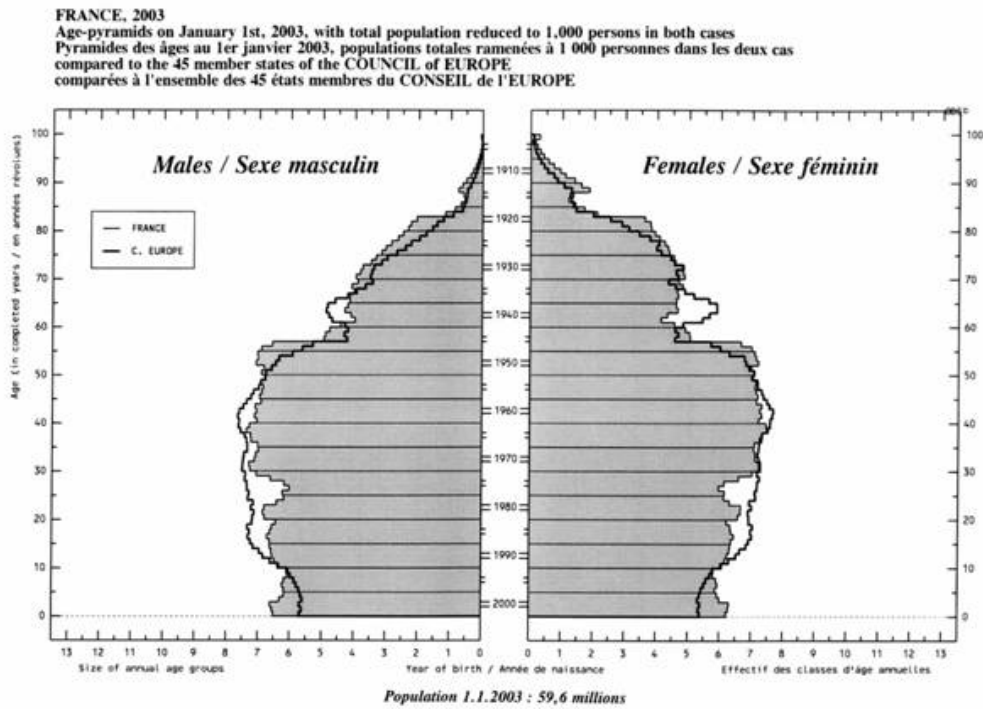
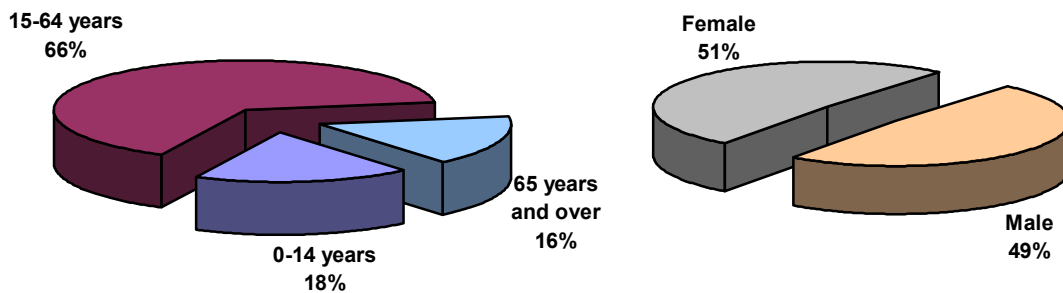


Figure 3. Age-pyramids (2003)³

The figure above shows the French birthrate recovery. The pie charts below show the population by age and gender, with the bulk of the population between the age of 15 and 64 (65.2%).



Figures 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Since the Revolution of 1789, France has had an extremely uniform and centralized administration, although legislative changes in 1982 allowed greater autonomy for the nation's regions and departments. The country is governed under the 1958 constitution, which established the Fifth French Republic and reflected the views of Charles de Gaulle. It provides for a strong president, directly elected for a five-year term (changed from a seven-year term in 2000). A premier and cabinet, appointed by the president, are responsible to the national assembly, but they are subordinate to the president. Parliament consists of the national assembly and the senate. Deputies to the assembly are elected for five-year terms from single-member districts. Senators are elected for nine-year terms from each department by an electoral college composed of the deputies, district council members, and municipal council members from the department.

Parliament is solely responsible for legislation regarding civil, fiscal, and criminal law, electoral law, civil liberties, the budget, and amnesty and labour laws. The president has power of appointment of the prime minister, the executive ministers, high-ranking civil servants, and judges. The president presides over the council of ministers, is the commander-in-chief of the armed forces, and has power to dissolve the national assembly.

Each of the 22 regions (see above) have a directly elected regional council, primarily responsible for stimulating economic and social activity. The regions are further divided into 96 departments (not including the four overseas departments), which are governed by a locally elected general council, with one councillor per canton, elected for a six-year term. As a result of constitutional amendments introduced in 2003, regions and departments may seek greater autonomy than was possible in the past. Further subdivisions are districts, cantons, and communes. The districts (*arrondissements*) and cantons have little power, except within the largest cities where this is also a political subdivision with its own mayor and council. Cantons are only electoral divisions with no administrative functions. The communes, however, are full political bodies with autonomy to exercise their own powers. The Mayor acts in a dual capacity as head of the local administration and as a representative of the State within the municipal territory.

2.3. Main airports

In 2004, there were an estimated 478 airports and aerodromes in France. These comprised 41 airports with paved runways more than 2,400 m long.

This large network of civil airports is owned by the French government, although the airports are managed by Aéroports de Paris (ADP) or the regional Chambers of Commerce under a concession.

Aéroports de Paris manages all the civil airports and aerodromes within a 50Km radius of Paris. ADP is a public corporation, created in 1945, that has continually adapted to the constantly developing air-transport industry, while preserving the environment by every means possible. Since April 2005, Aéroports de Paris is a private company and has been transferred ownership of the airport grounds and facilities.

ADP manages the 2 main airports in France, Orly and Roissy-Charles de Gaulle, and has also developed and operates 12 light aircraft aerodromes in the Paris area, notably the prestigious business airport at Le Bourget, and the Parisian heliport in Issy-les-Moulineaux.

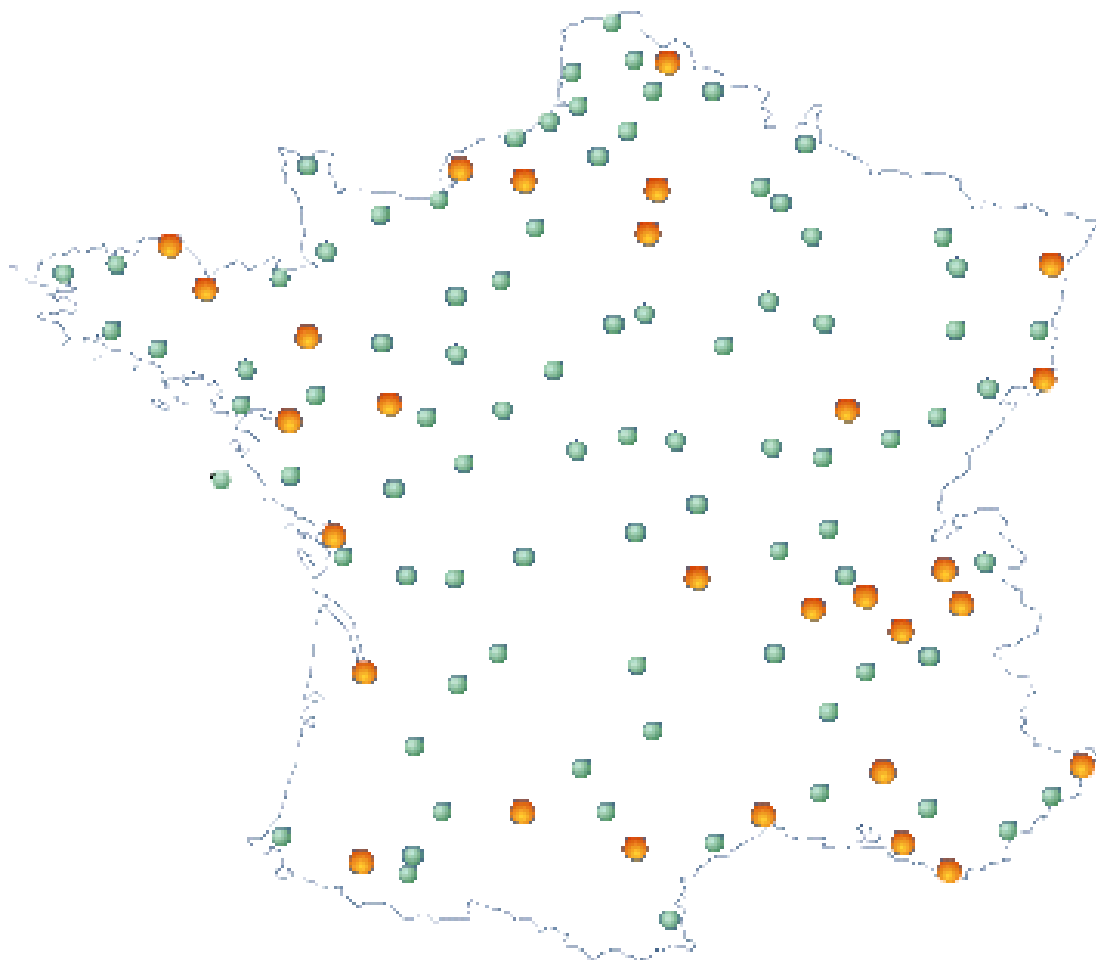


Figure 7. French airport network

The following table shows the commercial passenger and cargo traffic of the main French airports during 2004:

Airport	Passengers	Cargo (Tons)
Paris Charles de Gaulle	50,951,000	11,828
Paris Orly	24,049,000	669
Nice-Cote-D'Azur	9,327,000	118
Lyon-Saint-Exupery	6,125,000	317
Marseille-Provence	5,605,000	430
Toulouse-Blagnac	5,563,000	460
Bordeaux-Merignac	2,897,000	89
Bale-Mulhouse	2,492,000	342
Strasbourg	1,919,000	6
Nantes-Atlantique	1,864,000	84
Beauvais-Tille	1,428,000	1
Montpellier-Mediterranee	1,326,000	12
Ajaccio-Campo-Dell'Oro	975,000	54
Bastia-Poretta	820,000	16
Lille-Lesquin	836,000	2
Biarritz-Anglet-Bayonne	786,000	1
Pau-Pyrenees	720,000	3
Brest-Bretagne	675,000	4
Clermont Ferrand-Auvergne	622,000	7
Toulon-Hyeres	525,000	-
Rennes-Saint-Jacques	376,000	91
Perpignan-Rivesaltes	445,000	-
Tarbes-Lourdes-Pyrenees	408,000	-
Metz-Nancy-Lorraine	303,000	90
Carcassonne	274,000	-
Figari Sud-Corse	262,000	-
Others	2,855,000	-
Total	124,428,000	-

Table 2. Main French airport data (2004)

3. SPATIAL PLANNING SYSTEM

Spatial planning in France was for many years divided into two separate fields, “regional planning” (*aménagement du territoire*) and “land use planning” (*urbanisme*). Regional planning was essentially a centralized function which dealt with socioeconomic development and land use planning was considered a local matter and basically dealt with the physical aspects of development.

After the move towards decentralization initiated in 1982, regions became more active in planning and municipalities saw their competences considerably broadened. At the same time the visions of regional planning and land use planning began to merge and the traditional split between socioeconomic planning and land use started to disappear, especially at the regional and agglomeration levels.

Spatial planning legislation was fairly stable for many years until the decentralization of the 1980s. It was modified on several occasions during the 1990s and underwent its last major revision in 2000 with the “Law on Solidarity and Urban Renewal” of 13 December 2000 (*Loi n° 2000-1208 du 13 décembre 2000, relative à la solidarité et renouvellement urbain (LSRU)*), which was amended in 2003 by the Law on “Urbanism and Habitat” of 2 July 2003 (*Loi n°2003-590 du 2 juillet 2003 relative à l'Urbanisme et l'Habitat*).

Decentralization is still an ongoing process as the Central Government still has very considerable power and influence in this field.

3.1. Institutions

3.1.1. National

National government is no longer involved, as a rule, in the elaboration of spatial planning instruments in France. The State only drafts and adopts planning instruments on some occasions, and the bulk of the central government’s involvement in this field is in establishing the broad framework and cooperating in the adoption of regional and local instruments. Central Government intervention is not limited to controlling or sharing the planning efforts of other administrations and the system now places great importance on the guidance that can be achieved by contractual means.

3.1.2. Regional

Metropolitan France is divided into 22 Regions which are at the same time a division of Central Government and a self-governing unit. Regions play a limited role in the field of spatial planning, as they are more concerned with socioeconomic planning. The main exception is the Region of “Île de France” where a “Planning Framework” (*Schéma Directeur*) is drafted by the regional

administration in cooperation with the State and adopted by the State Council (*Conseil d'État*).

Regions are further divided into “departments” (*Départements*)⁴, which are also two-sided demarcations, as they are the basic level of the deconcentrated State administration and constitute a further tier of self-governing administrations. Provinces play a limited role in spatial planning but the head of the State Administration in each “*Département*”, the “*Prefect*”, has the power to veto local spatial plans if they are not in accordance with national planning or legislation.

In each “*Département*” the law provides for the creation of a “Conciliation Commission” made up of an equal number of locally elected representatives, presidents of inter-municipal entities and “qualified individuals” appointed by the Prefect. These commissions may be required to give an opinion in case of conflict in the elaboration of spatial plans.

3.1.3. *Local and area wide*

There are no “metropolitan areas” as such in France, but there is a long tradition of “inter-communal” cooperation which has led to the creation of many entities which bring municipalities together. The official designation and the specific powers may vary according to the number of inhabitants in the area, but their involvement in spatial planning is rather similar. Urban areas with more than half a million inhabitants come together to form “Urban Communities” (*Communautés Urbaines*), while smaller areas with over 50,000 inhabitants are joined into “Agglomeration Communities” (*Communautés d'Agglomération*)⁵. The size of these entities varies considerably and it is possible to find an “Urban Community” such as Nantes with close to 550,000 inhabitants next to an “Agglomeration Community” with some 160,000 inhabitants such as the “*Communauté d'Agglomération de la Région Nazairienne et de l'estuaire*”. For example, these two particular areas, actually form a functional metropolitan area, known as the “Nantes-Saint Nazaire metropolis” which has no official recognition.

Regardless of their size and designation, these inter-municipal entities always undertake some functions in the field of spatial planning, often by taking on the task of preparing strategic plans. However, in some cases, their role is mainly one of coordination as the territory covered by area wide plans does not necessarily coincide with the jurisdiction of an existing inter-municipal organization.

Municipalities have full competences in the field of spatial planning and development control and can adopt and enforce their own planning instruments.

⁴ There are 96 “*Départements*” in metropolitan France.

⁵ The generic designation is “*Établissement Public de Coopération Intercommunale*” (EPCI).

The fact that over two-thirds of the more than 36,000 municipalities in metropolitan France have less than 700 inhabitants points out that many of them do not have the resources to perform these functions and must operate by means of some of the multiple types of cooperative schemes provided for in French law or rely on the support of other administrations.

3.2. Instruments

3.2.1. Strategic plans or policy documents

At national level the French State has had a long tradition of centralized socioeconomic planning but the practice of “Development Plans” (*Plan de développement économique et social de la nation*) was discontinued after the completion of the 10th Plan in 1992. National planning can now take the form of “Public Services Framework” (*Schémas de Services Collectifs*) which have been prepared in the past for several fields, including one on transportation that contains references to airports. This instrument was, nevertheless, discontinued in practice by a decision of the “Inter-ministerial Committee on Spatial Planning” (*Comité interministériel d'aménagement du territoire CIADT*) of 12 December 2003, which approved an infrastructure programme to the year 2025 where only some airport projects were included, but none of them involved any of the major airports.

Central government can adopt “Spatial Planning Directives” (*Directives Territoriales d'Aménagement*) to set national objectives regarding transport infrastructures, large public services or nature protection in specific areas. This instrument was created in 1995⁶ but has scarcely been used⁷.

When Spatial Planning Directives are adopted, they are binding on public administrations, and all other spatial planning instruments must comply with them.

At regional level, the “Ile de France” Region in the Paris area has a special statute and is legally bound to prepare a “Planning Framework” (*Schéma Directeur de l'Ile de France*) (SDRIF) pursuant to Article L141 of the “Planning Code” (*Code de l'Urbanisme*). The current regional plan dates from 1994 and is now subject to a revision process to bring it into line with the substantial changes that have taken place in spatial planning legislation and to adapt it to the evolving reality of the region. It will be the latest addition to a long list of plans dealing with this area, beginning in 1938, and the first to be drafted by the Regional Council.

⁶ Loi n° 95-115 du 4 février 1995 d'orientation pour l'aménagement et le développement du territoire.

⁷ There have been 7 DTAs initiated. One DTA was adopted in 2003 for a coastal urban area in the region of Alpes Maritimes.

The plan organizes the regional space by defining the general uses of land, delimiting environmentally protected areas, locating large transport infrastructures and public services and the preferred areas for urban development, industrial, agricultural or forestry activities. The contents of the plan are not at all detailed, as schematic maps are used to represent its provisions.

These plans must take into consideration any spatial constraints incorporated into national legislation or national planning instruments. In the case of the 1994 plan, it clearly included a provision for the possible enlargement of the Charles de Gaulle airport, reserving land for the eventual construction of a new runway. The regional plan was used in 1965 to reserve space for the new airport at Roissy and limit development in the vicinity. The State was at that time an airport operator and a spatial planner and for some time the regional plans were coherent with airport development. At the end of the 1970s, nevertheless, this coherence was partly set aside to allow some important developments near the airport⁸. It is not clear how the new SDRIF will deal with the airport now.

The revision of the SDRIF is being undertaken by the Region with the cooperation of the national government. When it becomes legally enforceable by means of a Decree of the Council of State, it will be binding on all lower-tier planning instruments for the region.

3.2.2. *Local (framework) plans*

Framework planning takes place in a “supra-municipal” context, as the instruments created for this purpose always operate above the single municipality level. The “Territorial Coherence Framework” (*Schéma de Cohérence Territoriale*, SCOT), as these plans are known, are regulated by Article 122L of the Planning Code and always cover a group of municipalities, although the area does not have to be an administrative entity such as an “urban community” or an “agglomeration community”. The plan is drafted by these “communities”, or similar structures, where such supramunicipal entities already exist, otherwise it will be necessary to establish an ad hoc cooperation institution to manage the process.

The content of the SCOT is also fairly general, in the sense that it does not contain detailed land use regulations but rather “the general orientation of the space organization and the restructuring of urbanized areas, together with the balance between urban and to be urbanized areas regarding natural, agricultural and forestry areas.” For this purpose, these plans set objectives

⁸ For an account of the relationship between spatial planning and airport development at CDG see: Jaques Grangé, “Plaine de France, un territoire indécidable?. Une rétrospective de la planification urbaine dans le secteur de Roissy.” In *Aéroports et territoires. Cahiers de l’Institut d’Aménagement et Urbanisme de l’Ile de France*. N. 139-140, 2003. The entire issue provides an excellent view of the relationship airport-territory from different perspectives.

and define or delimit protected areas. They may also define large public service projects and can establish conditions for the development of rural areas.

It is not compulsory for municipalities to draft and to adopt a SCOT, but in the absence of such plan they may be prevented from modifying their local plans to develop new areas, or from authorizing the construction of shopping centres or recreation complexes.

These plans are drafted and adopted by the “inter-municipal cooperation entity” which will then take charge of coordinating the implementation. Before they can become enforceable they must be sent to the Prefect, who has 2 months to present any objections, if the SCOT is not in agreement with national planning or with the general principles established in Articles L110 and L121-1 of the Planning Code.

Once they become enforceable SCOTs are binding on all lower level spatial plans within their territory.

3.2.3. *Regulatory (detailed) plans*

Regulatory planning takes place by means of “Local Land Use Plans” (*Plan Local d’Urbanisme*, PLU) in accordance with Article L123 of the Planning Code. As a rule, the PLU must cover the entire territory of one municipality or group of municipalities, but may cover only a part when prepared by an inter-municipal entity.

The PLU must include a “sustainable development project” (*projet d’aménagement et développement durable PADD*) where the general goals of the plan are stated, especially with regard to urban renovation and the preservation of architectural and environmental quality. PLUs define four types of zones. Urban zones (U) which include the built-up areas and land that already has the necessary services. Development zones (*zones à urbaniser* AU), which may be made available for development in the future by building the necessary capital improvements. Agricultural zones (A) which must not be developed on account of their economic or biological potential, and natural zones (N) which are to be preserved for ecological, landscape or historical reasons. The Plan should also include specific zones where development or construction are prohibited or restricted for other reasons, among them noise exposure.

The PLU also includes detailed provisions for each zone with specific regulations on land use, public infrastructures, building heights, floor area ratios and other construction characteristics, as well as the location of parks, protected areas and buildings and, in general, all the rules necessary to achieve the goals stated in the PADD. Regulations should take noise into account and may restrict both the establishment of noise generating activities and the construction of residential units in their vicinity, as well as to require certain

levels of sound insulation for existing and future buildings depending on the intended use.

All PLUs must include an Annex with all public “servitudes” which affect land use or construction (Article L126). In the case of airports this includes building height limitations established for the protection of obstacle limitation surfaces, as well as the Noise Exposure Plan (*Plan d’Exposition au Bruit*, PEB) which is described in Chapter 6. The regulation of land uses and construction included in the rest of the PLU must be consistent with the Annex, which means, for example, that the detailed plan maps will have to redraw the boundaries of the PEB zones which are represented at a scale of 1:25,000 to the scale of the PLU which is usually 1:2,000 or 1:5,000.

Airport areas are included in the PLU, like the rest of the municipality. When a municipality decides to revise or to draft a PLU, the State provides information regarding the public infrastructures to be included in the plan, but other buildings are subject to negotiation with the municipality. In the case of airports this means that runways and platform will have to be taken as a given by the municipality, but terminals and other buildings will be subject to the local planning authority and an agreement will have to be reached about their characteristics.

The plan may also include land reserves for spaces to be acquired in the future for infrastructures or other uses “of general interest”. Such reserves can be established for an indefinite period of time but the owner of the land can request that the property be acquired within a period of one year. If the land is not acquired through purchase or the expropriation is not initiated within 3 months after the 1 year period, then the reserve has to be lifted.

Once the PLU has been adopted, it becomes binding both for public and private parties and it is used as the basis for the consideration of construction permits or the authorization of industries and other economic activities, subject to environmental approval.

Local land use plans are drafted and adopted by the municipality or inter-municipal entity. In areas where no SCOT has been adopted, the PLU must be sent to the Prefect, who can object to the plan within a period of one month in the case of non-compliance with higher level planning instruments or with the general principles included in Articles L110 and L121-1 of the Planning Code. The Prefect can also object on the grounds of serious incompatibility with land use planning in neighbouring municipalities. The Prefect could also object to a local plan at any stage of the procedure if the local authorities fail to take into consideration the information on State projects, programs or public servitudes, which has been made available to them. In areas covered by a SCOT the plan becomes enforceable immediately after publication, but it must be sent to the

Prefect, who can verify the legality of the document and take the plan to the administrative court.

3.3. Process

French administrative procedures usually involve a number of consultation processes in which a number of consultative and coordination bodies must participate.

3.3.1. *Inter-government consultation*

Spatial Planning Directives (DTA) are drafted by the State administration “in association” with regions, departments and municipalities. This means that a special prefect is designated to lead the project and regional and local bodies are invited to participate. At the end of the process these administrations can submit their opinions about the plan within a period of 3 months after they are notified. The plan is adopted by Decree of the Council of State after a public enquiry.

In the case of the “planning framework” for Ile de France, SDRIF, the regional council must request proposals from the departmental councils of all the “*Départements*” in the region, as well as the regional economic and social councils⁹ and chambers of commerce. These bodies are also consulted before the plan is approved and submitted to a public enquiry process. The final approval of the plan will be made by Decree of the Council of State.

In the case of local plans (SCOT and PLU), the municipality or inter-municipal entity which decides to draft or revise a plan must notify the Prefect so that the representative of the State can provide all the available information on projects, programs, or other Government decisions that may have to be taken into account. The decision must specify how inter-government concertation is to take place and must be notified also to the president of the regional council, the president or presidents of the provincial council or councils, the representatives of the public transport authority, chamber of commerce and other professional and trade chambers. All these administrations and entities may request to be consulted, as well as the mayors of neighbouring municipalities. It is also compulsory to consult with the chamber of agriculture and some forestry and agricultural organizations in specific cases.

Consultations are formalized in written opinions which must be included in the proceedings and dealt with in a specific report to be included with the plan.

⁹ Economic and social councils exist at different levels of government and bring together trade unions, professional organizations and trade and industry associations. They have a consultative role and must participate in many public decision-making processes.

Within each Department there is a “Conciliation Commission” (*Commission de Conciliation*) made up of locally elected representatives appointed by the mayors, the presidents of inter-municipal entities in charge of spatial planning and “qualified persons” in the field of spatial planning or environment appointed by the Prefect. The Commission is presided over by a local councilperson and meets whenever it is called upon by its members in a case of conflict. The proposals of the Commission are made public.

3.3.2. *Policy Integration*

Policy integration takes place by means of the information (*portée à connaissance*) provided by the Prefect. In the case of airports this would include any approved projects as well as the building limitations to protect the obstacle limitation surfaces, other “servitudes” resulting from the operation of radar, ILS etc., and the noise exposure plans.

3.3.3. *Citizen participation*

Citizen participation in land use planning as well as in environmental processes, such as the environmental impact assessment, is regulated by a specific piece of legislation, “Law 83-360, of 12 July 1983 on the democratisation of public enquiries and the protection of the environment” (*Loi n° 83-630 du 12 juillet 1983 relative à la démocratisation des enquêtes publiques et à la protection de l'environnement*). The law requires public enquiries to take place for a period of at least one month, during which all the documents must be available to any citizen. The enquiry is presided over by a commissioner designated by the courts and any one can appear before the commissioner to present their views orally or in writing. The commissioner may also decide to hold public meetings. At the end of the participation process the commissioner writes a report which is also available to the public.

The result of the enquiry must be taken into consideration and the plan shall include a document specifying how it has been considered in the final planning documents.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

Pursuant to Article L421-1 of the Planning Code, a building permit is required by anyone intending to undertake any construction, residential or otherwise, even if it does not involve laying foundations. The permit is also required for the modification of existing constructions. This obligation applies to private persons as well as to the State, Regions, Departments and Municipalities and their concessionaries.

4.1.2. *Exceptions or exemptions*

Article L421-1 also provides for a number of exceptions to the general principle, stating that no building permit is required for works which, on account of their nature or small size, can not be considered “constructions”.

Article L422-1 lists a number of works which are exempted from the building permit requirement including, among others, national defence constructions and “technical facilities linked to the operation of public services”. The article adds that this exemption does not exclude the implementation of legal and land use planning prescriptions.

Article R421-1 provides a detailed list of works which are excluded from the building permit requirement. Paragraph 2 explicitly refers to “airport infrastructure works”. No mention is made of other constructions within airport areas, which leads to the conclusion that only those works dealing with runways, taxiways, platform, and in general what can be strictly considered “infrastructure” are contemplated in this exclusion. This article also excludes antennas not exceeding 4 metres and satellite dishes providing the dimensions do not exceed 1 meter.

Article R422-2 lists other works which are also exempted from the building permit requirement but not excluded from local control. These include “the installations required for the operation of public services within ports, airports or railway public domain”, as well as “the technical works for the safety of air traffic”. All these works must be declared to the municipality prior to construction. The declaration is processed in a similar way to the building permit although it follows a somewhat simplified procedure. Works can be initiated after one month providing no other authorization is required and two months if other administrations also have to authorize the construction. Within this period of time, the mayor can issue a negative decision or introduce some conditions, stating the explicit reasons for his/her opposition. This decision is binding and can only be challenged in court.

4.1.3. *Institutions involved: inter-government relations*

Building permits are issued by mayors in municipalities with local land use plans. In other municipalities the permit may also be issued by the mayor but in his capacity as a representative of the State. In cases when buildings exceed a certain height or are open to the public, it will be necessary to obtain the opinion of the Provincial “Civil Protection Consultative Commission”. If the construction also requires other permits or authorizations, the building permit can only be issued with the approval of the competent authority. In this last case, the building permit will also integrate the other authorizations or permits required by law.

There is a long list of authorities that must be consulted in certain cases, including the aviation authorities when the construction is located within areas affected by obstacle limitation surfaces. A permit can not legally be issued without this consultation or when the aviation authority advises against the construction.

4.1.4. *Relationship with planning*

No building permit can be granted unless it is in accordance with the spatial plan or, outside the planned areas, with the general planning rules provided by the law. At the same time the permit can not be refused if the proposed works are in accordance with the plan and any other applicable legislation.

4.2. **Environmental permits**

4.2.1. *Environmental Impact Assessment*

The concept of Environmental Impact Assessment and the requirement to evaluate the possible consequences of projects and activities was introduced into French law almost 30 years ago by means of “Law 76-629, of 10 July 1976, on Nature Protection (*Loi 76-629 du 10 juillet 1976 relative à la protection de la nature*), subsequently amended on several occasions to comply with European legislation, and implemented by a number of regulations, the first of which was Decree 77-1141 of 12 October 1977.

The French EIA regulation is essentially in line with EU Directives, although it has some peculiarities. The law considers that all projects and activities require some sort of environmental assessment, and the implementation regulations have established criteria to determine which projects must be subject to the full EIA procedure and which shall undergo a simplified assessment. Instead of the system of closed lists included in the EU Directives, which has been adopted by the majority of countries, France opted for the application of two criteria. The first criterion is project size, measured in terms of budgeted investment, and the second is the criterion of potential impact. Thus, the regulation is based on a list of projects that must always follow the full EIA procedure irrespective of their

cost, as well as the requirement that all projects with a budgeted investment over 1,900,000 € are subject to EIA.

The cost criterion was incorporated into the Civil Aviation Code (*Code de l'Aviation Civile*) by Article R211-3 which required that all airport construction or extension works with a budget over the amount established in Decree 77-1141 should be subject to a full environmental impact assessment. The recent amendments to the Environmental Code (*Code de l'Environnement*) introduced by Decree 2005-935, of 2 August 2005 (*Décret n° 2005-935 du 2 août 2005 relatif à la partie réglementaire du code de l'environnement*) have maintained the budgetary threshold and do not include airport related projects among those which require a formal EIA procedure in all cases.

Article R122-6 of the Environmental Code, as amended in 2005, excludes from the EIA requirement those projects which do not require a building permit under Article R422-1 and 2 of the Planning Code. This includes “installations needed for the operation of public services within aerodromes and technical facilities needed for air traffic safety”.

Spatial planning documents are also required to undergo environmental assessment under the provisions of Article L121-10 of the Planning Code. For local land use plans (PLU) this obligation is limited to cases which may have a significant effect on the environment on account of the area covered, the nature or importance of the projects included or the vulnerability of the environment. The environmental assessment of spatial plans is integrated into the planning process, which is not subject to the same provisions as environmental impact assessment of projects.

Airport planning instruments have been subject to environmental impact assessment for many years under the 1976 Nature Protection Law since they contemplate the execution of projects falling clearly under the EIA requirement.¹⁰

The Environmental Code also lists a number of activities or projects for which an environmental assessment is not required, but are subject to a public enquiry requiring the environmental grounds for the decision. This includes all modifications of instrumental landing and take-off procedures at an altitude lower than FL 65 when it concerns more than 30 jet operations and implies more than a 10% increase in the area under the approved routes.

¹⁰ The French CAA published a guide for the evaluation of airport plans. “Étude d'environnement de l'avant projet de plan de masse d'un aéroport. Guide technique”. Ministère de l'écologie et du développement durable, and Service Technique des Bases Aériennes. Paris 2002.

4.2.2. *Other environmental controls*

Under the 1976 Nature Protection Law, most activities and projects are subject to some kind of environmental assessment, whether it is a full EIA or a simplified procedure known as “*Notice d’Impact*”. These requirements are applied to industrial and service activities depending on their potential impact on the environment. These activities are known collectively as “Classified Facilities” (*Installations Clasées*).

The regulations adopted in order to implement the 1976 Law, basically Decree 77-1133 of 21 September 1977 as well as the numerous amendments thereof, have established a system under which all these activities either require legal authorization or need to file a declaration. The permit thus obtained integrates all the environmental permits that may be required for the activity.

Airports are not included, nevertheless, among the activities requiring this environmental authorization. The Council of State decided on June 1st 1984, that aerodromes and airports were not subject to the requirements that apply to “*installations clasées*”. However, it was also decided that this did not exclude from such procedures specific facilities such as fuel tanks located within airport grounds.

Many airport facilities will be covered by the environmental impact statement if they were included in the project, otherwise they will have to obtain the different authorizations and permits required under different legislations covering water, electricity, garbage, etc.

4.2.3. *Institutions involved*

Environmental permits are issued by the Prefect in his or her capacity as the representative of the State.

4.2.4. *Integration with other permits*

French legislation has achieved a high degree of integration regarding environment-related permits and goes beyond the requirements of Directive 96/61/EC¹¹ (the “IPPC” Directive), as it also includes in the procedures for “*installations clasées*”, the authorizations required under the legislation on the control of major accident hazards involving dangerous substances.

¹¹ Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Airport planning and construction are decided by Central Government. The principal institution is the General Directorate for Civil Aviation (*Direction Générale de l'Aviation Civile, DGAC*) within the ministry in charge of transport, currently "*Ministère de l'Équipement, des Transports, de l'Aménagement du Territoire du Tourisme et de la Mer*".

Other administrations are consulted in the planning process and may submit proposals. Local authorities participate indirectly in the management of some airports as shareholders of the airport operator.

5.1.2. Instruments

National policies or plans

At national level, Law 99-533 of June 25 1999 "on spatial planning and sustainable development" (*Loi no 99-533 du 25 juin 1999 d'orientation pour l'aménagement et le développement durable du territoire et portant modification de la loi no 95-115 du 4 février 1995 d'orientation pour l'aménagement et le développement du territoire*) introduced the concept of "Public Services Framework" (*Schémas de Services Collectifs*), which were to be prepared for a variety of fields, including transportation. The use of this instrument was, however, discontinued by a decision of the "Inter-ministerial Committee on Spatial Planning" (*Comité interministériel d'aménagement du territoire CIADT*), of 18 December 2003 which included, among other issues, general policy statements on the airport system, and approved an action program up to the year 2025. This programme lists a number of projects to be undertaken or promoted by the State, including a new airport at Notre-Dame des Landes in the western part of France¹².

In 2003, the French Parliament set up a commission to study "the future of French air transport and airport policy" ("*L'avenir du transport aérien français et de la politique aéroportuaire*"). The final report was presented in July 2003 and contained 21 proposals on the development of the national airport system and specific measures to be taken to reduce the impact of airports on surrounding territories.¹³

¹² Plans for the creation of this new airport are going forward as of the end of October 2005. The process is described in the following page, providing an interesting view on this subject: www.loire-atlantique.equipement.gouv.fr/dde44/dossier/ndl/ndl_accueil.htm

¹³ The report can be downloaded at www.assemblee-nationale.fr/12/pdf/rap-info/i1016-3.pdf

A very general document on the spatial evolution of the country was prepared in 2000 by the institution in charge of spatial planning, the “*Délégation à l’Aménagement du territoire et à l’action régionale*”, DATAR. The prospective study, entitled “*Aménager la France de 2020*”¹⁴, included some considerations on the role of airports and proposals with regard to the evolution of the air transport system.

In 2003, the same institution published a comprehensive report on transport policy “*La France en Europe: quelle ambition pour la politique des transports*”¹⁵. The report deals with all modes of transport in a European context and puts forward some proposals for airport policy, including decentralizing responsibilities and improving accessibility to some areas in order to contribute towards a more balanced regional development. The report deals with general policy issues and puts forward specific actions regarding Paris airports and some of the major regional airports. The document, however, does not constitute a policy document adopted by Government, as it is only a proposal from the institution dealing with regional planning and development.

Airport planning

Planning at State-owned airports is carried out by means of a technical document, the “Preliminary draft Master Plan” (*Avant projet de plan de masse* APPM), which sets out the plans for the long-range development of the airport on the basis of maximum development estimates. The APPM does not directly enable the construction of any project since all projects have to be assessed and approved prior to being executed. The plan, which is not binding on third-parties, is essentially an internal document used for preparing other instruments, such as the noise exposure plans (*Plan d’Exposition au Bruit*, PEB) which establish the boundaries of noise zones for purposes of land use regulation, and the maps which define the areas affected by building restrictions for the protection of obstacle limitation surfaces (*Plans de Servitudes Aéronautiques*, PSA)¹⁶.

Planning in the medium term is done by means of another instrument, the “*Plan de Composition Générale*”, PCG, which includes more detail and can be used in the negotiations with local authorities about the provisions of local land use plans. While APPMs concentrate on the geometry of the airport, runways, traffic and accesses, the PGC focuses more on zoning and buildings, as well as parking spaces or access to areas linked to airport activity. Like the APPM, these plans are also internal documents with no binding force.

¹⁴ DATAR. *Aménager la France 2020*. Paris, La Documentation Française. 2000.

¹⁵ <http://lesrapports.ladocumentationfrancaise.fr/BRP/034000181/0000.pdf>

¹⁶ Described later in this chapter.

Not all airports have these kinds of planning instruments, and in some cases the existing plans are somewhat dated. In these cases the link with the surrounding territory is made through the noise exposure plans and the delimitation of obstacle limitation surfaces.

5.1.3. Process

APPMs and PGCs for airports not operated by Aéroports de Paris (ADP) are drafted in accordance with an “Instruction” (*Instruction relative au dispositif de planification aéroportuaire actuellement en vigueur, de 17 décembre 1996*) and Circular AC/75DBA of 6 March 1975, which are internal documents used by the DGAC and do not have any other legal standing. APPMs are adopted either by the Minister or the Regional Prefect, depending on the category of the airport, following an environmental assessment and consultation with the local authorities.

5.2. Spatial impact

The impact of the airport on the surrounding area is clearly linked to spatial planning by means of specific instruments dealing with noise, and the protection of obstacle limitation surfaces or navigation aids.

5.2.1. Implementation of ICAO Annex 14 requirements

Article R241-1 of the Civil Aviation Code (*Code de l’Aviation Civile*) creates two types of aeronautical servitudes (*servitudes aéronautiques*) “in order to guarantee the safety of aircraft traffic”. The first type are the so-called “clearance servitudes” (*servitudes de dégagement*) which protect obstacle limitation surfaces as well as the operation of radio navigation aids, communications or meteorological facilities. The second type are known as “marking servitudes” (*servitudes de balisage*), and are aimed at ensuring the visibility of certain obstacles by installing visual or radio signals.

These servitudes are specifically defined for each airport and must provide security conditions equal to or greater than the standards and recommendations in ICAO Annex 14. The technical specifications for the delimitation of servitudes were defined by Orders of 31 December 1984, and 20 August 1992 (*Arrêtés du 31 décembre 1984 et 20 août 1992*).

Clearance servitudes for each airport are delimited by a “clearance plan” (*Plan de servitudes aéronautiques de dégagement, PSA*) prepared by the aviation administration and adopted by decree of the Council of State (*décret en conseil d’état*) providing there are no objections from other administrations or as a result of the public enquiry. Whenever there are such objections, the plan is approved by an order of the minister (*arrêté du ministre*) in charge of civil aviation. The plan must be submitted to both the regional and local authorities

affected and to a public enquiry, following the procedure established in the Expropriation Code.

Once the PSA has been adopted, it becomes legally binding and must be included as an annex in all local land use plans. The regulations describe how the restrictions are to be represented, indicating even the colour of the line to be used. Since the PSA becomes part of land use plans, no building permit can be granted which runs contrary to its provisions. Any construction or installation which do not require a building permit must first be authorized by the civil aviation authority.

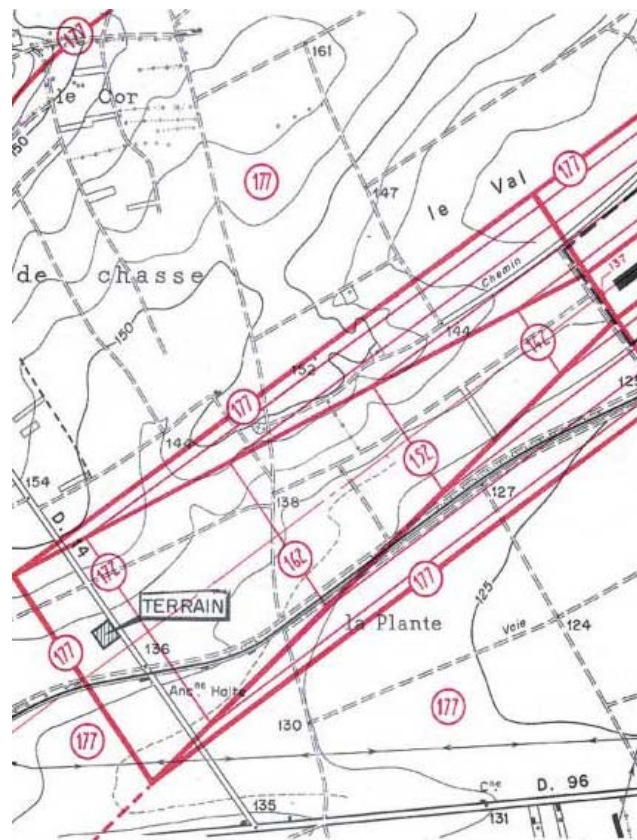


Figure 8. Detail of a PSA

Source: Service Technique Des Bases Aéériennes: LES SERVITUDES AÉRONAUTIQUES: Note d'information générale 1995

Building restrictions arising from the PSA are considered like all other limitations arising from spatial plans and do not create a right to compensation. On the other hand, when the plan requires that some obstacle be removed, the owner is entitled to compensation in accordance with the law on expropriations.

5.2.2. Noise Impact

Noise impact in the vicinity of airports is the object of a separate spatial plan, the Noise Exposure Plan (*Plan d'Exposition au Bruit*, PEB), regulated by Article L147 of the Planning Code. These plans must be established for most French airports on the basis of projected airport development in the short, medium and long term, taking into account the evolution of infrastructures, traffic forecasts, fleet evolution and possible changes in procedures.

PEBs are prepared by the regional or departmental services of the DGAC and approved by the Prefect after a procedure which includes a public enquiry and consultation with local authorities and the airport's environmental consultative commission (*Commission consultative de l'environnement*). The plans for the 10 most important airports are also submitted to the airport noise authority, ACNUSA (*Autorité de contrôle des nuisances sonores aéroportuaires*).

The PEB defines the boundaries of noise exposure zones according to the amount of noise they are subject to using the L_{den} index. The plan is drawn at a scale of 1:25000 and must establish the boundaries of the airport and the noise level zones. All PEBs must contemplate zones A, B and C, and the plans for the 10 largest airports must also include a fourth D zone.

- Zone A includes areas subject to a noise level of 70 dB or more.
- Zone B includes areas with noise levels between 65 dB or 62 dB and 70 dB.
- Zone C includes the area subject to a noise level over 55 dB or 57 dB.
- Zone D includes the area subject to a noise level of more than 50 dB.

In these areas no new residential construction is allowed, with the following exceptions:

- In all zones, airport-related buildings, including hotels.
- In zones B and C and in urbanized areas of Zone A, residential units required for the operation of industrial or commercial facilities or agricultural buildings.
- In zone C, single-family detached homes in fully urbanized areas, as long as there is a low increase in the exposed population. Urban renovation can be authorized as long as there is no increase in the exposed population.

- In zone D, residential buildings may be allowed subject to sound insulation requisites. Such requisites, nevertheless, have not been specified.

In zones A and B public service buildings are only accepted, when required for the airport or in order to care for the needs of the existing population.

All new buildings within the noise exposure zones must be soundproofed according to the law.

The PEB is legally binding once it has been approved. Local land use plans must include it as an annex and integrate the maps with their own. Rental agreements for properties within these areas must include a clause which clearly states where the noise zone is located.

Despite the fact that PEBs are legally enforceable and must be included in spatial plans, in the Paris area some buildings were constructed in violation of the plan. This was essentially due to some implementation problems at the beginning of the 1980s and not to a situation of widespread non-compliance.

PEBs have already been adopted for almost all airports but many plans are based on the old index¹⁷ used in France before L_{den} and must be revised and adapted to the new index before the end of 2005.

5.2.3. Risk prevention

There are no provisions for third-party risk in the vicinity of airports.

5.2.4. Land reserve for future construction

Land reserves for the construction of airports may be included in spatial planning documents, since local authorities are bound to take into consideration the information provided by the representatives of central government on future projects.

The Civil Aviation Code states in Article R245-1 that when the land for future airport creation or expansion has not been reserved in spatial plans, a reserve may be established by decree of the Council of State following a public enquiry. Such reserve may be complemented by a clearance plan establishing the servitudes for the protection of obstacle limitation surfaces.

¹⁷ Index *ipsophonique*.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: No building permit is required for the construction of airport infrastructures. Installations require a simplified permit (*déclaration*) and all other buildings and constructions are subject to ordinary building permit requisites and procedures.
- b) Environmental permits: An airport as such does not require an environmental permit to operate. Any activities not covered by an Environmental Impact Assessment must have the appropriate environmental permits as required by the applicable legislation on water pollution, waste, major hazard risk, etc.
- c) Other permits: An airport established by persons other than the State requires prior authorization or an agreement signed by the Ministry in charge of aviation.

5.3.2. Institutions and processes involved

- a) Authorization: Airports are authorized by the Ministry in charge of aviation. When the airport developer is a local authority, the Ministry in charge of local government must also approve the establishment of the airport, as well as the Minister for the economy and treasury.

Building a new airport or a new runway as well as any works for the purpose of changing the airport's category must be submitted to a prior public enquiry, even though they are not required to undergo an EIA procedure.

- b) Supervision: Airport construction is supervised by the Ministry in charge of transportation.

5.3.3. Integration with planning and environmental controls

Airport infrastructures do not require a building permit. Control of the environmental conditions arising from the EIA procedure lies with the Ministry of transport who must authorize and monitor construction.

5.4. Airport operation

5.4.1. Operating permits

- Institutions involved: Airport operation requires a decision from the Ministry in charge of transportation.

- Requirements: Airports can only open following a decision of the Minister in charge of aviation after a technical enquiry process.

5.4.2. *Airport certification*

Airport certification has not yet been formally regulated, but the Civil Aviation Authority is already requesting airports to meet the requirements set by ICAO.

6. AIRPORT NOISE AND AIR QUALITY

NOISE

6.1. Legislation

Airport noise is treated from different perspectives in several pieces of legislation. It was specifically dealt with in “Law 85-696, of 11 July 1985 on urban development in the vicinity of airports” (*Loi 85-696 du 11 juillet 1985, relative à l’urbanisme au voisinage des aérodromes*) which introduced Articles L147-1 to L147-6 into the Planning Code and provided for the establishment of an Environmental Consultative Commission in airports.

These articles in the Planning Code regulate the noise exposure zones and Noise Exposure Plans (PEB) described above, and have been implemented through a number of decrees embodied in Articles R147-1 to R147-11 of the same code.

The Environmental Code deals with noise in general and other sources different from airports in Articles L571-1 to L571-10, and specifically with airport noise in Articles L571-11 to L571-16. These articles refer to the Planning and Civil Aviation codes, regulate the Environmental Consultative Commissions and set out the broad framework for the assistance provided to the population in the vicinity of airports.

The Civil Aviation Code integrates and develops in Articles L227-1 to L227-9 the Law 99-558 of 12 July 1999, on the creation of the “Airport noise control authority” (*Loi n° 99-588 du 12 juillet 1999 portant création de l’Autorité de contrôle des nuisances sonores aéroportuaires*).

Law 92-1444, of 31 December 1992, on the fight against noise (*Loi n°92-1444 du 31 décembre 1992 relative à la lutte contre le bruit*) introduced the Noise Nuisance Plans (*Plans de gêne sonore*) mentioned below.

Directive 2002/30/EC¹⁸ (the “noise-related operating restrictions” Directive) was transposed by Decree 2004-1051 of 28 September 2004 on the introduction of noise-related operation restrictions in certain airports (*Décret no 2004-1051 du 28 septembre 2004 relatif à l’introduction de restrictions d’exploitation liées au bruit sur certains aérodromes et modifiant le code de l’aviation civile*).

¹⁸ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

Directive 2002/49/EC¹⁹ (the “noise” Directive) was transposed by means of Ordinance 2004-1199 of 12 November 2004 (*Ordonnance n° 2004-1199 du 12 novembre 2004 prise pour la transposition de la directive 2002/49/CE du Parlement européen et du Conseil du 25 juin 2002 relative à l'évaluation et à la gestion du bruit dans l'environnement*) which must be ratified by Parliament.²⁰

6.2. Institutions

Airport noise is the concern of both central and local governments. Central government establishes the regulatory framework, regulates airport operations, and approves noise plans, while local governments play an implementation role. Regarding airport noise, local and regional governments can not adopt rules or standards different from those established by central authorities for the entire country.

There are a number of institutions involved in the implementation of noise policy. For brevity only the 2 most important will be mentioned here: ACNUSA and the environmental consultative commissions.²¹

The airport noise control Authority (*Autorité de contrôle des nuisances sonores aéroportuaires*, ACNUSA), was established in 1999 as an independent authority to perform advisory and control functions regarding airport-related noise. The authority must be heard prior to the adoption of noise plans, noise regulations or procedural modifications, and provides independent advice on many subjects, such as noise indexes or measuring methods. It also sets out the specifications for noise monitoring stations and plays a mediation role bringing together different levels of government, the industry and citizens. The Authority has also been given the power to impose fines for violations of airport and aviation noise regulations. The Authority does indeed operate independently and has become a reference in this field.

Environmental Consultative Commissions may be established at each airport at the request of any municipality affected. They may be consulted on any issue relevant to the airport's environment and must be heard prior to the adoption of noise plans. The commissions are made up of representatives of local

¹⁹ Directive 2002/49/EC on the assessment and management of environmental noise

²⁰ The ratification Bill of Law was introduced in the Senate on 26 January 2005.

²¹ In the Paris area there are the following public institutions concerned directly with noise:

- ACNUSA
- Comité National sur le Bruit
- Environmental Consultative Commission
- Airport Community
- Conseil superior d'Hygiene Publique
- Regional Noise Observatory
- Paris Noise Observatory
- 10 local noise observatories

governments, citizen associations, airport personnel, airport operators and users.

Airport operators are now responsible for managing the noise monitoring networks and administering the soundproofing financial assistance system. The airport collects the noise tax, processes all applications for sound insulation financial assistance and acts as a noise complaint reception centre.

6.3. Instruments

a) Planning:

There are two kinds of airport-related noise plans. Noise exposure plans (PEB) which have been described above, and Noise Nuisance Plans (*Plans de Gêne Sonore*, PGS) which were created by Law 92-1444 of 31 December 1992 and must be prepared for the 10 busiest airports. The purpose of the PGS is to establish the limits of areas experiencing noise disturbances in the vicinity of the airport where citizens can receive assistance to install noise insulation.

These noise abatement plans are drafted for the 10 main airports on the basis of projected traffic for the following year, taking into account the number of movements, routes, fleet, distribution during the day, night and evening. The PGS represents the following zones at a scale of 1:25000:

- Zone I: L_{den} higher than 70.
- Zone II: L_{den} between 65, or 62 if the PEB has used this level for Zone B and 70.
- Zone III: L_{den} between 55 and 65 or 62.

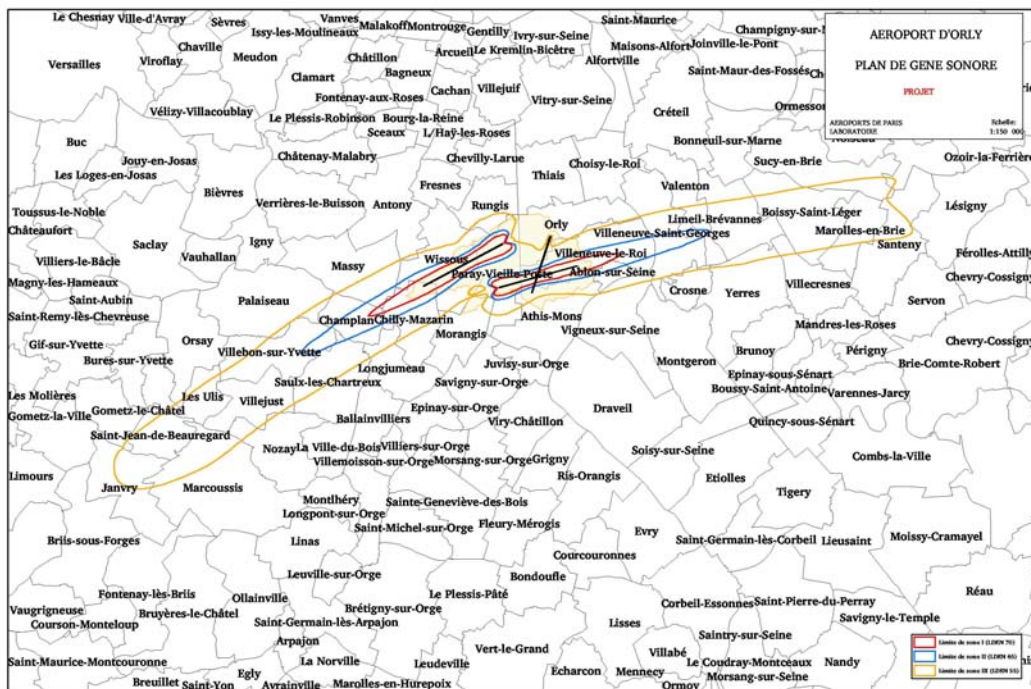


Figure 9. Noise nuisance plan (PGS) Orly

The PGS is drafted by the regional services of the Civil Aviation Directorate and sent to the municipalities. Once the opinion of the local authorities is integrated into the Plan, it is sent to ACNUSA and to a specific commission established at each airport to consult on financial assistance (*commission consultative d'aide aux riverains*). The plan is finally adopted by the Prefect. In 2002 the criteria for the delimitation of the PGS zones as well as the noise indexes were modified and the new plans have resulted in a considerable increase in the number of people who are now eligible for insulation assistance²².

All financial assistance related to airport noise is based on these plans.

b) Land use restrictions:

Noise zoning is established by the PEB which must be integrated into local land use plans. The public are informed through advertisements in the press about the PEBs which are then submitted to a public enquiry before they can be adopted. All citizens have access to the PEB and to the land use plan where the PEB is reproduced in detail.

²² At Paris Orly the new PGS adopted in 2004 increased the number of homes from 32,925 to 43,615 and at CDG the plan adopted the same year increased the figure from 15,915 to 63,257.

c) Compensation:

Land use restrictions derived from noise zoning do not give rise to compensation. Residents of areas included within the PGS whose houses were built in accordance with the PEB are entitled to financial assistance for the purpose of soundproofing. The amount can not exceed 80% of the cost (90% for low income families), and is limited by a total amount per dwelling which varies according to the zone in the PGS where the house is located. In 2002 total financial assistance amounted to near 25 million euros. In 2004, over 23.7 million euros were allocated for soundproofing in the Paris airports and over 2,200 homes plus a number of schools and public buildings were insulated.

The assistance is financed by a noise tax, integrated into the “*general tax on polluting activities*” (“*taxe générale sur les activités polluantes*”) based on aircraft weight, noise certification and time of day, which is levied from airlines for each take-off. The program is now administered by the airport operators, who collect the tax and also provide the financial assistance to the beneficiaries.

6.4. Integration with spatial planning

Noise exposure plans (PEB) are considered in themselves a land use planning instrument which is legally binding on all. Land use plans must integrate the PEB into their own provisions and local plans include the contents of the PEB as an annex.

6.5. Integration with development, construction or operation controls

Airport operations are controlled, in order to take noise into consideration, by regulating operating hours, type of aircraft, preferential runways, procedures and flight paths. In some cases such as Orly, there is a total curfew for turbojet aircraft between 23:15 and 06:15; in others such as Charles de Gaulle the night-time restrictions are applied only to noisier planes. Orly has been subject to a cap of 250,000 movements²³ and is prohibited from increasing its capacity. At CDG the measures have been more varied and include a maximum number of slots to be allocated each year, as well as a commitment by the Government to maintain total noise emissions below a maximum level calculated on the basis of noise levels during the years 1999, 2000 and 2001. The Government has defined in both airports an “Environmental Protection Airspace” (*Volume de Protection Environnementale VPE*) which must be entered and exited through particular points and requires IFR flights to remain within certain boundaries associated with different procedures.

Aéroports de Paris operates a network of 4 noise monitoring stations around Orly and 21 around CDG. The stations and locations have been approved by

²³ Arrêté du 6 octobre 1994 relatif aux créneaux horaires sur l'aéroport d'Orly.

ACNUSA and the airport must submit quarterly reports. Non-compliance with the operating restrictions can be subject to monetary fines levied by ACNUSA.

In addition to the noise tax, landing fees are increased with a noise surcharge calculated on the basis of the aircraft noise group and the time of the day.

AIR QUALITY

6.6. Legislation:

The basic legislation on air quality is provided by Law 96-1236 of 30 December 1996 on air and rational utilization of energy (*Loi 96-1236 du 30 décembre 1996 sur l'air et l'utilisation rationnelle de l'énergie*). The Environmental Code regulates air quality in Articles L220-1 to L226-11.

These laws have been implemented by means of a number of regulations based on EU Directives. National air quality criteria are set out in "Decree 2002-213 of 15 February 2002 on monitoring air quality and the effects on health and the environment, air quality objectives, alert thresholds and maximum levels" (*Décret, n°2002-213, du 15 février 2002 relatif à la surveillance de la qualité de l'air et de ses effets sur la santé et sur l'environnement, aux objectifs de qualité de l'air, aux seuils d'alerte et aux valeurs limites*) and Decree 2003-1085 of 12 November 2003 (*décret, n°2003-1085, du 12 novembre 2003 portant transposition de la directive 2002/3/CE du Parlement européen et du Conseil du 12 février 2002 et modifiant le décret n° 98-360 du 6 mai 1998 relatif à la surveillance de la qualité de l'air et de ses effets sur la santé et sur l'environnement, aux objectifs de qualité de l'air, aux seuils d'alerte et aux valeurs limites*).

There is no specific legislation on airport air quality.

6.7. Institutions

Air quality is the primary responsibility of the ministry in charge of the environment. Within airport grounds air is monitored by the Civil Aviation Directorate and the airport operators. In Paris there is a specialized institution, AIRPARIF, which is made up of representatives from central, regional and local governments, industry and environmental protection associations. AIRPARIF monitors air quality in the region, conducts regular surveys and provides the information to administrations and citizens.

6.8. Instruments

- a) Planning: Regions must prepare Regional Air Quality Plans (*plan régional pour la qualité de l'air*) by drawing up guidelines in order to

achieve the quality objectives set by national government. In all urban agglomerations with more than 250,000 inhabitants the Prefect must approve an “Air Protection Plan” (*Plan de Protection de l’Atmosphère* PPA) adopting measures in order to achieve the legal air quality objectives.

- b) Land use restrictions: Land use planning is supposed to take air quality into consideration among other environmental constraints, but no specific zoning is required.
- c) Compensation: No compensation measures are based on air quality.

6.9. Integration with spatial planning

Air quality is taken into consideration in spatial plans together with other environmental constraints but no specific measures are required.

6.10. Integration with development, construction or operation controls

No specific measures are adopted to limit air pollution in airports. Monitoring takes place at all large airports but there are no specific provisions on this subject. Aéroports de Paris operates a network of monitoring stations within airports. The results obtained indicate that legal levels are maintained for all pollutants except occasionally ozone.

AIRPARIF conducted a study during 2001 and 2002 which indicated that emissions of NO₂ at CDG amounted to 3% of the total for the region. Although the concentration is high in one large area, the level is nevertheless below the measurements within the agglomeration. Comparing the results obtained by ADP within the airport and the results from one of the comparable monitoring stations set up by AIRPARIF, it appears that the levels of CO and NO₂ are lower in the airport grounds. Comparing the measured levels with legal standards, the study found that for benzene, NO₂, N, PM10 and SO₂ the airport was within the prescribed limits²⁴.

²⁴ <http://www.airparif.asso.fr/page.php?rubrique=projets&article=aeroports>

7. CASE STUDY – BASEL-MULHOUSE AIRPORT

The Basel-Mulhouse airport, EuroAirport, is an example of cross-border cooperation as the airport serves three countries, France, Switzerland and Germany, and integrates 2 of them into the management. The airport is on French soil but includes a Swiss customs area connected to Basel by a customs road. The environmental effects of the airport are felt in both countries.

The airport was established following a convention signed in 1949 by France and Switzerland. The runways were opened in 1953. The airport has been expanded since then, having recently inaugurated a new passenger terminal.

The legal status of the airport is different from all other French airports as it is operated by a French-Swiss establishment and run by a Board of Directors (*Conseil d'Administration*) comprising an equal number of representatives from each country. The airport is under the control of both the French and the Swiss administration, but air safety is the exclusive responsibility of the French Civil Aviation Directorate.

7.1. PLANNING, CONSTRUCTION AND OPERATION

Airport planning and construction are entirely governed by French law. Master planning takes place through an APPM and construction controls are the same as described above.

Airport operation is also under the control of French authorities in close contact with the Swiss CAA (*Office Fédéral de l'Aviation Civile*, OFAC) but subject to French law. Despite the fact that only French legislation applies, the airport makes every effort to take Swiss interests and opinions into consideration. A good example is the process followed in order to introduce a new ILS landing procedure for runway 34, the so-called "Project ILS 34".

Under French law²⁵ modifications of take-off or landing procedures may require a public enquiry process in which the environmental consequences must be analysed. Despite the fact that the proposal for EuroAirport did not go beyond the criteria that would have made such an evaluation compulsory, the airport decided to submit the project to the enquiry process in any case. What makes this case unique is the fact that even though there is no similar obligation under Swiss law and Swiss nationals have no standing to submit objections before the French Administration, information about the project was also widely distributed and discussed on the Swiss side of the border, and objections and suggestions from nationals of Switzerland have been accepted together with those submitted by French citizens.

²⁵ Civil Aviation Code, Article R227-7. See above in 4.2.1.

The information sent out to the citizens included an analysis of the environmental impact of the different alternatives for the new procedures. All noise level measurements were shown in both the L_{den} index used in France and the L_{eq} index used in Switzerland. The report also studied the impact on nature, land and air quality, and was accompanied by, among other documents, an analysis of third-party risk commissioned by the governments of Basel-city and Basel-country.

The legal basis for this cross-border consultation was provided by the Espoo Convention on environmental impact assessment in a trans-boundary context, whereby the Swiss authorities follow their own procedures and then present the results to the French side. Swiss citizens can submit their opinions and objections to the French authorities as long as they are able to provide a French address for notification purposes.

7.2. SPATIAL IMPACT

ICAO Annex 14: The protection of obstacle limitation surfaces and navigation aids takes place only on the French side, according to the system described above in 5.2.1.

Noise: The noise impact of the airport is integrated into spatial planning by means of a PEB like other French airports, with the peculiarity that here the plan stops at the border, since no similar plan exists on the Swiss side.

The noise impact of Project ILS 34 can be seen in the following maps, representing the medium term situation without and with ILS.

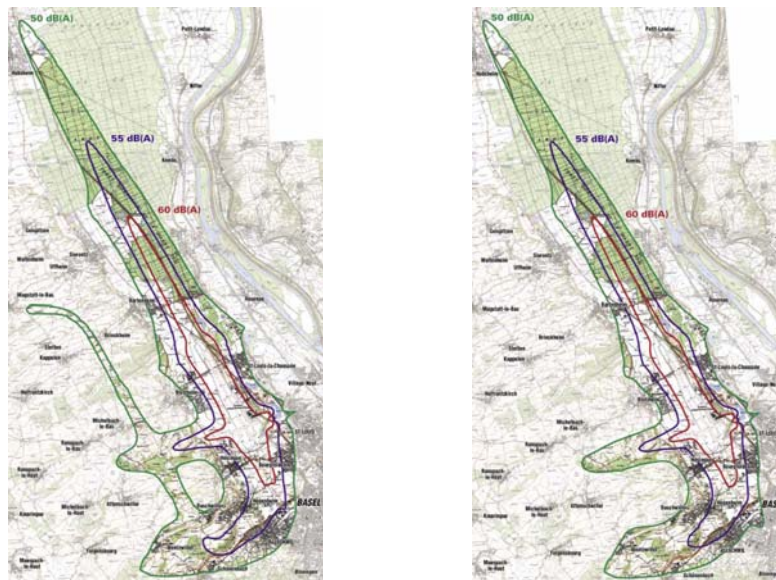


Figure 10. Noise impact of Project ILS 34

Source: http://www.aviationcivile.gouv.fr/html/actu_gd/bale/bale_fr/Dossier_F3.pdf

Third-Party Risk: There are no provisions in relation to third-party risk in either French or Swiss legislation. The local authorities on the Swiss side decided, however, to commission a risk study when approving the investment for the airport improvement. The study was conducted in 2001 and was available at the time of consultation for the project ILS 34.

7.3. NOISE AND AIR QUALITY

Noise abatement plans (PGS) have been prepared for the affected area in France but not for the Swiss area, and financial assistance for home insulation is only paid by the French Government in France.

Noise abatement procedures have been established by the French CAA and night time restrictions prohibit landings between 00:00 and 05:00 and take-offs between 00:00 and 06:00. The noisiest Chapter 3 aircraft are also banned from 22:00 to 00:00 and can not land between 05:00 and 06:00.

In addition to the landing charge based on acoustic group there is a surcharge based on aircraft weight and acoustic group classification by.

This is the only airport in France where there is an emissions charge, applied as a factor of the landing charge depending on the aircraft. This type of charge is used in some airports in Switzerland.

The airport operates a network of 13 noise monitoring stations and controls compliance with operating restrictions using radar data provided by the French authorities. Operating rules contraventions are dealt with in accordance to French law. The airport handles all complaints and provides information to the claimants. The number of complaints is almost 10,000 a year, but the number of complainants has greatly reduced.

COUNTRY CONTACTS

- **ADP - Aéroports de Paris**

Didier Hamon, Vice President - Public Affairs and Environment

- **Basel-Mulhouse EUROAIRPORT**

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- **Ministry of Ecology – “Mission Bruit”**

Pascal Valentin, Head of “Mission Bruit”

Didier Cattenoz

- **DGAC - Civil Aviation Authority**

Jacques Gauran

- **ACNUSA – Autorité de Contrôle des Nuisances Sonores Aéroportuaires**

Janine Le-Floch Fournier, General Secretary

- **IAURIF - Institut d’Aménagement et Urbanisme de l’le de France**

Etienne Berthon

- **Tremblay-en-France Municipality**

Jacques Grangé

GLOSSARY

General terms (taken from “The EU Compendium of spatial planning systems and policies”)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to address social and economic disparities between regions. It will usually entail

promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Arrondissements</i>	Districts
<i>Aménagement du territoire</i>	Regional planning
<i>Urbanisme</i>	Land use planning
<i>Schéma Directeur</i>	Planning framework
<i>Conseil d'État</i>	State Council
<i>Départements</i>	Departments
<i>Communautés Urbaines</i>	Urban communities
<i>Communautés d'Agglomération</i>	Agglomeration communities
<i>Schémas de Services Collectifs</i>	Public Services Framework
<i>Comité interministériel d'aménagement du territoire CIADT</i>	Inter-ministerial Committee on Spatial Planning
<i>Directives Territoriales d'Aménagement</i>	Spatial Planning Directives
<i>Code de l'Urbanisme</i>	Planning Code
<i>Schéma de Cohérence Territoriale, SCOT</i>	Territorial Coherence Framework
<i>Plan Local d'Urbanisme, PLU</i>	Local land use plans
<i>Projet d'aménagement et développement durable PADD</i>	Sustainable development project
<i>Zones a urbaniser AU</i>	Development zones
<i>Plan d'Exposition au Bruit, PEB</i>	Noise Exposure Plan

<i>Commission de Conciliation</i>	Conciliation Commission
<i>Installations Clasées</i>	Classified facilities
<i>Avant projet de plan de masse APPM</i>	Preliminary draft Master Plan
<i>Plan de Servitudes Aéronautiques, PSA</i>	Aeronautical servitudes plan
<i>Plan de Composition Générale, PCG</i>	
<i>Servitudes de dégagement</i>	Clearance servitudes
<i>Servitudes de balisage</i>	Marking servitudes
<i>Commission consultative de l'environnement</i>	Environmental consultative commission
<i>Autorité de controle des nuisance sonores aéroportuaires</i>	ACNUSA. Airport noise authority
<i>Déclaration</i>	Simplified permit
<i>Plans de gêne sonore</i>	Noise nuisance plans
<i>Taxe générale sur les activités polluantes</i>	General tax on polluting activities
<i>Volume de Protection Environnementale VPE</i>	Environmental Protection Airspace
<i>Plan régional pour la qualité de l'air</i>	Regional air quality plan
<i>Plan de Protection de l'Atmosphère PPA</i>	Air protection plan
<i>Conseil d'Administration</i>	Board of Directors

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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

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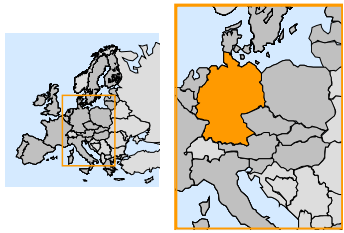
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GERMANY		Location Map
Population	82.4 mill. (236 inhabitant per sq. Km)	
Airports network		
International airport network and regional airport network. Although the property of the airports is usually public, airports are managed by private entities whose shareholders usually include regional and local government.		
<p>Spatial planning system</p> <p>Most <i>Länder</i> have passed their own legislation on “urban planning”, besides a Federal Spatial Planning Act.</p> <ul style="list-style-type: none"> • Institutions <ul style="list-style-type: none"> National level: The federal structure of the country prevents the <i>Bund</i> from being involved in the adoption of plans prepared by other levels of government Regional level: <i>Land</i> government Local level: Districts, Counties and Municipalities • Instruments <ul style="list-style-type: none"> Strategic plans Spatial Planning Policy Guidelines. <i>Land</i> spatial plans. Regional plans Framework plans Preparatory land use plans (<i>F-Plans</i>) Regulatory plans Binding land use plans (<i>B-Plans</i>) • Process: Extensive consultation among different levels of government. Lower tier authorities can always participate in the preparation of higher tier planning instruments (bottom-up) while lower level instruments must always comply with the provisions of higher level plans (top-down). High degree of citizen participation in local plans. 		
<p>Regulation and permits</p> <p>Building permits granted by different local authorities, depending on the type of spatial plan covering the affected area. Strict EIA process integrated into the planning system.</p>		
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: Non statutory airport plans. Major developments require a “planning decision”. In cases where a significant impact on the surrounding areas is expected, a “spatial planning procedure” is also required. • Spatial impact: Safeguard maps sent to affected tenants and owners. Noise protection zones by law. Noise zones must be defined by an Ordinance for each airport. • Construction: The “planning decision” includes all other permits. • Operation: License of the <i>Land</i> CAA.. 		
<p>Airport noise and air quality</p> <ul style="list-style-type: none"> • Noise: Noise protection zones are defined to impose land use restrictions. These restrictions may give right to compensation. • Air quality: Air pollution is analysed during the “planning decision” process 		

1. SUMMARY

SPATIAL PLANNING SYSTEM

Despite the federal nature of the country spatial planning systems are fairly uniform. At the local level the “Federal Building Code” (*Baugesetzbuch, BauGB*) and the “Federal land use Ordinance” (*Baunutzungsverordnung, BauNVO*) apply in all Germany, making detailed land use planning very homogeneous.

Länder (except city states) have adopted “statewide” spatial plans where airports are outlined but not regulated. “Regional Plans” covering several districts are adopted in many of the *Länder*. These plans include a more detailed delimitation of the airport grounds and may define “settlement restriction areas” based on noise, but do not regulate airport uses.

Local framework plans and regulatory plans, covering only part of a municipality, are adopted by local authorities or local planning associations but must be approved by a higher administrative authority, usually the district.

Regular spatial plans are not used to regulate airport creation or development. The spatial planning legislation provides for special planning instruments to plan and implement large infrastructural projects, including airports.

REGULATIONS AND PERMITS

Construction permits

In principle all construction works require a building permit issued by the local authorities. There is no generalized exclusion of infrastructure projects from the building permit requirement.

Large infrastructural projects, however, usually follow special planning procedures which do not lead to an ordinary “building permit”, and are not handled by the local authorities.

Environmental permits

EIA is regulated in accordance with EU legislation, including the evaluation of plans and programs, but applies to a larger number of projects. Airports require an EIA when runway length exceeds 1,500m.

A specific evaluation is conducted for projects which may affect protected areas.

All potentially contaminating activities require either an EIA or an environmental permit, but airports are excluded from this requisite.

Environmental permits are integrated with the building permit. Regional authorities in charge of environmental permits issues this integrated permission after consultation with the local authority. Water related permits are processed separately.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

The Federal government has a general competence regarding aviation but all competences with respect to airports are in the hands of the *Länder*.

- National

The “Federal Transport Infrastructure Plan” (*BundesverkehrswegePlan, BVWP*), which is adopted by Parliament, is basically an infrastructure investment program oriented essentially towards rail, road and waterways, but does not include airport projects since these are not within the competence of the federation. It includes only some very broad statements about enhancing the competitiveness of German airports.

The “Airport Concept of the Federal Government” (*Flughafenkonzept der Bundesregierung*) adopted in 2000 analyses investment requirements needed to accommodate demand, lists proposed actions, including the modification of noise legislation, and puts air transport in perspective with other modes but does not go into details.

- Airport

There are no statutory airport plans. Each airport may prepare its own internal development strategy but in order to create a new airport or expand an existing one it is necessary to go through a special “planning decision procedure” (*Planfeststellung*) and will often require a “spatial planning procedure” (*Raumordnungsverfahren*) in order to determine the impact on spatial plans and define the spatial framework for the new project.

Both procedures require an environmental impact assessment.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Safeguarded areas are implemented by defining a construction restricted area (*bauschutzbereich*) formed by a series of concentric circles and a widening inclined plane beginning 500m from the ends of the runways. In the inner areas (1.5 km radius) all constructions, trees, power lines, etc. must be authorized by the aviation authority, in the outer areas such authorization is only necessary when building heights exceed between 25m and 100m depending on the distance.

All constructions within these areas must be authorized by the Land's aviation administration.

The limits of safeguarded areas are made public but not integrated into spatial plans. Affected property owners are notified.

- Noise Impact

The noise impact of airports is regulated in a 1971 Act which is now considered obsolete. The Act defines 2 land use restriction areas where residential, uses, hospitals, schools, and the like are restricted.

- Risk prevention

There are no legal provisions concerning risk analysis, but in certain cases, like Frankfurt or Hamburg risk has been the object of specific evaluations.

- Land reserve for future construction

Land for future construction can be reserved in ordinary spatial planning documents or by means of the specific planning instruments (*Planfeststellung*) which must be used for airport development.

Construction

All new airports, or substantial modifications, must be authorized following a "planning decision procedure" (*Planfeststellungsverfahren*) which serves both as planning and building permission. The permit is issued by the aviation authorities in each Land.

The "planning decision" replaces all permits, authorization or licenses that may be required by law, it covers both airport construction and operation.

A regular building permit is needed for airport buildings, since the "planning decision" covers only the infrastructure.

Operation

No specific operation permit is required.

AIRPORT NOISE AND AIR QUALITY

Noise

Air traffic noise is regulated under specific legislation, requiring the delimitation of noise protection zones where land use restrictions are posed and some insulation measures receive financial assistance.

Night curfews, quota count systems and noise charges are used in many airports to contain airport noise.

Air quality

Clean Air Plans and Action plans must be adopted when certain levels are attained for a number of days. Polluting activities may be restricted or banned in contaminated areas.

Air pollution is taken into account in the special planning procedures used for the construction or enlargement of airports.

Information from monitoring stations does not evidence aviation related problems with air quality in or around airports.

2. CONTEXT

Germany is a country in north-central Europe. It is flat and low-lying in the north with plateaus and uplands (including the Black Forest and the Bavarian Alps) in the centre and south. World Wars in the first half of the 20th century left the country divided by the Allied Powers into four zones, which became established as East and West Germany in 1949. The two Germanies were reunified in 1990 after the fall of the East German Communist government.

Germany is a federation (*Bund*) of sixteen states called *Länder* (singular *Land*) or unofficially *Bundesländer* (singular *Bundesland*, German federal state). Germany is really divided in 13 states and 3 free states*: Baden-Wuerttemberg, Bayern*, Berlin, Brandenburg, Bremen, Hamburg, Hessen, Mecklenburg-Vorpommern, Niedersachsen, Nordrhein-Westfalen, Rheinland-Pfalz, Saarland, Sachsen*, Sachsen-Anhalt, Schleswig-Holstein, and Thuringen*. It is further subdivided into 439 districts (*Kreise*) and cities (*kreisfreie Städte*).



Figure 1. Map of Germany

As Europe's largest economy and most populous nation, Germany remains a key member of the continent's economic and political. Germany's GDP per capita is 109% of the European Union average (22,400¹).

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices 2004
Source: EUROSTAT

Characteristic	Description
Population	82,531,700
Latitude / Longitude	51°00' N, 9°00' E
Land area	349,223 sq Km
Coastline	2,389 Km
Capital City	Berlin (3.94 million)
GDP per capita (PPS at market prices)	24,400
GDP real growth rate	1.6 %
Inflation rate	1.8 %
Unemployment rate	9.5 %

Table 1. Germany: Main facts and figures²

2.1. Population and statistics

The total population in July 2004 is estimated at 82.5 million. Germany is one of the European Member States without growing population, mainly due to the low birth rate 8.33 births/1,000 inhabitants. Despite, Germany has a high population density, 236 inhabitants per sq. Km, that exceeds the European Average.

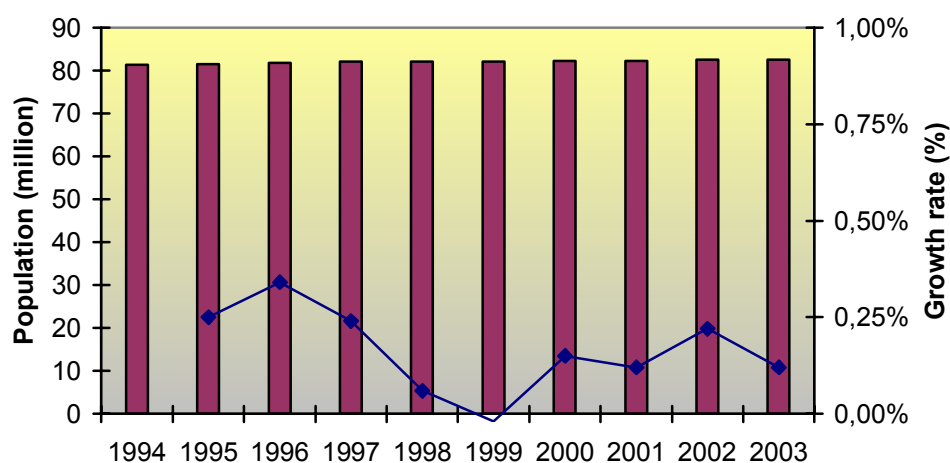


Figure 2. German population evolution

² Source: EUROSTAT

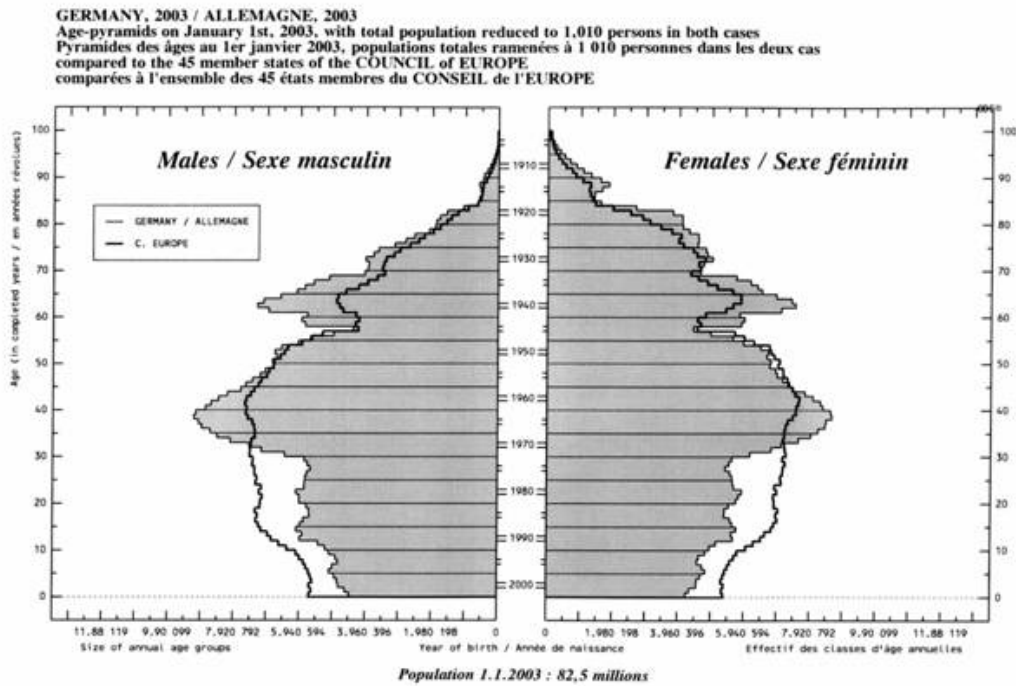
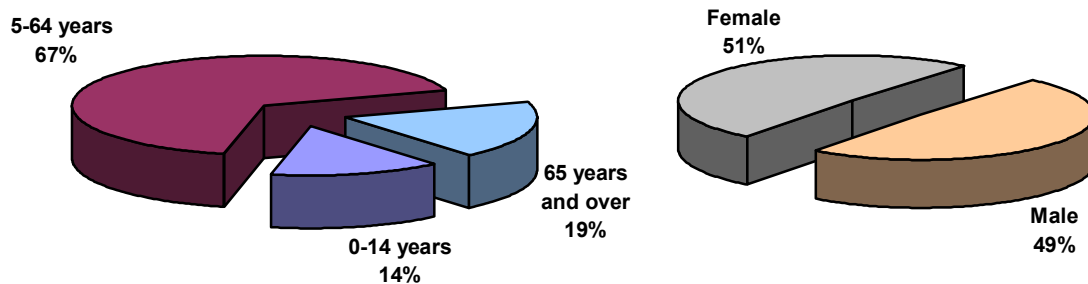


Figure 3. German age-pyramids (2003)³

The figure above shows the big decrease of the birth rate during 1970s. Currently, the German median age is 42.16 years old.



Figures 4 and 5. German population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Germany is a federal republic whose 16 states have their own constitutions, legislatures, and governments, which can pass laws on all matters except those that are the exclusive right of the federal government such as defence, foreign affairs and finance. Education, local law enforcement, culture, and environmental protection are tasks of the states.

Germany has a parliamentary democracy with a bicameral legislature. The *Bundesrat*, the upper house, has 68 seats, with each state having between three to six representatives depending on the state's population; the term is not fixed and changes according to the results of state elections. The *Bundestag*, the lower house, is the country's main legislative body. It has 603 deputies who are elected for four years using a mixed system of proportional representation and direct voting. Executive authority lies with the federal government, whose leader, the federal chancellor, is elected by an absolute majority of the *Bundestag* for a four-year term. Cabinet members are appointed by the president, upon the proposal of the chancellor. The federal president is a constitutional head of state with little influence on government. The president is elected for a five-year term by a federal convention (*Bundesversammlung*), which meets only for this purpose and consists of the members of the *Bundestag* and an equal number of members elected by the state parliaments.

2.3. Main airports

In Germany, there are:

- an international airports network (*Internationalen Verkehrsflughäfen*) with 18 airports where the DFS (*Deutsche Flugsicherung GmbH*) provides ATC services, and
- a regional airport network with around 40 airports which provide ATC services by themselves.

Generally, the three administrative levels (federal, states and local or municipal government) are relevant shareholders of the airports and sometimes there are private companies. Although the property of the airports is usually public, airports are managed by private entities.

The next table shows the commercial passenger traffic and cargo of the main German airports during 2004 (International and regional airports with more than 250.000 passengers in 2004)

Airport	Passengers	Cargo (Tons)
Frankfurt	50.767.968	1.750.995
Munich	26.666.272	177.005
Düsseldorf	15.150.471	56.732
Tegel	11.014.062	13.308
Hamburg	9.817.543	24.432
Stuttgart	8.699.732	18.227
Cologne/Bonn	8.275.234	613.299
Hanover	5.172.594	6.091
Nuremberg	3.592.281	13.342
Schönefeld	3.325.348	15.042
Hahn	2.744.550	66.121
Leipzig/Halle	1.949.559	5.699
Bremen	1.650.119	891
Dresden	1.577.399	425
Münster/Osn.	1.457.471	549
Paderboern/Lippstadt	1.313.628	196
Dortmund	1.179.028	75
Niederrhein	797.920	-
Karlsruhe/Bad.-Bad.	624.941	69
Lübeck	598.777	-
Friedrichshafen	534.388	1
Erfurt	526.117	4.039
Tempelhof	441.558	585
Saarbrücken	412.230	43

Table 2. Main German airport data (2004)

3. SPATIAL PLANNING SYSTEM

Spatial planning has a very long tradition in Germany, evidenced by the fact that by 1900 most Federated States (*Länder*) had their own legislation on “urban planning”. The evolution from “urban” to spatial planning has paralleled the processes that took place in many European countries in the XXth century and could be characterized here by an ever-increasing concern about environmental matters which permeated the planning system earlier and more deeply than in other countries.

3.1. Institutions

3.1.1. National

At the national level the Federal Government (*Bund*) concerns itself with legislation, policy making and coordination. Although some documents regarding spatial policy are adopted at this level, they should only be considered as spatial plans in the broadest sense. The federal structure of the country prevents the *Bund* from being involved in the adoption of plans prepared by other levels of government.

The primary legislation on spatial planning is the “Federal Spatial⁴ Planning Act” (*Raumordnungsgesetz*, ROG) of 18 August 1997, which sets out the basic principles and procedures for spatial planning. The federal level is also responsible for more detailed planning and building legislation. The “Federal Building Code” (*Baugesetzbuch*, BauGB), which is directly applicable throughout the country, regulates local land use plans, development control and other issues such as, compensation, expropriation and the provision of public infrastructures. The “Federal land use Regulations⁵” (*Baunutzungsverordnung*, BauNVO) establishes the kind of land uses to be regulated by local plans, and stipulates permitted uses, densities and building heights depending on land use.

The ministerial department in charge of spatial planning is now the Federal Ministry of Transport, Building and Housing (*Bundesministerium für Verkehr, Bau und Wohnungswesen*), which hosts a specialized agency, the Federal Office for Building and Planning (*Bundesamt für Bauwesen und Raumordnung*) in charge of conducting research, preparing reports and advising the ministry.

⁴ In translations provided by the Federal Government the Law appears as “Regional Planning Act” but the term “spatial” has been considered more coherent with the terminology used in this project.

⁵ The term “Verordnung” is often translated as “Ordinance”, but this is a concept that in many systems is reserved to local legislation and, therefore, the term Regulation is considered preferable here.

Other ministries can play an important role in spatial planning since they can develop “sector plans” (*Fachplan*) which may contemplate investments in large projects, such as infrastructures. The plans adopted at the federal level must be taken into account by the *Länder* and lower levels of government. One such plan is, for example, the “Federal Transport Infrastructure Plan” (*Bundesverkehrswegeplan*, BVWP), which focuses on rail and road infrastructures.

An important feature of the German system is the existence of a high level coordination body which brings together the Federal Government and the *Länder*. The “Standing Conference of Spatial Planning Ministers” (*Ministerkonferenz für Raumordnung*, MKRO) discusses all the spatial policy documents which affect the whole country and decides on key elements of such policies.

3.1.2. Regional

The term “regional” can be very misleading in a German context, since there is more than one subnational level of government that could be associated with this word. The first level of government “below” the Federation are the Federated States “*Länder*”, some of which can in turn be divided into districts (*Bezirke*) and, solely for spatial planning purposes, “planning regions” (*Planungsregionen*).

There are 16 *Länder*, 3 of which are “City-States” (*Stadtstaaten*), Berlin, Bremen and Hamburg.

The *Länder* have a considerable amount of autonomy in many fields, including spatial planning, and are responsible for adopting and implementing their own legislation and plans. Most *Länder* have their own laws on spatial planning and construction, but the system is very uniform throughout the country since they all must conform to the principles set in federal law. The *Länder* are responsible for coordinating and controlling spatial plans for lower levels of government and usually approve regional plans, as well as local plans under some conditions.

3.1.3. Local and area wide

The administrative bodies usually referred to as “districts” (*Bezirke*) are included here as “areawide” institutions, to designate the level of administration between the *Länder* and the local governments. There are *Bezirke* in 8 of the federated States. Districts are not political institutions and only perform administrative functions, but they often play an important role in the field of spatial planning. Districts are often grouped together to form “planning regions” (*Planungsregionen*). In the *Land* Hessen (where Frankfurt airport is located) there are three planning regions, each comprising one “*Regierungsbezirk*”. Planning in this *Land* is the responsibility of the “Regional Planning Assembly”

(*Regionalversammlung*), regional plans are approved by the Hessian government.

Strictly speaking, there is also another level of government which could also be considered as “areawide”. In most *Länder* there are also *Landkreise*, often translated as “counties”, which are both a local level of government and a decentralized branch of the *Land* administration. In this report, however, “*Landkreise*” are included within the global category of “local government”, since they are constitutionally considered as such and their area is usually rather limited.

Metropolitan areas as such do not exist in Germany, but in some large urban areas local authorities have formed associations for planning purposes (*Kommunal Planungsverband*). In some instances, municipalities have joined in multipurpose associations that could be described as “metropolitan governments”, as in the case of Stuttgart where the “Association of local authorities within the Stuttgart Region” (*Verband Region Stuttgart*), established in 1994, has its own directly elected assembly and acts as a decision making body on many issues, including planning. A similar process can be found in Hannover where on June 2001 the Land Parliament (*Landtag*) adopted the “Hannover Region Act” (*Gesetz über die Region Hannover*) which established a regional organization with competence over a variety of issues, including spatial planning.

In Frankfurt, the “Frankfurt/Rhine-Main agglomeration planning association” (*Planungsverband Ballungsraum Frankfurt/Rhein-Main*, PVFRM), created by Law of 19 December 2000, brings together 75 local authorities under one organization in charge of spatial and landscape planning.

In this report, the term “local authorities” designates a variety of institutions which are responsible for land use planning. This level includes the above mentioned “*Landkreise*”, the “county-free cities” (*kreisfreie Städte*) and the “municipalities belonging to a county” (*kreisangehörige Gemeinden*). They are all political entities with their own elected representatives and enjoy a considerable degree of autonomy.

Local authorities are responsible for drafting, adopting and implementing local land use plans.

3.2. Instruments

Spatial planning instruments, especially at the local end of the spectrum, are very uniform throughout Germany, since their form and content are regulated at federal level.

3.2.1. Strategic plans or policy documents

Although there are no spatial plans at federal level, in 1992 the “Standing Conference of spatial planning ministers” adopted a document called “Spatial Planning Policy Guidelines” (*Raumordnungspolitischer Orientierungsrahmen*) which applies to the entire country and aims to provide guidance to all policy makers on issues such as urban structures and networks, concentration versus dispersion, transport planning and containment of urban growth. These Guidelines were updated and implemented in 1995 by another document, the “Operational Program for Spatial Planning” (*Raumordnungspolitischer Handlungsrahmen*), approved also by the Ministerial Conference,.

The Federal Government must approve a periodic report on spatial planning (*Raumordnungsbericht*) in which the spatial situation of the country is analysed, and the most important problems and trends are presented. The report looks at the operation of the spatial planning system as well as the impact of federal and EU plans and policies on the regions, and makes recommendations for the future. This document is prepared by the Federal Office for Building and Planning and is presented to the lower chamber of Parliament (*Bundestag*). The last report was published in 2005⁶, with data up to 30 December 2004.

At the “*Land*” level, all the States, with the exception of the city-states which do not need the same kind of planning instruments, have their own plans, although they may vary in name and organization. In Hessen, the “Development Plan of the Land of Hessen” (*Landesentwicklungsplan Hessen*) was approved in 2000 and is currently being amended in order to include regional planning objectives and principles for the expansion of Frankfurt airport. The Plan, defines the system of centrality areas, main transportation infrastructures, nature preservation areas, and specifically deals with air transport in paragraph 7.4, where it includes objectives and principles concerning airports, including Frankfurt Airport. The Plan’s map shows the location of the airport at a scale of 1:200,000, which does not allow any detailed provisions for land use in the airport or its vicinity to be presented.

Land spatial plans are usually approved, as is the case in Hessen, by the *Land*’s executive (*Landesregierung*) and are binding on public authorities, e.g. regional plans must also comply with its objectives.

The contents of regional plans (*Regionalplanen*) must include the settlement structure designating central urban areas and development corridors; as well as

⁶ An English summary of the Spatial Planning Report 2000 can be found at: http://www.bbr.bund.de/raumordnung/raumentwicklung/e_broschuere.htm
Information about the 2005 Report (in German) is available at: <http://www.bbr.bund.de/index.html?raumordnung/raumentwicklung/rob2005.htm>

the designated open spaces and location of the main infrastructures. They may also reserve areas for specific uses.

Regional plans are prepared for supra-municipal areas, in many cases “districts” or groups of districts. These plans are approved by the Land government and are binding on public authorities. Local land use plans should not conflict with the objectives of regional spatial plans.

The regional plan (*Regionalplan*) for the South Hessen planning region where Frankfurt airport is located, drawn to a scale of 1:100,000, delimits the airport grounds, regulates general land uses, and includes the noise contour used to define a “settlement restriction area” (*Siedlungsbeschränkungsbereich*) where new residential uses are not allowed. The plan does not regulate land uses within the airport. According to the plan, the 60 dB(A) noise contour for Frankfurt airport has been calculated on the basis of 430,000 movements and any changes in the runway system or increase in the number of flights would require a revision of the Regional plan in order to estimate the new area affected by noise.

3.2.2. Local (framework) plans

Framework plans, known as “preparatory land use plans” (*Flächennutzungsplan*, F-Plan), must be prepared by all local authorities to cover their entire territory. In the case of city-states, such as Berlin, this is also their first level of spatial planning. The content of these plans is regulated in detail by the Federal Building Code.

F-Plans regulate land uses in a general way, designating future development zones and reserving spaces for infrastructures, services, open areas, agriculture, forestry or nature preservation. F-plans must also delimit areas where specific provisions have to be adopted regarding risk prevention, mining or soil pollution.

These plans are drafted by the local authorities but must be approved by a higher administrative authority; in the case of Hessen this is the district administration (*Regierungsbezirke*). F-plans are rather detailed, as their maps are drawn to a scale of between 1:5,000 and 1:25,000, but they are only binding on the municipal administrations and not private parties.

In the case of Frankfurt, Section 13 of the “Land Planning Act” (*Hessisches Landesplanungsgesetz*, HLPG) states that the “Frankfurt/Rhine-Main agglomeration planning association” in cooperation with the Südhessen Regional Assembly (*Regionalversammlung Südhessen*) takes over the spatial planning for the South-Hessen “Planning Region” (*Planungsregion Südhessen*) in order to prepare a planning instrument that is both a regional plan and a local framework plan (*Flächennutzungsplan*). This combination

requires compliance with that the legal prescriptions for both types of plans, and brings together two planning scales that until now had always been separate.

3.2.3. *Regulatory (detailed) plans*

The second tier of local planning is the “Binding land use plan” (*Bebauungsplan*, B-Plan), which is only prepared for areas where new development or redevelopment is planned. The B-Plan must provide detailed regulations about the types of land uses permitted, areas to be covered by buildings and roads, as well as natural hazard areas or land affected by mining or soil contamination. These plans usually regulate also the size of building plots, densities, areas reserved for special uses and measures to be taken in order to compensate for environmental damages resulting from the implementation of the plan.

B-Plans are binding on all individuals and entities, both public and private, and provide the basis on which building permit applications are judged. These plans are approved by the local council when drafted in accordance with a “preparatory land use plan”, otherwise they must be approved by the higher administrative authority.

Land use regulation does not usually generate a right to compensation. Only in some cases, i.e. when an existing right is to be withdrawn, the land is to be kept free from development or when the plan places an unreasonable burden on some properties, can compensation be claimed in accordance with the decrease in value of the property.

A special kind of B-Plan, known as a “project and infrastructure plan” (*Vorhabenbezogener Bebauungsplan*, or *Vorhaben-und Erschließungsplan*, VuE-plan), can be drafted by private developers for specific projects. The plan must include the project for whatever infrastructure is to be built and requires the prior signing of an agreement between the developer and the local authority. The plan is approved by the local authority as a B-Plan and the developer must guarantee the implementation of the plan and the construction of the infrastructure.

Local plans can regulate land uses and construction within the airport area not used for aeronautical purposes, but in many cases, such as in Frankfurt, construction inside the airport is not regulated in detail by spatial plans. These types of plans, either framework or regulatory, are not normally used for airport planning and construction purposes. Large infrastructures of this kind are developed in accordance with the special procedures mentioned below in Chapter 5.1.

3.3. Process

3.3.1. Inter-government consultation

- Horizontal: within the same level of government:

Horizontal coordination at the Land level is achieved by creating a specific commission or conference which oversees the plan-making procedure and submitting the “*Landesentwicklungsplan*” to the Cabinet, where all Ministries are represented. Plans are always circulated to all the agencies and Ministries who may have an interest before they are formally submitted for approval. Neighbouring *Länder* are also consulted whenever the plan may have an effect on their territory.

At regional and local levels, there is always consultation with adjoining regions and local authorities, both through informal consultation and written submissions which must be taken into consideration.

- Vertical: between levels of government

One of the basic tenets of spatial planning in Germany is the so called “countervailing influence principle⁷” (*Gegenstromprinzip*), as stated in Article 1 of the Federal Spatial Planning Act:

“(3) The development, organization and protection of the individual areas shall match the conditions and requirements of the territory as a whole; the development, organization and protection of the territory as a whole shall allow for the conditions and requirements of its individual areas (principle of countervailing influence)”

This principle, which also appears in the spatial planning acts of the *Länder*, is implemented in practice by ensuring that lower tier authorities can always participate in the preparation of higher tier planning instruments (bottom-up) while lower level instruments must always comply with the provisions of higher level plans (top-down). The end result is a system in which there is extensive consultation among levels of government. In Hessen, for example, each planning region has a regional planning assembly where local authorities, including the Frankfurt/Rhine Main agglomeration association, are represented. This assembly must approve the regional plan before it is formally adopted by the *Land* government and must be heard in the procedure to adopt the Land spatial plan as well as prior to the approval of large projects of territorial importance.

Vertical coordination is guaranteed to a large degree by the fact that lower authority plans must always be approved by a higher level administration, with

⁷ Often translated as “counter-current principle”

the exception of *Land* plans which are not directly controlled by the Federal Government.

3.3.2. *Policy Integration*

Although there is no mandate for the integration of specific policies, lower level plans shall observe the provisions of higher level instruments. Sector plans that may contemplate the creation of new infrastructures or other important measures with significant spatial consequences have to be taken into account.

In the case of airports, provisions for new or expanded infrastructures may be included in spatial plans from the beginning. In practice the tendency is more towards a “project-led” approach in which integration takes place by means of specific procedures which usually end up in the modification of the spatial plan in order to include the new development.

3.3.3. *Citizen participation*

Citizen participation has become an important part of the planning process in Germany. Regional plans are submitted to direct public participation procedures, and the planning assemblies or councils that manage the plan formation process always include representatives from a wide range of organizations with a variety of interests, ranging from industry to environment.

Both types of local plans (F-Plans and B-Plans), as well as the procedures for specific space-relevant projects, must be submitted to the citizens on at least two occasions, once at the beginning of the process, when the main criteria are being decided, and once again when the draft plan has been prepared, prior to being adopted. Public participation procedures in local planning are regulated by the Federal Building Code, which stipulates a minimum information period of one month in most cases.

The law does not state how the public participation process is to be managed. The only requirement is that it is advertised “in the manner customary to the municipality”. Written submissions must be given proper consideration and if they are not integrated into the plan it is a comment hall be included in the report that must accompany the plan. Any person who has lodged a submission shall be notified individually about the outcome, except when more than 50 persons file the same suggestion, in which case individual notification may be dispensed with.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. Activities subject to development control

In principle, pursuant to Article 29 of the Federal Building Code, all construction activities need a building permit (*Baugenehmigung*). The permit may be subject to different requirements depending on whether the area is already built up or whether it is covered by a regulatory plan, but the basic procedures are the same. Both the Federal Building Code and the Federal Land Use Ordinance regulate what type of activities are permitted and how they should be carried out, but detailed procedures are set out in the *Länder* legislation.

4.1.2. Exceptions or exemptions

Only some minor construction activities, such as fences or temporary structures, are exempted from obtaining a building permit, although many *Länder* have simplified the procedures for single family houses located in areas covered by a regulatory plan, which do not require an application, but rather just a notification.

Exemptions may be granted in some cases of public interest, but there is no generalized exclusion of infrastructure projects from the building permit requirement. However, there is a different set of rules for infrastructure projects of spatial relevance, which do not lead to an ordinary “building permit”, and are not handled by the local authorities.

4.1.3. Institutions involved: inter-government relations

The authority which issues the building permit (*Baugenehmigungsbehörde*) varies according to the location and the planning situation. In areas covered by a B-plan or designated as “built-up areas”, the permit is issued by the local authority⁸. In undeveloped areas not covered by regulatory planning the permit may have to be issued by the district or *Land* authorities depending on the *Land's* legislation.

In cases when a Federal or *Land* construction project is not in accordance with the plan or the planning and building legislation, the decision is to be taken by the “higher administrative authority”, which will be the district or the *Land* administration.

⁸ Either a county (*Landkreis*) or a county-free town (*kreisfreie Stadt*)

4.1.4. *Relationship with planning*

Although the general rule is that building permits can only be issued in accordance with the plan, the law allows the permit-issuing authority to grant dispensations if they are in the public interest and are not contrary to the basic objectives of the plan, or when the implementation of the plan would result in an unnecessary hardship and the project is not contrary to the public good. If a project is in accordance with the plan, the owner has legal right to obtain the building permit.

4.2. **Environmental permits**

4.2.1. *Environmental Impact Assessment*

Despite the fact that environmental assessment was introduced very early on into the spatial planning processes and that for years environmental concerns had been built into the legislation in many sectors, the concept of Environmental Impact Assessment (*Umwelt-Verträglichkeits-Prüfung UVP*) was not introduced until 1990, when Directive 85/337/EEC⁹ (the “EIA” Directive) was transposed into German Law. The Environmental Assessment Act (*Gesetz über die Umweltverträglichkeitsprüfung, UVPG*) of 12 February 1990 established the basic procedures for EIA but a large part of this subject-matter was regulated by separate sectoral laws. In 2001 the Act was revised to implement some requirements of the Directive that in the opinion of the European Court of Justice had not been adequately transposed. The Act was last modified in June 2005¹⁰, for the purpose of fully adapting German legislation to Directive 2001/42/EC¹¹ (the “SEA”) and Directive 2003/35/EC¹² (the “public participation” Directive).

The number of projects which require EIA under German law is now greater than that required by EU Directives. With regard to airports, paragraph 14.12 of Annex I of the *UVPG* Act includes projects for the construction of airports with a runway equal to or longer than 1,500m¹³, and requires a preliminary assessment in the case of shorter runways. Article 15 of the same Act specifies that the assessment shall be conducted at the planning stage of airport projects

⁹ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

¹⁰ Gesetz über die Umweltverträglichkeitsprüfung (UVPG) in der Fassung der Bekanntmachung vom 25. Juni 2005, BGBl. I S. 1757, geändert durch Artikel 2 des Gesetzes vom 24. Juni 2005, BGBl. I S. 1794

¹¹ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

¹² Directive 2003/35/EC of the European Parliament and of the Council of 26 May 2003 providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC (the “IPPC” Directive)

¹³ Council Directive 85/337/CEE, sets the threshold at 2,100 m.

which are subject to the procedure in Article 6.1 of the Air Traffic Act (*Luftverkehrsgesetz*), unless they have been evaluated within a “spatial planning procedure”. Paragraph 2 of Article 15 also establishes the requirements for public participation with regard to airport projects.

In addition to the EIA procedure, a specific assessment is often carried out of the potential impact on protected natural areas and landscapes, areas included in the Nature 2000 network or covered by the Habitats Directive, which in Germany fall under the provisions of the “Federal Nature Conservation Act” (*Bundesnaturschutzgesetz, BNatSchG*).

Environmental assessment of spatial plans had been integrated into German legislation much earlier, although it was part of a broader evaluation effort that examines not only the effects on the environment, but also on spatial policy and existing plans. The Federal Spatial Planning Act requires a strategic environmental assessment for all spatial plans, and the EIA requirements for local land use planning have been fully integrated into the Federal Building Code.

4.2.2. *Other environmental controls*

All activities that may cause pollution are required either to submit to an EIA procedure or to obtain environmental permits under the Federal Immission Control Act (*Bundes Immissionsschutzgesetz, BImSchG*) and the Federal Water Act (*Wasserhaushaltsgesetz, WHG*). However, airports are excluded by Article 2.(2) of the Federal Immission Control Act from the scope of the Act.

4.2.3. *Institutions involved*

Environmental permits are usually issued by special agencies of the *Länder* administrations operating either at the *Land* or the regional level. The environmental impact assessment procedure is integrated into the plan or project approval process in such a way that there is no separate decision by an “environmental authority”. Thus the EIA results become part of the final approval which in the case of airport projects would be issued by the *Land* ministry in charge of transportation.

4.2.4. *Integration with other permits*

Environmental permits under the Federal Immission Control Act are integrated with the building permit. The regional authority in charge of environmental permits issues the integrated permit after consultation with the local authority.

In the case of airports, Section 10 of the Air Traffic Act provides that permits granted under its provisions shall integrate any other authorizations or licenses that may be required. In practice such integration is not complete, since other pieces of legislation, such as the Water Act still require separate permits.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

The Federal Administration in Germany has a general competence with regard to airports. The way the functions have been distributed among levels of government, it is the *Länder* that make all decisions on airport planning and construction. The role of the Federal Government is to adopt legislation and act as a coordinator in order to ensure that all areas of the country are sufficiently communicated as well as to provide an inter-modal perspective. The Federal Administration has also the task to realize the Standards and Recommendations Practices (SARPs) of the ICAO.

5.1.2. Instruments

A.- National

Since 1973 the Federal Government has periodically prepared a general transportation planning document, the “Federal Transport Infrastructure Plan” (*BundesVerkehrswegePlan*, BVWP) which is adopted by an Act of Parliament. The plan is essentially an infrastructure investment program oriented towards rail, road and waterways, but does not include airport projects as they are not within the competence of the Federation. The most recent version of the Plan, adopted in 2003, includes some very general statements in Section 4.7, “Enhancing the competitiveness of German airports” which focuses on providing links with the rail and road systems.

However before, in the year 2000, the Federal Government presented a policy document entitled “Airport Concept of the Federal Government” (*Flughafenkonzept der Bundesregierung*) which analysed air transportation trends and the role of airports in the context of the economy, the transportation system and the environment. The report estimated that it will be necessary to invest around 15,000 million euros in airport construction to accommodate future demand and advocated transferring short-haul passengers to rail and improving the interconnection with the rail and road networks. Although airport authorization is within the competence of the *Länder*, the Federal government has to take care of the coordination of the entire transport system.

The report stressed the importance of noise and air pollution control and advocates specific measures to reduce both. With respect to noise it acknowledges the need to update the law, as it has become obsolete since it was adopted in 1971, and undertakes to introduce a new bill for that purpose. Specific measures for the delimitation of noise protection zones are proposed, as well as new noise indexes and levels.

The report included a list of proposed actions, essentially of a coordination and legislative nature, but there is no specific analysis of the situation in any particular airport or proposals for definite investments, since airport construction is not within the competence of the Federal Government. The “Airport Concept” is accompanied by other documents, including a report on capacity development in German airports, which analyses the situation and timeframe for the main airports.

B.- Airport plans

German law does not require airports to adopt long range master plans construed as statutory documents with a specific content. However, any new airport construction as well as any substantial expansion or modification require a prior “planning decision” (*Planfeststellung*)¹⁴. If the project may have considerable impact on the surrounding area, it can be considered as “spatially relevant” and may require a prior evaluation to be conducted according to what is known as the “spatial planning procedure” (*Raumordnungsverfahren*).

Both the “planning decision procedure” (*Planfeststellungsverfahren*) and the “spatial planning procedure” involve a number of documents that, taken as a whole, may be considered to be spatial plans in their own right, as they actually go beyond what is required in other countries regarding spatial planning. These two procedures share many common features, such as the requirement for an environmental impact assessment and full public participation, but there are some important differences between them.

While the “planning decision” procedure is always required by law for major infrastructure projects and the outcome is binding on all parties, the “spatial planning procedure” is only used for those projects that are considered “of spatial relevance”, a very broad concept that is applied case by case, usually when the project may not be in accordance with spatial planning or local land use plans. The result of this process is not considered formally as a plan and has no binding force, but allows both the public and the private sectors to express their opinions and leads, ideally, to conclusions in which all options have been considered. The final decision sets the premises for the subsequent “planning decision procedure” that will be required to approve the project.

The difference between these two procedures can be better understood with some practical examples.

In the case of Frankfurt airport, the decision to build a new runway and undertake considerable expansion projects was submitted to a “spatial planning

¹⁴ In some cases the expression “*Planfeststellung*” is translated as “project approval” but the contents of the documentation and the process are closer to those required for a plan than for a project. It is also common to translate this word as “planning approval”, but “decision” has been considered to be closer to the original meaning.

procedure” (*Raumordnungsverfahren*) in which all the alternatives were considered. It was concluded that the proposal was feasible although it required some modifications in the region’s spatial plans. The “planning decision procedure” (*Planfeststellungsverfahren*) was initiated subsequent to this ruling in order to approve a specific project according to the guidelines established by the “spatial planning procedure”.

In the same airport, the decision to build a new maintenance base for the Airbus A380, has been only submitted to the “planning decision procedure”, despite the fact that it involves the clearing of approximately 21 hectares, 13.5 of which are within a protected area.¹⁵

In the same *Land* the construction of a new runway to transform the Kassel-Calden airport in North-Hessen in order to accept 600,000 passengers in the future, compared with 41,000 that it had in 2000, increasing runway length from 1,500m to 2500m, has also been submitted to the “spatial planning procedure” (*Raumordnungsverfahren*) and is now undergoing the “planning decision procedure” (*Planfeststellungsverfahren*).

Thus, it appears, that the construction of a new airport or the expansion of an existing one with a new runway are clearly cases that require a “spatial planning procedure” but the construction of a very large hangar does not seem to be considered as having “spatial relevance” since it is approved with only a “planning decision procedure”.

5.1.3. Process

Both the “spatial planning procedure” and the “planning decision procedure” require the preparation of complete technical documents and an environmental impact assessment. However, the contents of the EIA can be simplified at the time of the “planning decision” in order not to duplicate what has already been done if the “spatial planning procedure” has previously been carried out.

All these documents are to be disclosed to local, *Land* and Federal administrations, including neighbouring local governments and *Länder*. The spatial planning procedure is regulated in Hessen by the “Hessian Spatial Planning Act” (*Hessisches Landesplanungsgesetz*) of 6 September 2002, which requires that the document be made public, allowing all citizens to examine them for at least one month and present written submissions.

Airport related “planning decisions” are regulated by the “Air Traffic Act” (*Luftverkehrsgesetz*), where Article 10 sets out the requisites for inter-administrative consultation and public participation and establishes that all

¹⁵ The decision has been upheld both by the Hessen and the Federal Courts. [Site Clearing for FRA's A380 Maintenance Base to Begin September 12 – Construction Fence to Be Erected – Green Light from BVG](#)

written submissions must be taken into consideration. Pursuant to this article the public debate has to be held in the same manner as required for environmental impact statements.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The Air Traffic Act implements the protection of ICAO's obstacle limitation surfaces by defining a construction restricted area (*Bauschutzbereich*) formed by a series of concentric circles and a widening inclined plane. In the inner areas (1.5 km radius) all constructions, trees, power lines, etc. must be authorized by the aviation authority; in the outer areas such authorization is only necessary when building heights exceed between 25m and 100m depending on the distance.

Authorizations are handled by the *Länder* aviation authorities, often through their offices in the districts (*Bezirke*). Property owners within the construction restricted areas are compensated for any economic loss suffered as a direct result of the restriction. Indirect damage may also be compensated but only if it appears to be causing inequitable hardship.

The limits of these areas are published in the official gazette and made public by the ordinary means of advertising administrative acts, but are not integrated into land use planning. Property owners are notified directly so that they can submit their opinions and defend their legal rights.

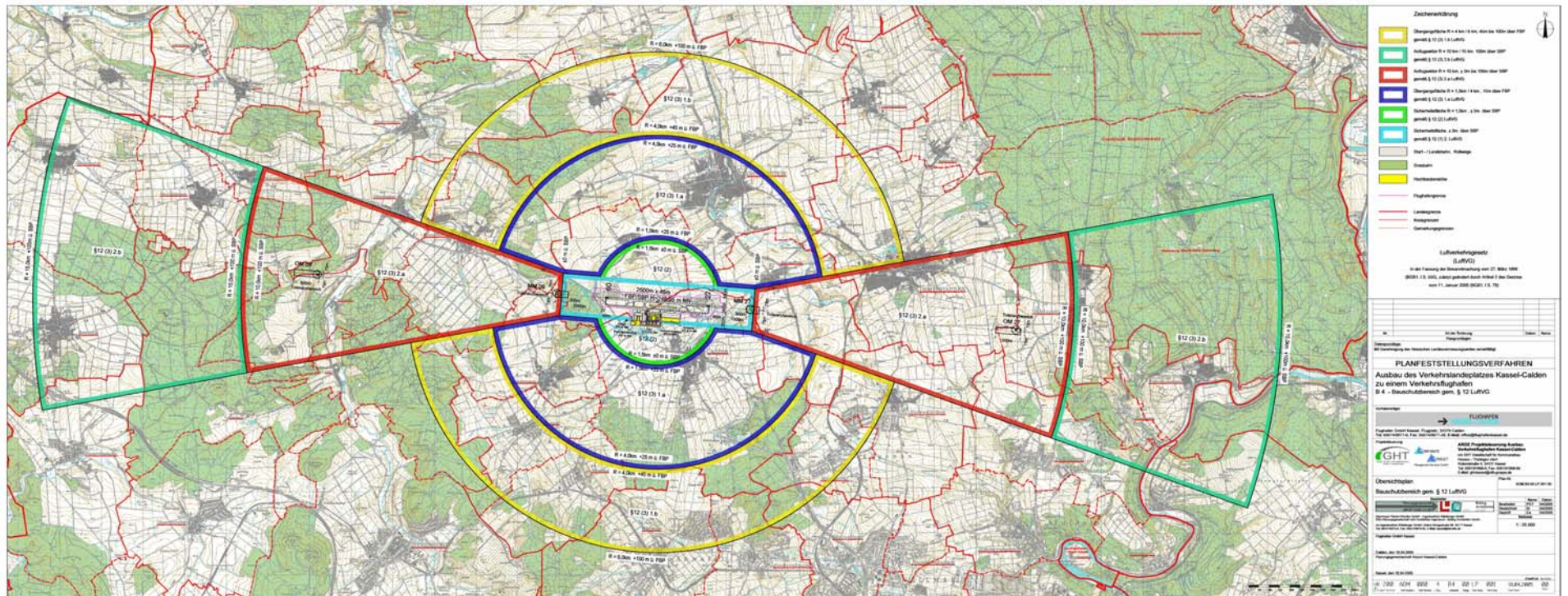


Figure 6. Obstacle limitation surfaces for Kassel-Calden airport

Source: [http://www.dfd.de/Andere/Calden/PFV/B4-001plt_\(tif\).zip](http://www.dfd.de/Andere/Calden/PFV/B4-001plt_(tif).zip)

5.2.2. Noise Impact

The noise impact of airports is currently regulated by the “Act on the protection against air traffic noise” (*Gesetz zum Schutz gegen Fluglärm*) of 1971¹⁶. This law has been amended on several occasions, the last time on October 2001, but it is considered to be clearly obsolete. On 25 May 2005 the Federal Cabinet approved a Draft Act for the Amendment of the Air Traffic Noise Act which would impose lower limits and introduce new rules on night operations¹⁷. The Draft did not receive the approval of Parliament’s Higher Chamber (*Bundesrat*) and has not been passed. The future of the Draft Act is uncertain since the early Federal election has changed the legislative agenda¹⁸.

The Act requires that two “noise protection zones” (*Lärmschutzbereiche*) must be delimited in the vicinity of civilian airports receiving scheduled flights and military aerodromes intended for jet operations. Zone 1 includes the area within the 75 dB(A) noise contour and Zone 2 comprises the area within the 67 dB(A) contour. Noise levels are L_{eq3} calculated according to a formula established by the Act which gives different weightings to night and day periods but is not adapted to EU legislation in this field (“noise” Directive 2002/49/EC).

No new hospitals, schools, homes for the elderly and similar facilities can be built within either of the two zones, and new dwelling houses are banned from zone 1. In some *Länder* the noise limits have been modified and in many cases the noise protection zones are established through spatial plans. In the Frankfurt area, for example, the Regional Plan for the South-Hessen planning region contemplates a single zone, within the 60 dB(A) contour, where new residential areas are not allowed; in some other *Länder* the 62 dB (A) contour is also taken as a reference.

¹⁶ Known also as “Air Traffic Noise Act” (*Fluglärmsgesetz*).

¹⁷ <http://www.bmu.de/laermschutz/aktuell/aktuell/1690.php>

¹⁸ The Bundesrat gave a negative opinion on the Bill of Law in the session of 8 July 2005. See: http://www3.bundesrat.de/coremedia/generator/Inhalt/Drucksachen/2005/0401_2D05B_property=Dokument.pdf

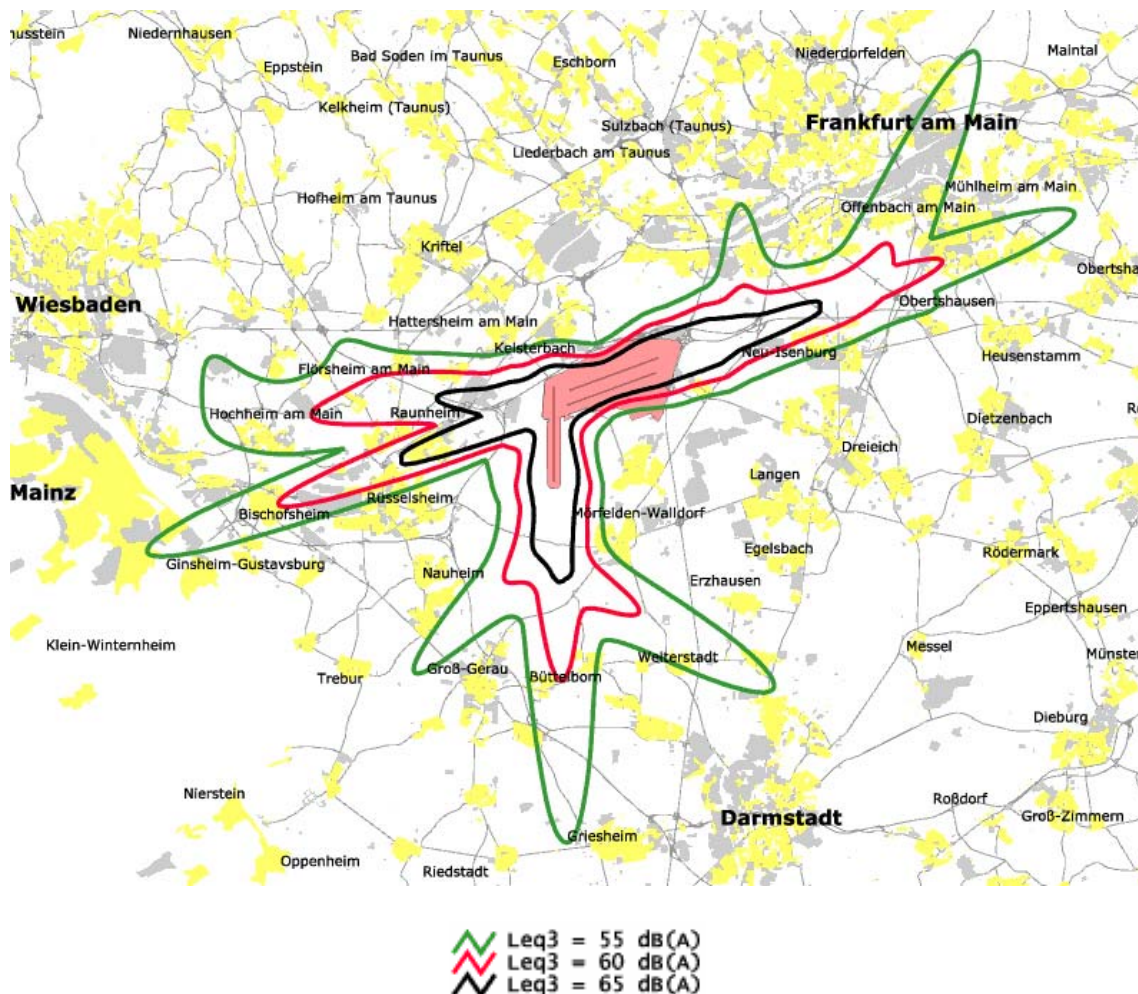


Figure 7. Noise contours around Frankfurt airport

Source: <http://atlas.umwelt.hessen.de/atlas/>

The noise protection zones were approved by means of separate regulations for each airport, but most of these delimitations date from the 1970's.¹⁹

Land owners within the noise protection zones are entitled to economic compensation according to the land use planning legislation if the restrictions have a negative impact on the value of their property. The 1971 Act also regulates the compensation that owners may receive for soundproofing their homes.

Airport construction and development is subject to a “planning decision” (*Planfeststellung*) which is a well-defined procedure, and includes consultation with all the administrations concerned as well as citizen participation. Consequently, the basis for the noise calculations, noise contours and the

¹⁹ Examples: Verordnung(en) über die Festsetzung des Lärmschutzbereiches für den Verkehrsflughafen Düsseldorf vom 4.3.1974. Verordnung(en) über die Festsetzung des Lärmschutzbereiches für den Verkehrsflughafen Frankfurt/Main vom 5.8.1977

actual noise protection zones are open to discussion and negotiation, and may form part of the final decision which becomes the spatial plan for the area and is binding on neighbouring municipalities.

5.2.3. Risk prevention

Risk prevention is not currently considered in German legislation, although some recent airport plans, such as the one for Frankfurt, have included risk analysis studies concerning both the risk to the population and the probability of accidents involving industries or harmful substances storage areas.

In other airports, such as Hamburg, there has also been growing concern about the risk issue as evidenced by the decision taken in 2001 by the airport's Air Traffic Noise Protection Commission to conduct an analysis of risk.²⁰

Risk analysis has focused mostly on the possible impact of an accident involving industries or facilities included in the SEVESO Directives, rather than the probability of causing direct loss of life among the population living or staying in the area, as is the case in other countries like the Netherlands or the UK.

5.2.4. Land reserve for future construction

Land for future construction can be reserved in ordinary spatial planning documents or by means of the specific planning instruments (*Planfeststellung*) which must be used for airport development.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Airport construction is regulated by Article 6 and Articles 8 to 10 of the Air Traffic Act, which requires that all airports must be authorized through a "planning decision procedure" (*Planfeststellungsverfahren*) which is used for both planning and building permission. In this procedure the permit-issuing authority must take into account the environmental impact of the proposal as well as the integration into spatial planning and the implementation of noise protection and safety requirements.

²⁰ The decision which can be accessed at: <http://www.airportnoise.de/hamburg/arisikoanalyse.htm>. A copy of the report produced in 2005 can be found at: www.dialogforum-flughafen.de/htm/uploads/asset/Endbericht_-_GA_Risikomanagement.pdf

This permit is required not only for new airports but also for substantial modifications or development (See 4.1 for details).

A normal building permit is required for airport buildings, since the “planning decision” only covers the infrastructure. The planning decision usually operates as a local land use plan to regulate building within the airport grounds but there is nothing to prevent local authorities from adopting detailed land use plans for the area within the airport, as long as they do not run contrary to the planning decision. Airports are under the obligation to announce planned measures to the Civil Aviation Authority (LuftVZO § 45)).

- b) Environmental permits: Pursuant to Article 9.1 of the Air Traffic Act, the “planning decision” replaces all permits, authorizations or licenses that may be required by law. It appears, however, that permits required under water protection laws must be obtained separately in some cases.
- c) Other permits: No permits are required other than those mentioned above.

5.3.2. *Institutions and processes involved*

- a) Authorization: The resolution at the end of the “planning decision procedure” is taken by the *Land's* aviation authority, usually at the regional office. In the case of Frankfurt Airport, for example the application was filed at the office of the Darmstadt district administration (*Regierungsbezirk Darmstadt*).

Construction permits for the buildings are issued by the local authority.

- b) Supervision: The construction process is supervised by the permit-issuing authority.

5.3.3. *Integration with planning and environmental controls*

The “planning decision” integrates the civil aviation authorization, the planning permission for the infrastructure and most environmental permits.

5.4. **Airport operation**

5.4.1. *Operating permit*

- a) Institutions involved:

Airport operation must be licensed by the Land's Civil Aviation Authority. Under Article 42 of the “Air Traffic Licensing Order” (LuftVZO) the authorization covers both construction and operation. In the case of Frankfurt the authorization will

be issued by the *Regierungsbezirk Darmstadt* acting as a decentralized office of the *Land's* competent Ministry (*Hessisches Ministerium für Wirtschaft, Verkehr und Landesentwicklung*).

b) Requirements

Airport licensing is regulated in the “Air Traffic Permits Order” (*Luftverkehrs-Zulassungs-Ordnung, LuftVZO*), Articles 38 to 49, which establish the requirements to be met by airport operators. The license provides all the details of the operation conditions, including noise related restrictions.

5.4.2. *Airport certification*

Airport licensing covers the same requirements as certification, and there is no separate procedure. German air traffic legislation does not use the term “certification”.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

Air and noise pollution are regulated by a single law, the “Federal Immission Control Act” (*Bundes-Immissionsschutzgesetz*, BImSchG) of March 15 1974, as revised on 26 September 2002 and amended in 2003, 2004 and 2005. The Act has been implemented by means of a long list of over 20 regulations, among them the Technical Instructions on Noise Protection (*TA Lärm*) and the Technical Instructions on Air Pollution Control (*TA Luft*). The Act is the central piece of environmental legislation on pollution and hazard risk control and regulates licensing of all sorts of installations which may have a negative environmental impact as well as car and rail emissions.

The last amendment to the Act, adopted on 24 June 2005 transposed into German Law the provisions of Directive 2002/49/EC²¹ (the “noise” Directive).

The scope of the Act, as defined in paragraph 1 of Article 2, includes:

- “1. the construction and operation of installations;*
- 2. the production, marketing and importation of installations, fuels, substances and products made of any such substances, in conformity with Articles 32 to 37;*
- 3. the nature, equipment, operation and testing of motor vehicles including their trailers, and of railborne vehicles, aircraft and watercraft as well as of floating bodies and floating installations, in conformity with Articles 38 to 40 and*
- 4. the construction of public roads as well as of railways, magnetic levitation trains and tramways, in conformity with Articles 41 to 43.”²²*

Paragraph 2 of the same article states that “*The provisions of this Act shall not apply to any airports*”, which excludes all airports from the licensing requirements and controls established in the Act.

Air quality is also the object of a specific “Act on Lead Levels in Petrol” (*Benzinbleigesetz*, *BzBIG*) implemented with several regulations on road and rail transport. There is no specific legislation on airport related air pollution.

²¹ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

²² English translation available at: <http://www.elaw.org/resources/text.asp?id=2590>

Aviation noise, as mentioned in 5.2.2, has been the object of a separate “Act on the protection against air traffic noise” (*Gesetz zum Schutz gegen Fluglärm*), implemented by the “Regulations on construction noise protection requirements” (*Verordnung über bauliche Schallschutzanforderungen*), the “Regulations on aerodrome noise protection” (*Landeplatz-Lärmschutz-Verordnung*) and the “Instruction for the calculation of noise protection areas at civil and military airports” (*Anleitung zur Berechnung von Lärmschutzbereichen an zivilen und militärischen Flugplätzen nach dem Fluglärmgesetz, AzB*). Noise indexes, which have not yet been adapted to EU legislation, are based on a specific metric designated as L_{eq3} .

Federal legislation is complemented by the legislation that each *Land* may adopt with regard to these matters. In Hessen, for example, the Regulations on the competences relating to the Federal Immission Control Act” (*Verordnung zur Regelung von Zuständigkeiten nach dem Bundes-Immissionsschutzgesetz*) assigned land abatement plans to the local authorities, and the competent Ministry issued instructions for the “implementation of article 47a of the Federal Immission Control Act for the preparation of noise abatement plans” (*Durchführung des § 47 a des Bundesimmissionsschutzgesetzes; Aufstellung von Lärminderungsplänen*).

6.2. Institutions

Basic legislation is enacted at the Federal level, but the *Länder* can adopt their own laws and regulations, which could set more demanding standards.

Implementation takes place at the local or district level. Most licences for potentially polluting activities are issued by the *Land* administration, often at the district level.

Article 32b of the “Air Traffic Act” stipulates that each airport where noise protection zones are to be established must have a consultative “air traffic noise Commission” (*Fluglärmkommission*), also known as “Commission for the defence against air traffic noise” (*Kommission zur Abwehr des Fluglärms*).

The Commission may issue opinions and recommendations on any subject relating to noise and air pollution and must be heard before any new development within the airport can be authorized. The Commission is made of up a varying number of members²³, representing the *Land* and local governments, German Air Traffic Control, experts, the airlines, the airport operator, citizen organizations and the German Federal Association against Aviation Noise.

²³ The Air Traffic Act sets the maximum at 15, but, Frankfurt’s airport Commission, for example, has 38.

6.3. Instruments

- a) Planning: The delimitation of “noise protection zones” (*Lärmschutzbereiche*) is calculated according to the “Air Traffic Noise Protection Act” and the implementation regulations and instructions usually appear in the “planning decisions” authorizing airport creation and development. There is not, however, a specific plan designed for that purpose.

Noise abatement, on the other hand, was contemplated in Article 47a of the “Federal Immission Control Act” which directed local and *Land* authorities to adopt noise abatement plans (*Lärmminderungsplan*) for residential areas, or areas with hospitals, universities or similar uses, whenever noise levels exceed or are expected to exceed the limits beyond which they can cause harmful effects. These plans do not only focus on aviation noise, but on the systematic reduction of noise within the affected area. Noise abatement plans should be coordinated with spatial planning in order to protect existing uses and to prevent future conflicts. The levels to be considered for airport noise are those stated in the “Air Traffic Noise Protection Act”.

The “Federal Immission Control Act” and its regulations set out in detail how the plans are to be drafted, the immission values to be considered according to land use and the types of measures to be taken in several fields, including traffic, construction and planning.

These plans take into account the recommendations of DIN 18005 which establish guideline noise levels for different land uses and classify the areas depending on predominant use, separating “health areas” (*Kurgebiet*), residential areas and mixed areas. Industrial and commercial areas are not usually contemplated as it is considered they do not need protection.

The current system of noise abatement plans will be modified after the adoption of the Act of 24 June 2005 which incorporates into German Law the provisions of the “noise” Directive, which has replaced all the articles of the Immission Act that dealt with noise plans. The Act now contemplates the introduction of strategic noise maps and noise action plans in accordance with the EU “noise” Directive, but there is still no implementation experience.

With respect to air pollution, Article 47 of the “Federal Immission Control Act” stipulates the need to prepare “Action plans” (*Aktionspläne*) when certain thresholds are exceeded. Local authorities can also adopt “Clean Air Plans” (*Luftreinhaltepläne*) when the air quality situation in an area does not reach the desired standards. The Act does not specify the measures to be adopted in these plans, but

requires that they must be drafted with public participation, and that any measures concerning land uses have to be taken into consideration when drafting spatial plans. The Act also states that when there is a risk that immission limits will be exceeded in a particular area, the *Land* government or delegated authorities may issue ordinances to restrict the use of some mobile facilities, the construction of fixed facilities or the operation of some facilities during some time periods. They may also restrict the use of certain fuels.

- b) Land use restrictions: Noise based zoning has been obligatory for all German airports open to traffic since the enactment in 1971 of the “Act on the protection against air traffic noise” (*Gesetzes zum Schutz gegen Fluglärm*) which was given effect by Ordinances for each airport. Air quality plans and noise abatement plans may contain land use related measures, but they should be implemented through spatial planning instruments.
- c) Compensation: Economic compensation for land use restrictions arising from planning, whether it is noise zoning or land use planning, may give rise to compensation providing land owners can prove that the value of their property has diminished or that they have to bear an inequitable burden.

Besides economic compensation for land use restrictions, which follow the same system prescribed for land use plans, the “Act on the protection against air traffic noise” (*Gesetz zum Schutz gegen Fluglärm*) also provides for mitigation measures to alleviate the problems originated by aviation noise. Article 9 of this Act sets out the rules for refunding sound insulation costs incurred by homeowners within Zone 1. Some airports such as Hamburg have also begun to finance special sound-absorbing ventilators so that windows can remain closed at night in summertime. The resources to finance these programs come from airport revenues and from noise charges levied on aircraft.

In Frankfurt, for example, 17,500 homes have been provided with sound insulation since March 2002 at the airport’s expense. Eligible dwellings are those situated within an area where six or more flights producing over 75 dB(A) take place at night, and within the continuous noise equivalent contour of 55 dB(A). In Hamburg more than 10,000 homes have been soundproofed since 1978, and similar programs are found at all major airports.

No relocation policies are implemented in areas affected by noise.

6.4. Integration with spatial planning

Spatial plans integrate noise zoning by reproducing isophonic contours and adapting land use regulations so as to only permit uses which are compatible with the level of noise exposure.

Article 9.24 of the Federal Building Code (*Baugesetzbuch*) provides, in the contents of land use plans, for the designation of protected areas to be kept free of development and for measures to be adopted, including technical and construction measures, to protect, prevent or mitigate negative impacts as defined in the “Federal Immission Control Act”. The Code enjoins that land use plans take into account the provisions of plans drafted under the legislation on pollution control.

Air quality and climate are among the requirements mentioned in Article 1 of the aforesaid Code that land use plans must necessarily take into consideration; it specifically refers to the maintenance of the prescribed air quality standards in areas where immission levels are determined by regulations or binding decisions of the European Union.

As a result of the specific procedures that must be followed in order to approve new or expanded infrastructures, planning documents include explicit provisions on noise protection in the areas around airports. For example, in the “spatial planning procedure” (*Raumordnungsverfahren*) for the expansion of Frankfurt airport, which culminated in a resolution over 300 pages long²⁴, noise and air quality issues were the object of detailed consideration and set out the parameters on which the ensuing “planning decision” (*Planfeststellung*) will be based.

Although the “spatial planning procedure” does not produce a binding decision, the outcome can not be ignored in subsequent phases and the “planning decision procedure” and constitutes a real “spatial plan” for the airport area. Furthermore, as a result of the “spatial planning procedure” the development plan of the Land of Hessen is amended to take into account the impact of the new airport development and the next revision of the regional plan will include the new contour that delimits the area where land uses are restricted on account of noise.

There is no similar zoning based on air pollution in the sense that there are no legally binding “air pollution contours”, but the environmental analysis conducted during the procedures leading to the airport expansion approval allows criteria to be defined in order to minimize the adverse effects on population and nature preservation areas.

²⁴ http://www.rpda.de/pg-flughafen/download_beurteilung.htm

The sequence of “spatial planning procedure” (*Raumordnungsverfahren*) and “planning decision procedure” (*Planfeststellungsverfahren*) to define first the broader spatial parameters and then the detailed rules to regulate airport projects and their impact on the surrounding areas, including the regulation of land uses under noise and air pollution criteria, is followed throughout the country, with the exception of the city states, Berlin, Bremen and Hamburg, which are exempted from the spatial impact assessment requirement by article 15.8 of the Spatial Planning Act.

6.5. Integration with development, construction or operation controls

Air quality and noise considerations are very prominent in the environmental impact assessment and the “planning decision” that must authorize the construction or development of an airport. In this decision the authorizing authority establishes all the requirements that are considered necessary for the protection of the environment both during the construction and the operation phases.

The “planning decision” to authorize the construction or expansion of an airport is taken by the *Land* Ministry in charge of transportation, this authority will be responsible of monitoring compliance with the terms of the decision at all times.

During the operation phase airports must comply with the terms of the authorization, which states the operational rules, including those based on noise protection considerations. This does not include take off and landing procedures, which are set by the Air Navigation service (DSF, *Deutsche Flugsicherung*). Airport operating authorizations, or licenses, not only regulate the types of aircraft and traffic which may use the airport and other technical issues regarding airport operation but set also detailed rules regarding noise related issues like the type of traffic allowed at different hours of daytime and night-time, depending on aircraft weight or noise category, weekday, or flight purpose²⁵.

German airports have been subject to operating restrictions for many years. Directive 2002/30/EC²⁶ (the “noise-related operating restrictions” Directive) has already been implemented in Germany by the “8th Regulation for Amending the Air Traffic Permits Order, of 4 April 2005” (*8. Verordnung zur Änderung der Luftverkehrs-Zulassungs-Ordnung*).

Each airport has its own set of noise related operating rules. For example, under Frankfurt’s airport current operation restrictions, only the quietest Chapter

²⁵ An example of the airport license for the Frankfurt-Hahn airport can be found at: http://www.fluglaerm.de/hahn/genuehmigung_titel.html#genuehmigung

²⁶ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

3 aircraft are allowed to take off or land between 20:00 and 08:00, and the noisier planes are banned during the entire weekend. In submitting the application for the “planning decision” in relation to the proposed airport enlargement, the operator proposed a complete night ban between 23:00 and 05:00 and to put a cap of 150 movements between 22:00 and 23:00 and 05:00 to 06:00. The ban would be imposed as part of the modified airport authorization to be issued by the Hessian Ministry for Economics, Transportation, Urban and Regional Development (*Hessisches Ministerium für Wirtschaft, Verkehr und Landesentwicklung*), and would be in line with the requirements of “noise-related operating restrictions” Directive.

This is complemented by a noise quota system based on the noise classification of the aircraft. Noise quota limits are determined for each season and noisier airplanes consume more quota points than quieter ones in order to encourage the use of the later. The German Air Navigation service (DSF) has adopted and implemented approach and takeoff procedures which have been designed with the aim of minimizing noise impact. Noise monitoring has been in place since 1964; the current system has 5 stations along the runways, 25 stations in the vicinity of the airport and 1 mobile station. The system allows the noise measurements to be linked to individual flights in real time.

In Munich, only 28 scheduled flights are allowed at night, distributed between 21:00 and 22:30 for take-offs and landings and between 04:00 and 05:00 for landings only. There are specific rules for delayed take-offs and landings, flights by airlines with a maintenance base in Munich and smaller aircraft. There are also provisions for approach and departure routes. The airport operates a noise monitoring system with 16 fixed stations and 1 mobile station, linked to flight track data in order to allow an exact follow-up of each aircraft and airline.

Hamburg has adopted a much stricter policy, and a general night-time ban is imposed between 22:00 and 05:00, although some exceptions can be authorized. The noise monitoring system, which is controlled by the city administration, consists of 13 fixed stations in the vicinity of the airport and 2 mobile stations.

All German airports levy a noise charge, under Article 43 of the Air Traffic Licensing Order (LuftVZO), but no legal criteria have been established for the computation of such levies and the charge system is not the same at all airports. The charge is based on the aircraft’s noise category. It may be levied on landings only, or on landings and takeoffs, and in some cases night time landings must pay a surcharge.²⁷

²⁷ A full discussion of the subject can be found in the report of the Öko-Institut e. V: Economic measures for the reduction of the environmental impact of air transport: noise-related landing charges. Berlin 2004.

Air quality at German airports is also considered at the time of planning and authorizing new constructions or expansions. However, available data indicate that airports are not considered a major source of air pollution. The “Emission Cadastre” of the *Land* Hessen includes the following table:

	Carbon monoxide [t/a]	Nitrogen oxides [t NO ₂ /A]	Sulphur dioxide [t/a]	NM VOC [t/a]	Dust [t/a]	Carbon dioxide [kt/a]
Industry	10,300	16,810	4,787	5,032	3,375	15,530
Building heating	52,670	12,520	10,480	4,299	1,151	18,450
Road traffic	270,300	72,130	1,997	26,550	2,882	15,240
Air traffic	960	2,077	173	145	9	455
Organic and waste sources	-	14,450	-	42,270	-	-
Private consumption and handicraft (1995)	-	-	-	18,610	-	-
Sum	334,200	118,000	17,440	107,200	7,623	49,680

Table 3: Sources of air pollution in Hessen (2000)

Source: *Environmental Atlas Hessen (Umwelt Atlas Hessen)*, available on the Web at: <http://atlas.umwelt.hessen.de/servlet/Frame/atlas/einfuehrung/inhalt.htm>.

Data obtained at Frankfurt airport indicate that concentrations in the vicinity of the airport are lower than along highways or in the city center. Monitoring has been conducted by the airport operator in cooperation with the German Federal Office for the Environment and the Hessen *Land* Office for Environment and Geology. There are two permanent air quality monitoring stations inside the airport which provide continuous data which evidence that pollution levels remain within legal standards.

The same applies to other airports, such as Munich which has monitored air quality since 1991, at first with two stations and then with one, placed outside the airport between the two parallel runways. All pollution measurements have been at medium to low levels, with the exception of ozone, which rose occasionally to high levels although it remained within legal standards.

7. CASE STUDY – FRANKFURT AIRPORT

Frankfurt airport is in the midst of an expansion process and provides a good example of how the German system operates for the construction or expansion of airports, how it relates to spatial planning, and how environmental concerns are taken into consideration.

When the airport operator, Fraport AG, decided in 1997 that it was necessary to undertake a major expansion, the “Minister President” of the *Land* of Hessen indicated that it would be convenient to carry out first a mediation process in which all interested parties could be heard in order to reach a consensus on the major options for the future airport development, as well as to build a closer relationship between the airport and its neighbours.

The “mediation” was an open-ended conciliation process which lasted for one and a half years during which many public hearings and expert presentations took place. The process was steered by a mediation group with 21 members representing a variety of public and private interests, plus 3 mediators assisted by 3 working groups and a number of experts.

A total of 129 expert opinions were received and at the end of the process the “mediation report” included a series of recommendations and proposals which had no legally binding force but carried a lot of weight. The report confirmed the need to expand the infrastructure but recommended a ban on night flights and an agreement on a “noise pact”, as well as setting up a permanent “Regional Dialog Forum” (RDF) throughout the entire process. The report proposed what has been called the “mediation package”, which is made up of five of interdependent components, as illustrated in the following “jig-saw puzzle”²⁸:



The Regional Dialog Forum was created as suggested and provides an instance for participation, consultation, clarification and decision-making. The Forum operates a web page, www.dialogforum-flughafen.de and is continuously active, with working groups dealing with different topics.

²⁸ Christian Hochfeld: Mediation Airport Frankfurt & Regional Dialogue Forum. (Presentation in English on can be found at: <http://www.cg95.fr/environnement/johannesburg/hochfeld-discours.pdf>)

On the basis of the outcome of the mediation process and the work of the RDF, the operator prepared the documents needed to initiate the “spatial planning procedure” (*Raumordnungsverfahren*) and filed the application on October 2001. The documents included three possible alternatives, which were evaluated in detail from all points of view, technical, economical and environmental. It focused on the compatibility with existing land use plans and with environmental planning and legislation. The documents were then examined by the administration and submitted to all affected local authorities as well as citizen organizations, trade associations and public interest organizations. Any interested citizen was able to examine the documents and submit an opinion.

At the end of the “spatial planning procedure” the President of the Darmstadt district issued a “regional planning statement” (*Landesplanerische Beurteilung*) on 10 June 2002, pointing out the need to amend the objectives of the regional plan for South Hessen in order to achieve compatibility of the North-West alternative with the requirements of regional planning. Moreover, the “statement” set a number of conditions to be met by the operator in order to insure compatibility with regional planning²⁹.

Due to the Hessen-wide importance of the expansion of Frankfurt Airport, the development plan of the Land of Hessen is being amended in order to include regional planning objectives and principles for the airport’s development, a process that had not ended in August 2005.

The airport operator prepared the detailed project documentation required to initiate the “planning decision procedure” (*Planfeststellungsverfahren*) and filed the application before the Darmstadt district administration on 9 September 2003, and after several requests for additional documents and clarifications, the district administration considered the application to be complete³⁰. On 24 November 2004 the documentation was put on public display and it was announced that comments could be submitted from 17 January to 16 February 2005. The documentation was made available to 57 local communities and 327 public authorities were invited to comment on the proposal. The participation process resulted in over 120,000 written submissions.

The final decision, (*Planfeststellungsbeschluss*) is expected in 2007 and will include all the necessary permits to begin the construction of the new

²⁹ The final 300-page report of the Darmstadt “Regierungspräsidium” can be downloaded at www.rp-darmstadt.de/pg-flughafen/endfassung_rob.doc.

³⁰ The documents cover some 17,500 pages and 900 maps, including 39 expert opinions,

infrastructure, as well as a decision on all the operation restrictions that must be applied, including the night flight curfew proposed by the airport operator.

COUNTRY CONTACTS

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”³¹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

³¹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Bund</i>	Federal Government
<i>Bundesländer or Länder</i>	States of Germany
<i>Kreise</i>	Districts
<i>Kreisfreie Städte</i>	Cities
<i>Bundesrat</i>	Upper House of Parliament
<i>Bundestag</i>	Lower House of Parliament
<i>Landtag</i>	Land Parliament
<i>Bundesversammlung</i>	Federal Convention electing the Federal President
<i>Internationalen Verkehrsflughäfen</i>	International airports network
<i>Deutsche Flugsicherung</i>	DFS – German ANS provider
<i>Raumordnungsgesetz</i>	ROG – Federal Spatial Planning Act
<i>Baugesetzbuch</i>	BauGB - Federal Building Code
<i>Baunutzungsverordnung</i>	BauNVO – Federal Land Use Regulations
<i>Bundesamt für Bauwesen und Raumordnung</i>	Federal office for Building and Planning
<i>Fachplan</i>	Sector plan
<i>Bundesverkehrswegeplan</i>	BVWP – Federal Transport Infrastructure Plan
<i>Ministerkonferenz für Raumordnung</i>	MKRO - Standing Conference of Spatial Planning Ministers
<i>Bezirke</i>	Districts
<i>Planungsregionen</i>	Planning regions
<i>Regionalversammlung</i>	Regional Planning Assembly

<i>Kommunal Planungsverband</i>	Association for planning purposes formed by Local authorities
<i>Raumordnungspolitische Orientierungsrahmen</i>	Spatial Planning Policy Guidelines
<i>Raumordnungspolitische Handlungsrahmen</i>	Operational Program for Spatial Planning
<i>Raumordnungsbericht</i>	Periodic report on spatial planning to be approved by the Federal Government
<i>Landesentwicklungsplan</i>	Land development plan
<i>Landesregierung</i>	Land's executive
<i>Regionalplänen</i>	Regional plans
<i>Siedlungsbeschränkungsbereich</i>	Settlement restriction area
<i>Flächennutzungsplan</i>	F-Plan – Preparatory land use plan
<i>Landesplanungsgesetz</i>	LPG Land Planning Act
<i>Flächennutzungsplan</i>	Local framework plan
<i>Bebauungsplan</i>	B-Plan – Binding land use plan
<i>Vorhabenbezogener Bebauungsplan or Vorhaben- und Erschließungsplan</i>	VuE-plan – Project and infrastructure plan
<i>Baugenehmigungsbehörde</i>	Building permit
<i>Umweltverträglichkeitsprüfung</i>	UVP- Environmental Impact Assessment
<i>Gesetz über die Umweltverträglichkeitsprüfung</i>	UVPG – Environmental Assessment Act
<i>Luftverkehrsgesetz</i>	Air Traffic Act
<i>Bundesnaturschutzgesetz</i>	BnatSchG – Federal Nature Conservation Act

<i>Bundes Immissionsschutzgesetz Wasserhaushaltsgesetz</i>	BlmSchG – Federal Immission Control Act WHG – Federal Water Act
<i>Flughafenkonzept der Bundesregierung</i>	Airport Concept of the Federal Government
<i>Planfeststellung</i>	Planning decision
<i>Planfeststellungsverfahren</i>	Planning decision procedure
<i>Raumordnungsverfahren</i>	Spatial planning procedure
<i>Bauschutzbereich</i>	Construction restricted area
<i>Gesetz zum Schutz gegen Fluglärm</i>	Act on protection against aircraft noise
<i>Lärmschutzbereiche</i>	Noise protection zones
<i>Luftverkehrs-Zulassungs-Ordnung</i>	LuftVZO – Air Traffic Permits Order
<i>TA Lärm</i>	Technical Instructions on Noise Protection
<i>TA Luft</i>	Technical Instructions on Air Pollution Control
<i>Benzinbleigesetz</i>	BzBIG – Act on Lead Levels in Petrol
<i>Verordnung über bauliche Schallschutzanforderungen</i>	Regulations on construction noise protection requirements
<i>Landeplatz-Lärmschutz-Verordnung</i>	Regulations on aerodrome noise protection
<i>Anleitung zur Berechnung von Lärmschutzbereichen an zivilen und militärischen Flugplätzen nach dem Fluglärmsgesetz</i>	AzB - Instruction for the calculation of noise protection areas at civil and military airports
<i>Fluglärmkommission</i>	Air Traffic Noise Commission
<i>Kommission zur Abwehr des Fluglärms</i>	Commission for the defence against air traffic noise

Lärminderungsplan

Noise abatement plan

Kurgebiet

Health areas

Aktionspläne

Action plan

Luftreinhaltepläne

Clean Air plan

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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

GREECE

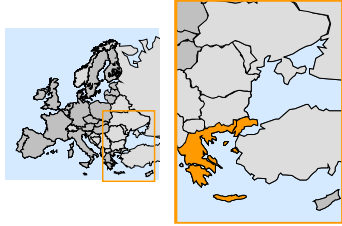


This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

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GREECE		Location Map												
Population	10.6 mill. (80.7 inhabitant per sq. Km)													
Airports network	Public airports network (41 airports) managed by HCAA (Hellenic Civil Aviation Authority), with the exception of Athens International Airport which is a public/private partnership owned 55% by the Greek State and 45% by a private consortium. It operates as a private company													
Spatial planning system														
<p>Spatial planning is rather centralized and the main planning functions are concentrated in the Ministry of Environment, Regional Planning and Public Works</p> <ul style="list-style-type: none"> • Institutions <table border="0" style="width: 100%;"> <tr> <td style="padding-left: 20px;">National level</td> <td>Parliament and National Government define framework legislation and planning policies. Draft and adopt national, regional and local plans</td> </tr> <tr> <td style="padding-left: 20px;">Regional level</td> <td>Formulate development plans</td> </tr> <tr> <td style="padding-left: 20px;">Local level</td> <td>Draft local plans</td> </tr> </table> • Instruments <table border="0" style="width: 100%;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>Large scale structural plans to guide development and provide a framework. They do not contain land use regulation or land reserves</td> </tr> <tr> <td style="padding-left: 20px;">Local plans</td> <td>General Urban Plans cover only the urbanized areas. In the future will cover the entire municipality</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans</td> <td>Town and Implementation Plans are detailed plans Special Spatial Plans for "Zones of Urban Development Control"</td> </tr> </table> • Process: Spatial planning processes are integrated within the Ministry of Environment, Spatial Planning and Public Works; in spite of this, coordination between administrations and citizen participation could be improved 			National level	Parliament and National Government define framework legislation and planning policies. Draft and adopt national, regional and local plans	Regional level	Formulate development plans	Local level	Draft local plans	Strategic plans	Large scale structural plans to guide development and provide a framework. They do not contain land use regulation or land reserves	Local plans	General Urban Plans cover only the urbanized areas. In the future will cover the entire municipality	Regulatory plans	Town and Implementation Plans are detailed plans Special Spatial Plans for "Zones of Urban Development Control"
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Local plans	General Urban Plans cover only the urbanized areas. In the future will cover the entire municipality													
Regulatory plans	Town and Implementation Plans are detailed plans Special Spatial Plans for "Zones of Urban Development Control"													
<p>Regulation and permits: Airports do not need any further permits other than the Environmental Impact Assessment (EIA). According to the law, building permits are required for all construction activities, except within airports. Unauthorized development is still an unresolved problem</p>														
Airport planning														
<ul style="list-style-type: none"> • Policy and planning: Airport master plans are approved, with the exception of Athens International Airport, by the Hellenic Civil Aviation Authority (HCAA) and are considered internal technical documents. They are not integrated into the planning system • Spatial impact: HCAA has to approve any construction around airports, but there are no mechanisms designed to allow the establishment of land reserve for future needs. Athens airport is an exception • Construction: No permits are necessary in addition to the EIA. The authorisation and supervision of airports is entirely under the HCAA • Operation: The HCAA is responsible for authorizing airport operation. No certification is required 														
Airport noise and air quality														
<p>Regarding airport noise and air pollution, Greek legislation has not yet been developed and several European Directives have still not been transposed. There are no specific plans to integrate noise or air quality criteria in land use definition or spatial planning system</p>														

1. SUMMARY

SPATIAL PLANNING SYSTEM

Spatial planning is centralized in the National Government. The regional plans prepared for the prefectures (*nomoi*) in the 1980s are now obsolete, but the new regional plans have yet to be adopted. Athens and Thessaloniki have metropolitan “Master Plans” dating from 1985 which are currently under revision. The Athens Plan was modified in 1992 to accommodate the new Eleftherios Venizelos Airport.

Until now, land use plans only covered the built-up part of the municipality. A new generation of plans is being prepared which will regulate the entire municipal territory. The area near Athens Airport was regulated by a “*Special Spatial Plan*” which established a “*Zone of Urban Development Control*” in order to regulate development in the vicinity of the new infrastructure and minimize the impacts caused by the operation of the airport.

The actual regulation of land uses in and around the new Athens Airport was included in the Airport Development Agreement signed for the operation licence.

REGULATIONS AND PERMITS

Construction permits

According to the law, building permits are required for all construction activities, although there are some problems with development control in some parts of the country.

Public infrastructures, including airports, do not require construction permits, as they are deemed authorized by the decision approving the project.

Environmental permits

EIA legislation adheres to EU legislation with some peculiarities such as requiring a “*Preliminary Approval of Site Allocation*” (PASA) for projects subject to an EIA located in areas not specifically designated by spatial plans for that purpose. The environmental terms resulting from the new Athens airport were included in the Act which approved the Airport Development Agreement which governs the licence.

All activities within the airport are covered by the EIA of the project, and in the case of the Eleftherios Venizelos Airport, by the Airport Development Agreement.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There are no national airport plans.

- Airport

For all airports except Athens, airport plans are only technical documents drafted and adopted by the Hellenic CAA.

In the case of Athens the licence was based on a Master Plan which has been integrated into the Airport Development Agreement.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The Hellenic Civil Aviation Authority is responsible for establishing the limits of the areas where building height is controlled in compliance with the obstacle limitation surfaces provided for in ICAO Annex 14.

The maps showing the location of these zones are sent to affected municipalities and prefectures and all construction in these areas has to be approved by the HCAA before a building permit may be issued

- Noise Impact

The noise impact of airport operation is taken into consideration at the time of the assessment of the environmental impact, but there are no mechanisms to ensure future land use compatibility or to prevent residential uses from occupying high noise level areas.

- Risk prevention

Third-party risk prevention is not provided for in Greek legislation.

- Land reserve for future construction

There are no mechanisms designed to allow the establishment of land reserves for future needs.

Construction

No building permit is required for airport construction or for buildings inside airports. Airport construction is authorized solely by the HCAA.

No environmental permits are required in addition to the Environmental Impact Assessment.

Operation

Operation permits are not contemplated in the law, since the HCAA is directly responsible for the operation of all airports other than Athens Airport, whose operation was authorized under the terms of the Development Agreement.

AIRPORT NOISE AND AIR QUALITY

There are no specific plans in relation to noise or air quality.

No land use restrictions are established in relation to noise or air quality. Spatial plans may, and sometimes do, take these considerations into account but there is no legal obligation in that respect.

In the case of the new airport in Athens, the Environmental Terms integrated into the Airport Development Agreement included many provisions regarding noise and air quality, and compliance is continuously monitored with reports every 6 months.

2. CONTEXT

Greece is a Mediterranean state on the tip of the Balkan Peninsula in southeast Europe, bordering Turkey to the east, Albania, Bulgaria and the Former Yugoslav Republic of Macedonia (FYROM) to the north, and surrounded by the Ionian and the Aegean seas.

Greece achieved its independence from the Ottoman Empire in 1829. After World War II and a protracted civil war, the country was ruled by a military junta from 1967 to 1974. The 1974 democratic elections and a referendum created a parliamentary republic and abolished the monarchy. Greece joined the European Union in 1981 and became the 12th member of the euro zone in 2001. The official language is Greek (99%).

Greece is divided in 51 prefectures (*Nomoi*) and 1 autonomous region*: Agion Oros*, Achaia, Aitolia kai Akarmania, Argolis, Arkadia, Arta, Attiki, Chalkidiki, Chanion, Chios, Dodekanisos, Drama, Evros, Evrytania, Evvoia, Florina, Fokidos, Fthiotis, Grevena, Ileia, Imathia, Ioannina, Irakleion, Karditsa, Kastoria, Kavala, Kefallinia, Kerkyra, Kilkis, Korinthia, Kozani, Kyklades, Lakonia, Larisa, Lasithi, Lefkas, Lesvos, Magnisia, Messinia, Pella, Pieria, Preveza, Rethynnis, Rodopi, Samos, Serrai, Thesprotia, Thessaloniki, Trikala, Voiotia, Xanthi, and Zakynthos.



Figure 1. Map of Greece

Greece has a mixed capitalist economy with the public sector accounting for about 40% of GDP and with a per capita GDP which is 82% of the EU average (22,400)¹. Tourism provides 15% of GDP. The Greek economy has grown by

¹GDP per capita in PPS (Purchasing Power Standards) at current market prices. 2004
Source: EUROSTAT

about 4.0% for the past two years, largely because of an investment boom and infrastructure upgrades for the 2004 Athens Olympic Games.

Characteristic	Description
Population	11,040,700
Latitude / Longitude	39° 00' N, 22° 00' E
Land area	131,940 sq Km
Coastline	13,676 Km
Capital City	Athens
GDP per capita (PPS at market prices)	18,300
GDP real growth rate	4.7 %
Inflation rate	3.0 %
Unemployment rate	10.85 %

Table 1. Greece: Main facts and figures(2004)²

2.1. Population and statistics

The population of Greece exceeds 11 million with an average density of 80.7 inhabitants per sq Km, while the European (EU-15) average density is 115 inhabitants.

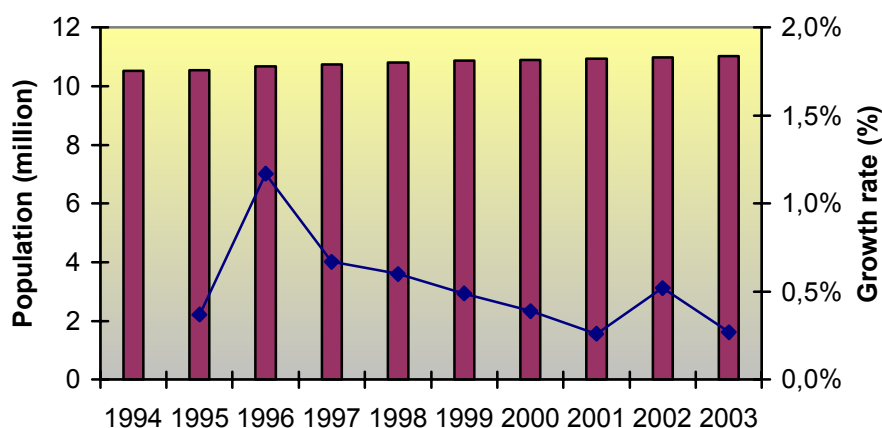


Figure 2. Population growth

² Source: EUROSTAT

Population growth in Greece has increased slowly, with a growth rate of under 1%.

The median age in Greece is 40.2 and, moreover, Greece has one of the lowest birthrates of the European Union with 9.73 births/1,000 population (2004 est).

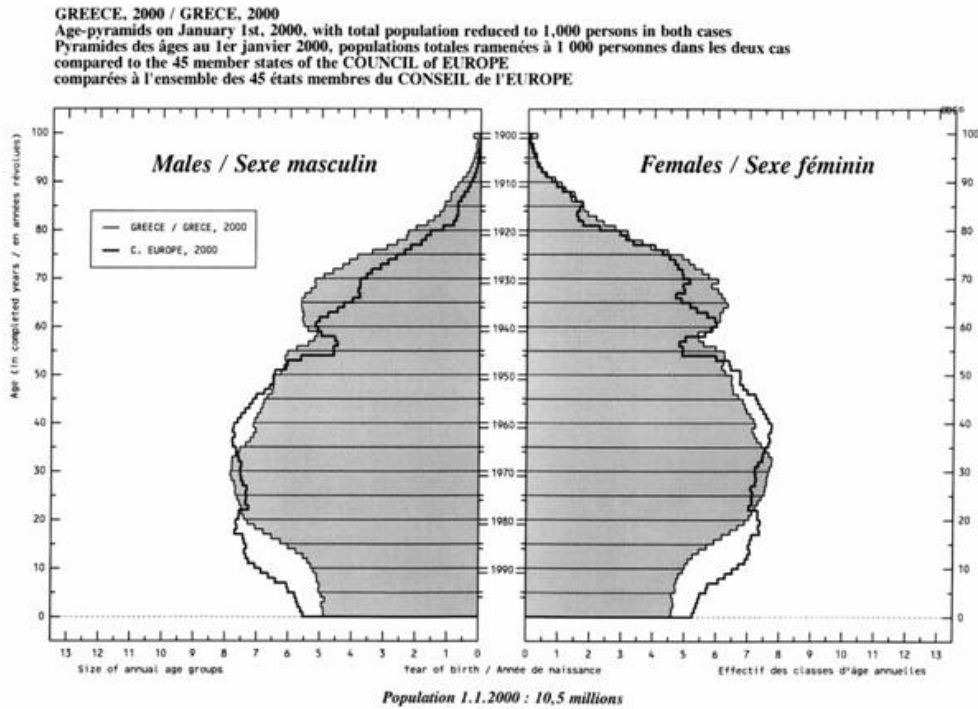
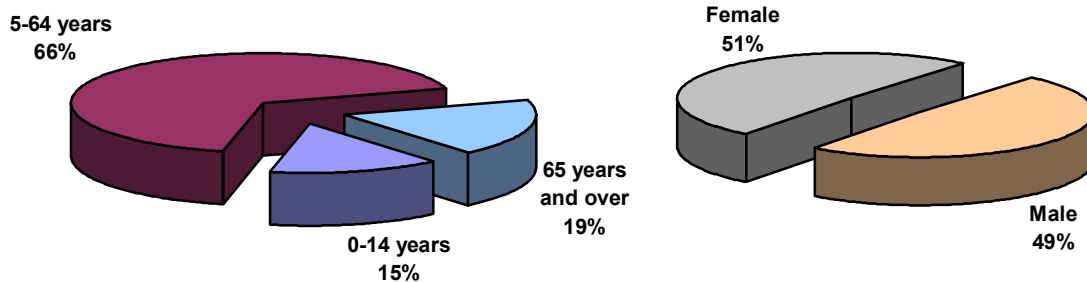


Figure 3. Age-pyramids (2000)³

The figure above shows the low birthrate in Greece and the pie charts below show the population split, with the bulk of population between the age of 15 and 64 (66%).



Figures 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Greece is a parliamentary republic supported by the Greek Constitution adopted on 11 June 1975 and amended in March 1986 and April 2001. Monarchy was rejected by referendum on 8 December 1974.

In the Executive branch of government, the head of state is Karolos Papoulias, elected by Parliament for a five-year term. Currently, the Prime Minister is Costas Karamanlis (since March 2004) who makes recommendations to the president to appoint the cabinet. The Legislative branch comprises only one chamber or Parliament with 300 members elected by direct proportional system popular vote to serve for a term of four years. The most important court of law in the Judicial branch is the Supreme Court.

The system has traditionally been very centralized but in the past decade efforts have been made to devolve broader powers to the regions and the municipalities.

The country is divided into 13 administrative regions, 54 prefectures which form a first tier of local government, and 900 municipalities.

2.3. Main airports

There are 42 airports in the Greek airport network. The Hellenic Civil Aviation Authority owns and manages 41 airports in Greece, most of which are small with low traffic levels. The exception is Athens International Airport (Eleftherios Venizelos), which is a public/private partnership owned 55% by the Greek State and 45% by a private consortium. It operates as a private company.

The Hellenic Civil Aviation Authority (HCAA) is not only the owner and manager of the public airport network, but it also provides the air navigation services and is the aeronautical authority.



Figure 6. Greek airport network

Only Athens international airport (Eleftherios Venizelos) has a high level of traffic with 13.7 million passengers and around 120,000 tons of cargo in 2004.

3. SPATIAL PLANNING SYSTEM

The spatial planning system in Greece has its roots in Article 24 of the Greek Constitution, which states that:

“The master plan of the country and the formation, development, town planning and expansion of towns and residential areas in general shall be under the regulatory authority and the control of the State in the aim of serving the functionality and the development of settlements and of securing the best possible living conditions.”

This constitutional mandate has been developed through a succession of laws from 1976 to 1999, resulting into a fairly complex legislative framework where planning instruments are superimposed at times. The first of such pieces of legislation was Law 360/1976, on “Regional Planning and the Environment”, which regulated the procedures for the adoption of national and regional plans, but it was never really implemented.

From the mid 1980s until the late 1990s the main planning legislation was embodied in Law 1337/83, on “the extension of cities and towns, urban development and associated arrangements”, which is still in force in many respects but has been superseded partially by Law 2508/97, “on Sustainable Urban Development”, which in turn has been replaced by the current Law 2742/99 on Spatial Planning and Sustainable Development.

In addition to the above legislation, there are a number of laws in relation to the Ministries involved in these matters and the metropolitan areas of Athens and Thessaloniki, as well as a number of decisions from the highest administrative court, the “Council of State”, which have played an important role in shaping the current spatial planning system.

3.1. Institutions

3.1.1. National

National Government plays a very important role in the spatial planning system in Greece, as indicated by the above paragraph of the constitution. In fact, this paragraph of Article 24 of the Constitution has been interpreted by the State Council in such a way that it has become impossible to devolve planning powers to sub-regional governments and part of the decentralisation effort undertaken in the 1990s has been undone.

Within the National Government the planning function is concentrated in the Ministry of Environment, Regional Planning and Public Works (YPECHODE). This Department is in charge not only of formulating policy and preparing legislation, but is currently responsible for the preparation of national and

regional plans as well as approving local spatial plans and controlling their implementation.

National plans, together with the plans for the metropolitan areas of Athens and Thessaloniki, are approved by Parliament and become national laws. Regional and local plans are also approved by Central Government.

The National Council for Spatial Planning and Sustainable Development must be consulted before the adoption of national and regional spatial plans. The Council is made up of members from both the public and the private sector, representing local authorities, productive systems, chambers of commerce, professional or technical organizations, NGOs and universities.

3.1.2. *Regional*

There are 13 regional administrations in Greece, operating as deconcentrated offices of the National Government. The regional administration is presided over by a general secretary appointed by the Government. Each region also has a Regional Council consisting of the general secretary and the presidents of the prefectures plus one delegate from the union of municipalities and communes, and one delegate from the chamber of producers. These regional councils formulate and, in some cases, adopt economic development plans.

Nevertheless, regional planning is not always prepared by these regional administrations, but rather by the competent Directorate within the Ministry (YPECHODE).

3.1.3. *Local and area wide*

a) Metropolitan:

Although there are no proper metropolitan authorities in Greece, the two largest metropolitan areas, Athens and Thessaloniki, have special institutional arrangements. In both cases there is a specialized planning agency in charge of preparing spatial plans for their jurisdiction. These agencies, called “Master Plan and Environmental Protection Organization of Athens and Thessaloniki” (also known as “Organization for Athens” and “Organization for Thessaloniki”), are part of the Ministry of Environment, Regional Planning and Public Works.

The role of these organizations is limited, nevertheless, to spatial planning and environmental matters as there is no unified metropolitan administration in these areas. The metropolitan area of Athens, for example, has a complex administrative structure comprising 1 Region (Attica), 1 Unified Prefecture (Athens-Piraeus), 4 Prefectures (Athens, Piraeus, Eastern Attica and Western Attica) and 157 municipalities and

communes. In addition, there are about 300 public agencies with territorial or sectoral competences⁴.

The Organization for Athens was established by Law 1515/85 as a public sector entity with full administrative autonomy, operating under the supervision of the Minister for the Environment, Physical Planning and Public Works, who appoints the manager of the institution. The Organization is responsible for monitoring and reviewing the implementation of the Master Plan of Athens, preparing implementation measures and plans, including local plans, and harmonizing projects from other administrative bodies in the area. In this capacity, the Organization for Athens must be consulted before local plans can be approved.

b) Local:

There are now two tiers of local authorities in Greece: prefectures and municipalities.

The larger, second-tier authorities are called “prefectures” (*nomoi*) headed by an elected prefect, to whom the National Government has delegated important powers in some fields, such as spatial planning. However, the Council of State has considered that some of their powers in the planning field are not constitutional and have been re-centralized.

The smallest government units, the first-tier authorities, are the municipalities (population over 10,000) and communes (population under 10,000). Their role in spatial planning is often limited to an advisory capacity, although they can draft their own town plans and, in a limited number of cases, issue building permits. However, final approval of local plans lies with the Minister for the Environment, Physical Planning and Public Works.

3.2. Instruments

Spatial planning instruments in Greece are constantly evolving and usually change with each new legislation. The current system, which is herein described, was established by the 1999 Law. In practice, this spatial planning system has not been implemented since almost all new plans have been prepared but have yet to be adopted at the time of writing.

⁴ For an analysis of the issues relating to this area see: Elias Beriatos. Governing and managing Metropolitan Areas: The case of Athens. 40th ISOCARP Congress 2004.

In addition to spatial plans, one has to consider the direct effect of the General Building Construction Code, approved by Law 1577/1985 and amended by Law 2831/2000, which establishes not only building quality standards, but also plot area ratios and floor space coefficients.

Separate legislation regulates construction in areas not covered by detailed spatial plans, the so-called “out of plan” lands which actually cover a large proportion of the country.

3.2.1. *Strategic plans or policy documents*

Large scale structural plans have been provided for in Greek legislation since 1976, although the National Plan was never drafted. In the early 1980s a serious effort was made to adopt structural plans for the 49 prefectures into which Greece was divided at that time. These plans were an attempt to translate the five-year development plan into spatial terms, and to a certain extent played a role in the introduction of “planning culture” in the country. The plans became obsolete for many reasons, such as the restructuring of the administrative and political framework.

The only areas where structural plans have been approved and are still in force are Athens and Thessaloniki, where the two so-called “Master Plans” were approved by the National Parliament in 1985.⁵

The Plan of Athens covers most of the metropolitan area, included in the prefecture of Attica and the isle of Makronisos. The Plan designates major infrastructures, population centres and economic activities at a very large scale and contains no land use regulation that can be applied directly, even though it is considered to be binding on both the public and the private sector. The Athens Master Plan has been modified on numerous occasions, most recently in order to accommodate, in a rather piecemeal fashion, many of the infrastructures required for the 2004 Olympics. One such modification took place in 1992 when the Master Plan was revised to provide for the creation of the new Athens Airport, together with the necessary major connection infrastructures. The Plan of Athens is now considered to be obsolete, both the conception and the content, and the Organization for Athens has prepared a new plan for the same area according to the principles of the 1999 Law which it expects to submit to Parliament for approval at the end of 2005.

The new breed of structural plans created by Law 2742/99 includes instruments at national level, General Framework for Spatial Planning and Sustainable Development and Special Frameworks for Spatial Planning and Sustainable Development, as well as regional level, Regional Frameworks for Spatial Planning and Sustainable Development. The Law also provides for the need to

⁵ Law 1515/85, which enacted the Master Plan and established the Organization for Athens

replace the Athens and Thessaloniki Master Plans with new structural plans and to extend this type of instrument to other large urban areas.

It is intended that these plans provide a guide for development and a framework for more detailed planning but they do not contain detailed land use regulations or reserve land for future infrastructures. The General Framework and the Master Plans of Athens and Thessaloniki shall be approved by the National Parliament. The Special Frameworks are prepared by the Ministry (YPECHODE) and approved by a special committee of ministers after consultation with other ministries, and the Regional Frameworks are approved by YPECHODE.

The General Framework has already been prepared and is pending parliamentary approval. Some Special Frameworks regarding coastal zones, mountain areas, tourism, aquaculture and fisheries have also been drafted. All the Regional Frameworks have already been approved, with the exception of Athens, as the revision of the Master Plan is a more complicated procedure.

3.2.2. *Local (framework) plans*

Until the Law of 1999, the basic planning instrument at the local level was the “General Urban Plan” which only covered the built-up areas of municipalities and communes. After 1999 these plans are required to cover the entire territory of the local authorities, although none have been adopted yet.

Although General Urban Plans operate as framework plans, they do not grant development rights to property owners. In most cases, these plans are prepared and approved by Ministry (YPECHODE). As mentioned above, the attempt to delegate its authority to the local authorities has met with constitutional objections from the State Council and the system has reverted to its original centralized form.

3.2.3. *Regulatory (detailed) plans*

Since the Law of 1983, there is a particular kind of “Special Spatial Plan” at the sub-regional level above the municipal or communal levels, which regulates land uses in the so called “Zones of Urban Development Control⁶”. This instrument aims to prevent unplanned development in areas outside the urban centres which are not covered by local land use planning. This is the type of plan that was used in the case of the new Athens Airport in order to regulate development in the vicinity of the new infrastructure and to minimize the impacts caused by the operation of the airport.

At the neighbourhood or district level, municipalities and communes can also have a variety of detailed plans (town plans and implementation plans) which

⁶ Also translated as “Land Development Control Zone”, abbreviated as ZOE.

regulate in detail issues like street alignments, specific land uses, and building. All these plans provide sufficient detail to generate development rights and are therefore directly applicable to both the public and the private sector.

Until now, airports were not at all integrated into ordinary local plans, as the General Urban Plan only covered the urbanized areas. This situation is bound to change with the implementation of the new legislation. The only detailed regulatory instrument to be used so far for this kind of infrastructure has been the abovementioned Special Spatial Plan for a “Zone of Urban Development Control” in the Messogheia area, prepared by the Organization for Athens and adopted by the Ministry of Environment, Spatial Planning and Public Works.

This Plan considered three different types of areas, the first is the airport itself, the second includes urban areas, and the third takes in green and agricultural areas. Consequently, 3 basic zones were established:

- Protection zones: where construction is prohibited or limited due to environmental and archaeological considerations
- Urban zones: for residential uses
- Zones for productive activities: Aimed basically at providing land for the activities that the new airport will attract and to act as a low density buffer in peri-urban areas

This Plan will be revised when the new Master Plan for the Greater Athens area has been adopted, as it is intended to intensify the protection of forests and agricultural lands in the area.

It should be noted that the airport itself and the immediate surrounding area are not regulated by this Plan, but rather by the Airport Development Agreement which will be explained in detail later. This agreement established the legal framework for the construction and operation of the Athens International Airport and determined a Restricted Development Zone where building densities are limited. This Agreement was subsequently ratified by National Parliament in Law 2338/1995.

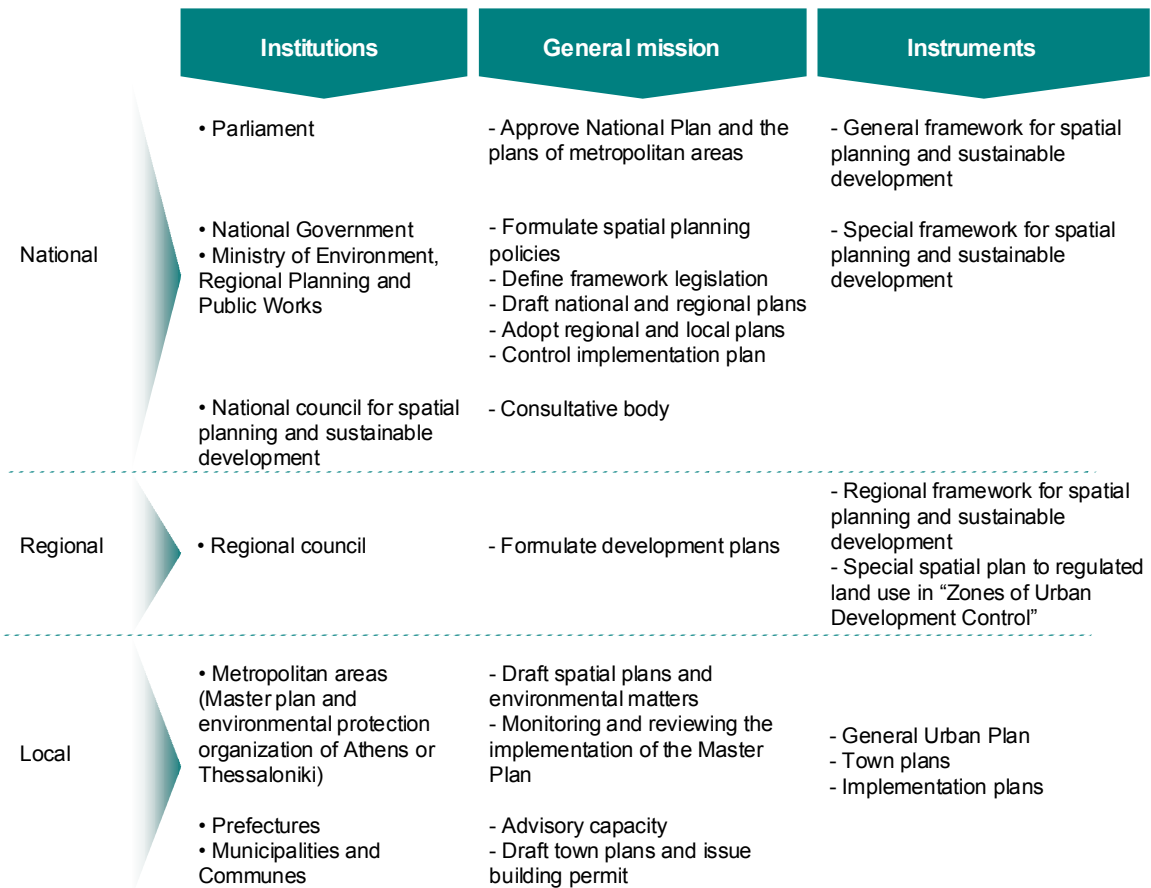


Figure 7. Greek spatial planning and institutions

3.3. Process

3.3.1. Inter-government consultation

Despite the fact that the Ministry of Environment, Spatial Planning and Public Works (YPECHODE) integrates within one single department many of the fields that are most directly related to spatial planning, it is true that until now horizontal coordination has not been very successful in Greece. There are specific bodies for the coordination of spatial planning and sector policies, such as the "Coordination Committee of Government Policy for Spatial Planning and Sustainable Development" and the "National Council for Spatial Planning and Sustainable Development", as well as consultation requirements between different ministries, but in practice horizontal coordination has not worked very well in the spatial planning process.⁷

Vertical coordination is to a certain extent assured by the hierarchical nature of the planning system, as well as by the fact that local level planning instruments are finally approved by National Government, but there are still many examples

⁷ Louis Wassenhoven (coordinator). ESPON project 2.3.2: Governance of territorial and urban policies from EU to local level. National Overview: Greece, pages 36 and 37.

of cases in which mere formal consultation procedures have not yielded satisfactory results, probably due to an administrative culture in which each agency and administration tends to act in an isolated way.

Local plans must go through Local Councils for Spatial Planning and Environment where different public and private bodies are represented. Municipalities and communes are also consulted in the approval process of their plans, but these opinions only have advisory value and the final decision is taken by the National Government.

3.3.2. Policy Integration

There is no mandatory policy integration regarding airports. It is assumed that in national and regional spatial plans airports will be taken into consideration like any other major infrastructure, but there are no specific provisions in that respect.

3.3.3. Citizen participation

Citizen participation in the planning process is limited to local plans which most directly affect property rights. The law does not require direct citizen involvement in national or regional plans and not even in local framework plans, General Urban Plans or plans for Zones of Urban Development Control. These plans are subject to institutional consultation and can not be objected to by private citizens.

This does not mean that effective citizen participation is non-existent in Greece. Detailed plans and projects are often subject to public hearings and, in practice, may be submitted to far greater participation than required by law. In the case of particular projects like airports, where an Environmental Impact Assessment is mandatory, citizens are consulted and may lodge their objections in writing.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. Activities subject to development control:

According to the law, building permits are required for all construction activities. It is true, however, that this requirement is not always met. As some authors have put it:

*"Laws at the regulatory level are numerous, substantive and detailed. However, -and this is one of the overriding characteristics of the Greek spatial planning system- an important gap exists between established plans and the reality. Unauthorized development, known in Greece as illegal construction, is one of the major pathologies of the Greek spatial planning system."*⁸

Although the situation is gradually improving, it can not be denied that difficulties with the enforcement of the development control system were specifically taken into consideration at the time when the Athens airport was designed. Such concerns are evident in the Airport Development Agreement, in which a Restricted Development Zone (R.D.Z.) was established and it was expressly provided that *"The Greek State undertakes to take such measures as are reasonably required to secure the observance of the planning and building regulations applicable in the R.D.Z. and to indemnify the Airport Company against any failure to observe such planning and building regulations."*

However, apart from the R.D.Z., no such formal commitment applies, and despite the Government's efforts to enforce the provisions of the spatial plan, it does not appear to be easy to contain unplanned development.

4.1.2. Exceptions or exemptions

Public infrastructures do not require construction permits, as they are deemed authorized by the decision approving the project. This applies also to Athens Airport, which was built by a corporation operating under private law.

4.1.3. Institutions involved: inter-government relations

Construction permits are granted by regional prefects or, in some cases, by Municipalities that have received delegated powers. Airports are not subject to this requirement. The same applies to public or private constructions within

⁸ ESTIA (2000) *Spatial Planning Systems And Agencies In Southeast Europe*, European Space and Territorial Integration Alternatives: Spatial Development Strategies and Policy Integration in South-eastern Europe, INTERREG IIC – CADSES project, Department of Urban and Regional Development and Planning, Aristotle University of Thessaloniki, Thessaloniki. Page 32.

airport grounds. Athens Airport, for example, is able to attract large commercial facilities not only because it offers a good location with excellent transportation, but also because no construction permit is required and administrative delays are totally avoided.

4.1.4. Relationship with planning

In principle no permit can be issued unless it is in accordance with an adopted plan, although the implementation of this rule is not always as strict as the law requires.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Although environmental legislation can be found in Greece prior to the date of the country's accession to the EEC, it was after that date that it gained importance, resulting in the adoption in 1986 of the one piece of legislation that has remained at the centre of this field, Law 1650/1986 "On the Protection of the Environment". This Act provides a broad framework for the abundant legislation that has come after it, covering most aspects of environmental protection, from air or water pollution to nature conservation or the preservation of natural resources.

Environmental Impact Assessments (EIA) have been regulated under this law. Implementation issues are detailed in regulations such as the Joint Ministerial Decision 69269/5387⁹, on the "categorisation of works and activities, content of Environmental Impact Assessments, determination of the content of Special Environmental Studies and other related provisions according to Law 1650/1986".

The regulation of Environmental Impact Assessments basically follows Directive 85/337/EEC¹⁰ (the "EIA" Directive), while adding a second type of environmental assessment with less demanding requirements for projects with a lower potential risk and establishing the regulatory framework for the authorisation of all types of activities with potential environmental consequences. Nevertheless, there are a few distinctive features not found in EU legislation, like the requirement of a "Preliminary Approval of Site Allocation"

⁹ The Decision was jointly adopted by the Ministers of the Interior, of National Economy, of Agriculture, of Civilisation, of Marine, of Tourism, of the Environment, Physical Planning and Public Works, of Industry, Energy and Technology and the Minister of Transport and Communications.

¹⁰ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

(PASA) for projects requiring EIA located in areas not specifically designated by spatial plans for that purpose.¹¹

The interpretation of the law put forward by the Council of State on several occasions has also contributed in a very important way to the configuration of EIAs in Greece. This Court has ruled, for example, that even preliminary site studies must be accompanied by a full EIA, and that large infrastructure projects can not be approved in separate parts but require an evaluation of the impact on all the regions affected.

The construction of airports with a basic runway length of 2,100 m or more is included under paragraph 7 of Group I projects which are subject to a full EIA. Airfields not included in Annex I are included in paragraph 11.(b) of Group II, which are also subject to EIA but require a less detailed study.

The approval of a project subject to EIA always includes what Law 1650/1986 designates as “Environmental Terms”, which establishes detailed conditions, from the environmental point of view, for the construction and operation phases. In the case of the new Athens Airport, these “Environmental Terms” were included not only in the Airport Development Agreement, but also in the Act of Parliament that ratified it, Law 2338/1995. These “Environmental Terms” are approved by a joint ministerial decision of the Ministers responsible for the environment and for the project or activity which is evaluated.

Directive 2001/42/EC¹² (the “SEA” Directive) has not yet been transposed into Greek law, so Environmental Impact Assessments are required only for projects and activities and not yet for plans and programmes.

4.2.2. *Other environmental controls*

Industrial activities are also subject to Law 2516/1997, “on the operation of industrial and craft activities”, which links in with the spatial planning legislation in article 7 by prohibiting the establishment of industrial activities in areas where such uses are considered incompatible with land use plans.

These requirements do not apply to airports or to activities within airport grounds, where no other permit is required. Airport operation is not subject to any permits other than the EIA which covered the construction project. In the case of the new Athens Airport all the necessary permits are covered by the Airport Development Agreement, which aimed at facilitating private sector involvement by making procedures easier.

¹¹ The use of this instrument, the PASA, has been subject to controversy and was considered unconstitutional by the Council of State on the grounds that it violates article 24 of the Constitution by allowing large projects to be undertaken outside the provisions of spatial planning (Council of State 304/1993, 2844/ 1993).

4.2.3. *Institutions involved*

Both the Ministry responsible for environmental matters (YPECHODE) and the Ministry in charge of the activity or project are involved in Environmental Impact Assessments. In the case of airports this is the Ministry of Transportation and Communications.

In Athens and Thessaloniki, the special agencies dealing with planning in these metropolitan areas (Organization for Athens and Organization for Thessaloniki) must be consulted before the environmental terms are approved.

4.2.4. *Integration with other permits*

In the case of airports, no other permits are required other than the Environmental Impact Assessment.

¹² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Airport plans and projects are approved by the Hellenic Civil Aviation Authority (HCAA), integrated within the Ministry of Transportation and Communications. The HCAA owns and operates 41 airports in Greece, with the exception of the new E. Venizelos Airport in Athens which is operated under licence by a private corporation which is partially owned (55%) by the Greek State. The private sector partner (45%) is an international consortium led by Hotchief AirPort (100% subsidiary of the construction firm Hochtief that built the airport).

Airport projects usually require an Environmental Impact Assessment, at which time they are submitted to a consultation and participation process. In the case of the new Athens Airport, the National Parliament was involved since it ratified the Airport Development Agreement. The decision to build this airport had been taken in 1973 by the Cabinet after considering several alternatives, but no formal policy or planning instrument was used in the decision-making process.

5.1.2. Instruments

Airports are developed according to master plans which are prepared by the HCAA and have no statutory basis.

In the case of the new Athens Airport, the master plan was used as a basis for the EIA and the Airport Development Agreement, which includes provisions regarding future modifications of the plan.

5.1.3. Process

Airport master plans are considered technical documents for internal use and are not subject to any consultation or public review. Future revisions of the Athens International Airport master plan will be prepared by the airport operator and approved by a Special Review Committee.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The HCAA is responsible for establishing the limits of the areas where building heights are restricted in order to comply with the obstacle limitation surfaces provided for in ICAO Annex 14.

The maps showing the location of these zones are sent to affected municipalities and prefectures and all construction in these areas has to be

approved by the HCAA before a building permit may be issued. HCAA approval is not integrated into the building permit issuing process, and must be obtained separately by the developer.

No compensation is paid for building height limitations, since they are considered normal “legal servitudes” that must be borne by property owners.

5.2.2. Noise Impact

The noise impact of airport operation is taken into consideration at the time of evaluating the environmental impact, but there are no mechanisms to ensure future land use compatibility or to prevent residential uses from occurring in high noise areas.

The Airport Development Agreement for the new Athens Airport included some provisions regarding noise insulation of existing buildings, but in practice no measures has been implemented yet.

5.2.3. Risk prevention

Third-party risk prevention is not considered.

5.2.4. Land reserve for future construction

Airport projects may include more land than actually needed in the short term, but there are no mechanisms designed to allow the establishment of land reserves for future needs.

In the case of Athens, Eleftherios Venizelos Airport occupies a contiguous area of 1286 ha. but the expropriation included a further 370 ha. to facilitate unobstructed operations. Beyond the airport grounds, the Restricted Development Zone, provided for in the Development Agreement, limits the type and size of uses that may be allowed (private dwellings, agriculture, rights of way and air navigation equipment), and establishes population density and height limitations. Implementing these restrictions, however, is not backed by any specific measures, and the Airport operator is not always consulted before building permits are issued.

5.3. Airport construction

5.3.1. Permits and authorisations required for airport construction or development

- a) Building permits: No building permit is required for airport construction or for buildings inside airports. Airport construction is authorized solely by the HCAA (which actually owns and operates all Greek airports other than the Athens-E. Venizelos airport).

- b) Environmental permits: No other environmental permits are required in addition to the terms of the Environmental Impact Assessment. On some occasions, Athens Int. Airport has been required to submit specific studies on waste management to the Ministry of Environment for approval.
- c) Other permits: No other permits are required, as airports are considered to be excluded from major hazards legislation.

5.3.2. Institutions and processes involved

The authorisation and supervision of airports is entirely in the hands of the HCAA for aviation purposes and the Ministry of the Environment, Spatial Planning and Public Works (YPECHODE) for environmental matters. There are no specific provisions for the coordination of these institutions after the completion of the project, although contact shall take place whenever necessary during operation since the environmental terms are subject to periodic review.

5.3.3. Integration with planning and environmental controls

Airports are not integrated into the planning system. The Ministry of the Environment, Spatial Planning and Public Works is responsible for environmental control which is carried out as prescribed in the environmental terms of the respective EIAs. In the case of Athens, it is the Organization for Athens who is primarily responsible for the environmental control.

5.4. Airport operation

5.4.1. Operating permit

The HCAA is responsible for the operation of all airports other than Athens Airport, whose operation was authorized under the terms of the Airport Development Agreement. There is no need to obtain an environmental permit for airport operation, as this is considered to be included in the construction EIA.

Before an airport can start operation, the HCAA shall verify that all the obligations deriving from international legislation have been fulfilled, and the Ministry of the Environment, Spatial Planning and Public Works (or the Organization for Athens, in the case of Athens airport) shall verify compliance with the environmental terms.

5.4.2. Airport certification

Airport certification has not yet been implemented.

An airport licence was issued on 12 March 2001 by the Ministry of Transportation and Communications.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

The basic noise and air quality legislation is included in the abovementioned Law 1650/1986, on the Protection of the Environment, which has later been developed by Presidential Decrees and Ministerial Decisions.

Presidential Decree 1178/1981 required Noise Exposure Forecast (NEF)¹³ contours to be prepared for all airports and provided guidelines for land uses according to noise levels, but spatial plans were not bound by this Decree.

Directive 2002/30/EC¹⁴ (the “noise-related operating restrictions” Directive) is already transposed into Greek legislation.

With respect to air quality, the main legislation is the Joint Ministerial Decision 3277/209 of 4 February 2000, which transposed the Directive 1996/62/EC¹⁵ (the “Air Quality Framework” Directive) into Greek law.

The Ministerial Act 34 of 30 May 2002 and the Joint Ministerial Decision 9238/332 of 26 February 2004 transposed two of the Daughter Directives (1999/30/EC and 2000/69/EC respectively), while the other two (2002/3/EC and 2004/107/EC) are pending but, nevertheless, legally binding in Greece.

Directive 49/2002¹⁶ (the “noise” Directive) had not been transposed at the time of writing.

6.2. Institutions

Local authorities have generic competences in the field of environmental protection but, in practice, it is the regional and central Ministry offices that bear the brunt of public action regarding noise and air pollution.

In Attica, the Organization for Athens (ORSA) plays an important role in all environmental matters.

¹³ NEF (Noise Exposure Forecast) is a tone-corrected perceived-noise metric

¹⁴ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

¹⁵ Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

¹⁶ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

6.3. Instruments

a) Planning:

There are no specific plans in relation to noise or air quality.

b) Land use restrictions:

No land use restrictions are established on account of noise or air quality. Spatial plans may, and sometimes do, take these considerations into account but there is no legal obligation in that respect.

c) Compensation:

Compensation is not an issue since there are no restrictions.

6.4. Integration with spatial planning

Presidential Decree 1178/1981 established guidelines for land use planning but the effects have been limited since implementation was not compulsory.

6.5. Integration with development, construction or operation controls

Noise and air quality are taken into account at the time of environmental impact evaluation, either in the EIA or in simplified instruments.

In the case of the new Athens airport, the Ministry of the Environment, Spatial Planning and Public Works commissioned studies (directly or through ORSA) to determine air quality and noise levels before the project was undertaken, in order to have comparative data at the time of operation.

The “Environmental Terms” of the EIA included many provisions regarding noise and air quality. Reports are submitted every six months to the supervising authority, the Ministry of the Environment, Spatial Planning and Public Works. With respect to air quality, Law 2338/1995 calls for the installation and operation of a six-station (one of which is mobile) air quality monitoring network, an acoustic radar (SODAR), a Differential Optical Absorption Spectroscopy (DOAS) system, and an advanced system for the storage, processing and reporting of data from the various monitoring systems. With respect to noise, Law 2338/1995 calls for the installation of a network of noise monitoring stations.

The above air quality and noise monitoring equipment (comprising 10 permanent stations and 1 mobile unit) has been already installed.

In order to minimize noise, the Hellenic CAA approved noise abatement procedures to be applied between 23:00 h and 07:00 h, consisting mainly of preferential use of runways, as well as restricting the use of Auxiliary Power

Units (APUs), reverse thrust and engine testing. The use of preferential runways has also been extended to cover the period between 15:00 h and 18:00 h.

Additionally, the airport operator also provides, on a voluntary basis, a “noise hotline” which is available to citizens 24 hours a day to receive their comments and complaints regarding noise.

Air quality monitoring both at the airport and in the surrounding communities began in 1998, more than two years prior to the opening of the airport. Comparison of data collected before and after the opening of the airport indicates that air pollution levels have not changed significantly. Research has also indicated that motor vehicle emissions have a greater influence on local air quality than aircraft emissions. The only established limit values that were exceeded in the region (up to 2004) were those for ozone during the summer months when solar radiation is at a maximum. For 2005, excessive PM10 may also be observed.

7. CASE STUDY - ATHENS INTERNATIONAL AIRPORT

The largest and busiest airport in Greece is Athens international airport “Eleftherios Venizelos”. It is sited 33 km northeast of Athens downtown, in the Messogheia area.

The decision to build this airport was taken by the Cabinet in 1973 after considering several alternatives, but no formal policy or planning instrument was used for the decision.

In 1985, National Parliament approved the Athens metropolitan area Master Plan. This plan has been modified on numerous occasions. One such modification took place in 1992 when the Master Plan was revised to provide for the creation of the new Athens Airport.

After studying several alternatives, the National Government decided to develop the new Athens airport under licence to a private corporation which is partially owned by the Greek State, in accordance with the BOT (Build, Operate and Transfer) principle.

As a consequence of this decision an Airport Development Agreement was signed and ratified by Parliament according to Law 2338/1995. The Airport Development Agreement was based on a master plan, which covered all necessary permits to build and operate the new airport and included the delimitation of a Restricted Development Zone where building densities are limited.



Figure 8. Athens international airport planning process

COUNTRY CONTACTS

- **ORSA (Organization for Planning and Environmental Protection of Athens)**

Catherine Sikianaki – General Director

- **HCAA – Hellenic Civil Aviation Authority**

Nikolaos P. Pavlopoulos – Head of Environmental Protection Department

Evangelos Xanthoudakis – Environmental Protection Department

- **Ministry of the Environment, Physical Planning & Public Works**

Kyriakos Psychas – Department of Noise Abatement

Ioanna Nikitara – Department of Noise Abatement

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- **National Technical University of Athens**

Louis Wassenhoven – Professor. Dept, of Urban and Regional Planning

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁷)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁷ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Nomoi</i>	Prefectures
YPECHODE	Ministry of the Environment, Spatial Planning and Public Works

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Country Report

HUNGARY

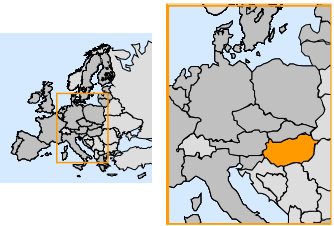


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HUNGARY		Location Map												
Population	10 mill. (108 inhabitant per sq. Km)													
Airports network	<p>There are three international airports in Hungary, the main of which is Budapest-Ferihegy Airport, with more than 6.4 mill. passengers during 2004. This airport is managed by Budapest Airport Plc, which is a public limited company. A privatisation process is in progress at the time of writing.</p>													
Spatial planning system														
<p>Spatial planning is developed at the local level, following national guidelines.</p> <ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National level:</td> <td>National Development Office + Hungarian Office for Territorial and Regional Development</td> </tr> <tr> <td style="padding-left: 20px;">Regional level:</td> <td>Regional Development Councils</td> </tr> <tr> <td style="padding-left: 20px;">Local level:</td> <td>Counties (through the County Development Councils) and municipalities</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>National Development Plan + National Regional Development Concept. Regional plans. Urban development strategies.</td> </tr> <tr> <td style="padding-left: 20px;">Framework plans</td> <td>Structural plans</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans</td> <td>Regulatory plans. Zoning and building Ordinances</td> </tr> </table> • Process: Extensive inter-government consultation coordinated by the relevant Development Council, depending on the type of plan. Citizen participation in local plans. 			National level:	National Development Office + Hungarian Office for Territorial and Regional Development	Regional level:	Regional Development Councils	Local level:	Counties (through the County Development Councils) and municipalities	Strategic plans	National Development Plan + National Regional Development Concept. Regional plans. Urban development strategies.	Framework plans	Structural plans	Regulatory plans	Regulatory plans. Zoning and building Ordinances
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Framework plans	Structural plans													
Regulatory plans	Regulatory plans. Zoning and building Ordinances													
Regulation and permits														
<p>Building permits (besides “demolition permits”, “occupation permits” and” use amendment permits”) granted by the local authorities, except for special infrastructures, such as airports. EIA and environmental permits issued by the regional inspectorates. Consolidated environmental use permit integrates all necessary permits.</p>														
Airport planning														
<ul style="list-style-type: none"> • Policy and planning: Non statutory airport plans circulated to the affected municipalities for comments. • Spatial impact: Safeguard maps and noise contours (subject to citizen participation). Noise mitigation zones, on the basis of the noise contours, must be integrated into spatial planning instruments, as well as land reserves for future developments. • Construction: Building permits granted by the municipality for buildings and by the CAA for infrastructures. • Operation: Airport license by CAA 														
Airport noise and air quality														
<ul style="list-style-type: none"> • Noise: Noise mitigation zones defining land use restrictions. No right to compensation (only to insulation, in some cases) • Air quality: No specific provision for the establishment of land use restrictions for reasons of air pollution, but municipalities are obliged by law to integrate all environmental considerations into their land use plans. This means that, at least in theory, they could regulate the use of land on the basis of air pollution criteria. 														

1. SUMMARY

SPATIAL PLANNING SYSTEM

The “National Regional Development Concept”, adopted by Parliament on March 1998, sets very general strategic options, defines principles and guidelines aimed at the spatial structure of the country, regional disparities, mobilization of regional resources and coordination of different sectors and administrations.

The “National Development Plan” focuses essentially on socio-economic development, rather than on territorial issues, but has a strong spatial component and includes a small chapter entitled “Expanding airport capacity”.

Regional plans follow the same orientation, aimed at the reduction of inter-territorial disparities, but have not yet been adopted.

Local “structure plans” set the boundary between the areas that can be developed and those where building is not allowed, define the main infrastructures and other structural elements (arterial roads, large public parks, etc.) and regulate the types of land uses allowed. These plans are only binding on the municipal administration.

“Regulatory plans” and “zoning and building ordinances” are mandatory in areas designated for new development or for urban renewal, as well as in areas that require special attention.

Both “structure plans” and “regulatory plans” shall include the delimitation of areas affected by the spatial impact of airports, but these instruments do not regulate land uses within the airport.

REGULATIONS AND PERMITS

Construction permits

All construction activities, including demolition, renovation and changes of use, require a building permit. Permits are issued by the municipalities, except in cases where special legislation dictates otherwise, as is the case of airports, where the CAA acts as building authority.

There are no specific exemptions or exceptions for airports or infrastructures in general.

Environmental permits

EIA is regulated according to EU legislation, both for projects and for plans or programmes, but the procedure is divided into a preliminary evaluation which most projects and economic activities must undergo, and a detailed assessment which is reserved for projects included in a list.

All environmental permits required for operation, except those relating to water, are integrated either in the EIA or in a “consolidated environmental use permit”, issued by regional authorities

Activities of little or no environmental consequence require a Business Site License, issued by municipalities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The “Hungarian Transport Policy 2003-2015” sets priority objectives and strategic goals for the transport system and defines the intended development according to the mode of transportation. It declares Budapest Ferihegy International Airport “the number one priority” which should be improved and linked to the city by rail, and mentions more airports of regional significance.

- Airport

There are no statutory airport plans. In Ferihegy International Airport the operator has prepared a long-term strategic plan as an internal document designed basically for corporate purposes. The scope and contents are not regulated and do not have legal repercussions, but rather are used as a basis for the preparation of projects and discussion with local authorities.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Obstacle limitation surfaces are implemented as defined in Annex 14. The affected areas are defined on the basis of the distance of the airport to the border. Municipalities are notified but these areas are not represented in spatial planning documents.

Construction within this area must be authorized by the CAA, which examines each case and determines if, and under what conditions, the construction can be allowed.

- Noise Impact

Airports must calculate noise contours based on ten-year projections taking the 6 busiest months of the year. The contours are used to delineate 5 noise protection zones in which land use restrictions are applied on the basis of noise exposure. The calculations are validated by the CAA which approves the resulting noise maps after consultation with local authorities and public participation.

The noise mitigation zones must be integrated into the spatial planning documents and are also made public by including them in the land registry records.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

Land reserves for future airport development can be established by including the necessary provisions in the spatial planning instruments.

Construction

A building permit issued by the local authority is required for the construction of airport buildings (i.e.: a terminal). Airport infrastructures, such as runways, taxiways, etc., do not require such local permit but must be authorized by the aviation authority, subsequent to hearing the opinion of the municipality.

Operation

Airports are required to obtain all environmental permits in the same terms as other activities. In the case of projects requiring EIA, the final decision will cover all the environmental permits, except those related to water, which must always follow their specific procedure. Ferihegy International Airport is in the process of obtaining a “consolidated environmental use permit”.

Before buildings may be put to use an “occupation permit” must be obtained from the municipality. In addition, airports are required to obtain a licence from the CAA before they can begin operation.

Airport certification is required by the CAA according to ICAO provisions.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise has been regulated in several Decrees dealing with noise protected zones, limit values and calculation methodology.

Spatial plans must reproduce the noise contours maps and regulate land use accordingly.

Homeowners within noise protection areas are entitled to financial assistance for soundproofing purposes.

In Ferihegy International Airport night operations have been restricted and airlines must pay a noise surcharge on all movements.

Air quality

There are no specific regulations concerning air quality at or around airports.

2. CONTEXT

Hungary is a landlocked country of central Europe, bordered by Austria, Slovakia, Ukraine, Romania, Serbia and Montenegro, Croatia and Slovenia.

Hungary was part of the Austro-Hungarian Empire, which collapsed after World War I. The country fell under Communist rule following World War II. Hungary held its first multiparty elections in 1990 and initiated a free market economy. It joined NATO in 1999 and the EU on 1 May 2004.

Hungary is subdivided administratively into 19 counties (*megyék*, singular: *megye*), 20 county-towns* (singular: *megyei jogú város*) and the capital city** (*főváros*): Bacs-Kiskun, Baranya, Bekes, Bekescsaba*, Borsod-Abaúj-Zemplén, Budapest**, Csongrad, Debrecen*, Dunaujvaros*, Eger*, Fejer, Gyor*, Gyor-Moson-Sopron, Hajdu-Bihar, Heves, Hodmezovasarhely*, Jasz-Nagykun-Szolnok, Kaposvar*, Kecskemet*, Komarom-Esztergom, Miskolc*, Nagykanizsa*, Nograd, Nyiregyhaza*, Pecs*, Pest, Somogy, Sopron*, Szabolcs-Szatmar-Bereg, Szeged*, Szekesfehervar*, Szolnok*, Szombathely*, Tatabanya*, Tolna, Vas, Veszprem, Veszprem*, Zala, and Zalaegerszeg*.

There are 148 towns and 2905 villages. Budapest has its own organization and is divided into 23 districts.



Figure 1. Map of Hungary

Hungary continues to show strong economic growth as one of the newest members of the European Union (since 2004), although Hungary's GDP per capita is still well below the European Union average (22,400¹).

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	10,116,700
Latitude / Longitude	47°00' N, 20°00' E
Land area	92,340 sq Km
Coastline	0 Km
Capital City	Budapest
GDP per capita (PPS at market prices)	13,700
GDP real growth rate	4.6 %
Inflation rate	6.8 %
Unemployment rate	5.9 %

Table 1. Hungary: main facts and figures (2004)²

2.1. Population and statistics

The total population in 2004 was just over 10 million, the lowest figure since the 1990's. The main reasons for this population decrease are the poor birth rate (9.76 births/1,000 population) combined with the high death rate (13.19 deaths/1,000 population).

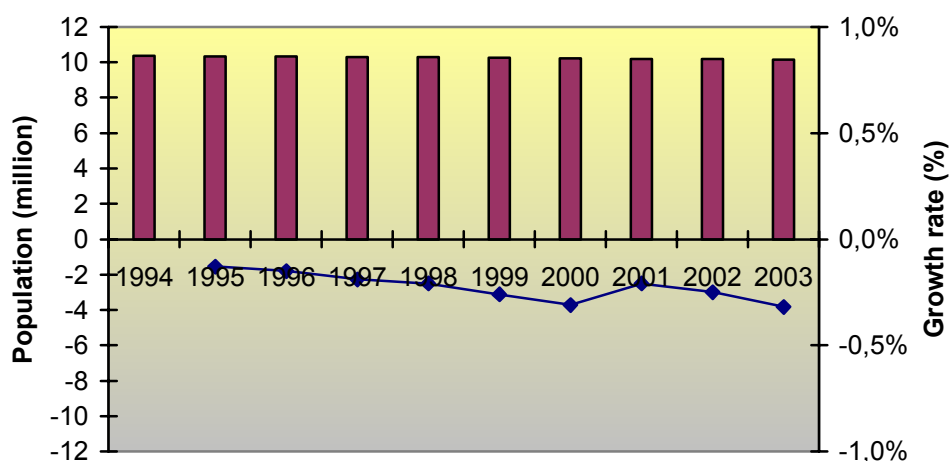


Figure 2. Hungarian population evolution

² Sources: EUROSTAT

The Hungarian median age is 38.57 years, but population growth is threatened by the low birth rate which is below the European average birth rate.

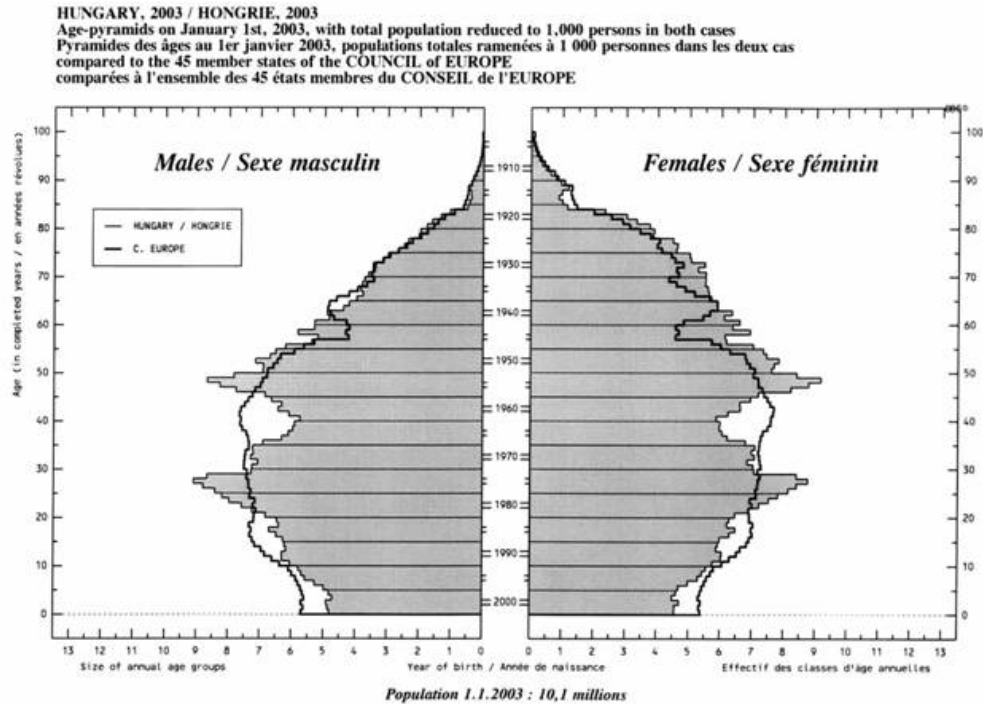
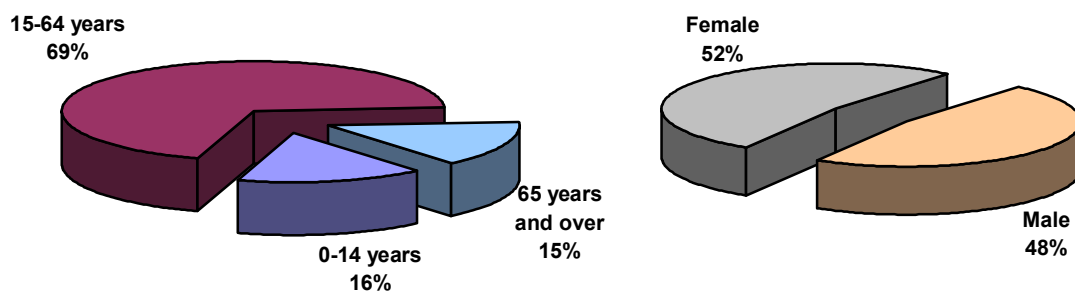


Figure 3. Hungarian age-pyramids (1.1.2003)³

The figure above shows the Hungarian age structure, with the bulk of the population between 15 and 64 years (70%).



Figures 4 and 5. Hungarian population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

After many years as a one-party Marxist state, Hungary became a multiparty parliamentary democracy in 1989. It operates under the Constitution of 1949 as amended in 1972, 1989, and 1997. The unicameral legislature consists of the 386-seat National Assembly, whose members are directly elected for four-year terms. The executive branch consists of a President, who is the Chief of State and is elected by the National Assembly, and a Prime Minister, who is the Head of Government. For administrative purposes, the country is divided into 19 counties, 22 urban counties, and the capital city.

2.3. Main airports

There are three international airports in Hungary, the main of which is Budapest-Ferihegy Airport, with more than 6.4 mill. passengers during 2004. This airport is managed by Ferihegy *Nemzetközi Repülőtér Üzemeltető Részvénytársaság* (Budapest Airport Rt. or Budapest Airport Plc), which is a public limited company. A privatisation process is in progress at the time of writing.



Figure 6. Budapest Airport

Airport	Passengers	Cargo (Tons)
Budapest	6,456,983	79,273
FlyBalaton	21,077	-
Debrecen	14,476	-

Table 2. Main Hungarian airport data (2004)

3. SPATIAL PLANNING SYSTEM

The spatial planning system in Hungary follows the lines of those countries that separate “regional development”, focusing on socio-economic issues and the reduction of territorial disparities, and “land use” or “urban” planning aimed at regulating the way territorial development takes place. This division is reflected both in the institutions and in the instruments that integrate the system, and are clearly divided along said lines although there is some degree of interrelationship.

3.1. Institutions

3.1.1. National

The Hungarian Government drafts the “National Regional Development Concept” (*Országos Területfejlesztési Konceptió*) and the “National Development Plan” (NDP), which are adopted by Parliament.

The main bodies in charge of spatial and development planning functions at the national level are the National Development Office (*Nemzeti Fejlesztési Hivatal* (NFH)) in charge of the National Development Plan, which coordinates the use of Community funds in the country, and the “Hungarian Office for Territorial and Regional Development” (*Országos Területfejlesztési Hivatal* (OTH)), created by the “Regional Development and Spatial⁴ Planning Act”, n. XXI of 1996 (*A területfejlesztésről és a területrendezésről*). The Office for Territorial and Regional Development acts as a technical and coordination body for the preparation of regional planning instruments and assists in the preparation of regional and local plans.

In order to assist national Government in these tasks, the same 1996 Act created the National Regional Development Council as a high level forum for negotiation and representation of a variety of interests. The Council acts in an advisory capacity to prepare decisions, make proposals, issue opinions and coordinate the formulation and implementation of regional development policy. The members of the Council represent the Hungarian Government, the Budapest government, “County Development Councils”, the chamber of commerce, trade unions, trade associations and municipal associations.

⁴ The title of the Act appears translated in different manners. All authors seem to agree on the first part “regional development”, but the second part becomes “town and country planning”, “regional planning” or “land use planning” depending on the translator. Here the term “spatial planning” is used in consonance with the terminology generally used in this project.

3.1.2. *Regional*

Hungary is divided into 7 regions established in the “National Spatial Development Concept” adopted by Parliament in 1998. These regions were established for statistical and planning purposes to meet the requirement of NUTS 2⁵ units for the implementation of EU regional policies but cannot be considered as levels of government.

Within each region there is a “Regional Development Council” established for the purpose of drafting the regional planning instruments and cooperating with other institutions. These councils do not form a layer of government and are not placed in a hierarchical position with regard to local authorities.

3.1.3. *Local and area wide*

Local government is divided into 2 levels, counties and municipalities. There are 19 counties, 20 county-towns, 148 towns and 2905 villages. Budapest has its own organization and is divided into 23 districts. Counties and municipalities are both political entities with their own directly elected assemblies, but their powers are very different. Counties are a relatively weak level of government and have no hierarchical relationship with municipalities. Counties have basically a coordinating role and assume only functions not performed by municipalities which are the main level of self-government.

Counties are active in regional development through their “County Development Council”, although their role has not been so clear since the establishment of the Regional Development Councils. Municipalities are more active in spatial planning and enjoy a considerable degree of autonomy for the adoption and implementation of land use plans. The County Development Councils are presided by the president of the county assembly and include representatives from the municipalities, the ministries in charge of regional development and spatial planning and the economic chambers.

Budapest was divided into 23 districts, each with its own local government. There is also a separate municipal government with jurisdiction over the entire area. The division of powers between the municipality and the districts takes into account whether a particular function affects the entire municipality or only the districts. Trunk roads, for instance, are managed by the municipality, while other streets are the competence of the districts. In the field of spatial planning, the municipality adopts a framework plan, while the districts are in charge of regulatory planning.

⁵ Nomenclature des Unités Territoriales Statistiques - NUTS

3.2. Instruments

3.2.1. Strategic plans or policy documents

At the national level there are two different planning instruments, the “National Regional Development Concept” (*Országos Területfejlesztési Konceptió*) and the “National Development Plan” (NDP).

The “National Regional Development Concept”, adopted by Parliament in March 1998 (Resolution n.35/1998), establishes very general strategic options. It defines principles and guidelines and aims to guide government action with a view to changing the spatial structure of the country, reducing regional disparities, mobilising regional resources and coordinating different sectors and administrations.

The National Development Plan focuses essentially on socio-economic development rather than on territorial issues. It has, nonetheless, a strong spatial component in as much as it searches to narrow the differences between different parts of the national territory and includes many provisions concerning activities with high territorial impact such as the construction of roads and other infrastructures.

The NDP constitutes the basis for the allocation of EU structural funds. The current Plan was approved in 2003 and covers the period 2004-2006. This Plan mentions airports in sub-chapter 4.1.6, entitled “Expanding airport capacity” where it does little more than present very briefly the current situation, stating that:

“The country has only one international airport that can meet the present traffic level. In line with international trends the traffic at Ferihegy International Airport in Budapest and also at temporary airports is gradually increasing. However there is no regular inland air service. Compared to other important hubs in Central and Eastern Europe Budapest has considerably strengthened its position in recent years. Its current passenger volume is approx. 30% less than in Vienna and 10% less than in Prague. If the trend continues an expansion of Budapest airport could be envisaged in a short-term perspective, developing its position as a hub for transit flights to Eastern Europe and to the Middle East. At regional level there are up to four airports offering future potential for commercial use.

Currently the airports of regional importance – except for Debrecen and Sármellék – can receive only small- and medium-sized planes safely, and only function for seasonal tourism, sport and business journeys.”⁶

⁶ The English version of the NDP 2004-2006 can be downloaded at:
<http://www.nfh.gov.hu/angol/xindex2.htm?t=2&i=946>.

Further down in the document, paragraph 4.1.10 lists the institutions involved in air transport but does not provide any analysis of their operation. Priority 3 summarizes the situation stating that:

“In air transport the national airport has reached the limits of its capacity, while regional airports play essentially no role in economic activity, despite the fact that in international comparison the air transport of Hungary would justify the use of around three regional airports.”

In order to improve this state of affairs, the NDP proposes that:

“an enlargement of air transport facilities will also take place so that they can serve the increased demand for air travel and cargo. The national airport and two regional airports shall be expanded.”

When describing the available financial resources the Plan indicates that regional airport development is financed by the European Regional Development Fund and when specifying the strategies defined in relation to transport infrastructure it includes the improvement of accessibility by the modernisation of the regional airports. The document does not go into further detail as to what regional airports will be expanded or how.

Regional plans follow along the same lines as their national counterparts, providing more detail for each of the 7 planning regions. The plans are still being drafted and there is strong competition among regions to locate the future regional airports within their territory.

At the local level municipalities also adopt strategic plans, the so-called “urban development strategy⁷” (*településfejlesztési koncepció*) where they set their socio-economic development goals for the entire municipality. The plans are mandatory for all municipalities, but their content is very broad and does not contain any binding elements. The law, rather than regulate their form and content, merely provides a short definition, according to which the local development strategy is “a document, approved by a local government resolution, outlining the municipal development resolutions of the local government on which the general zoning plan is based”.

3.2.2. Local (framework) plans

Local planning is regulated in Hungary by Act LXXVIII of 1997, “on the Formation and Protection of the Built Environment” (1997. évi LXXVIII. törvény az épített környezet alakításáról és védelméről). According to this act all

⁷ The direct translation of the Hungarian term “*koncepció*” would be “concept”, but it seems more adequate to use the word “strategy” as found in the translation of the Act provided by the Hungarian authorities.

municipalities must prepare a “Structural Plan” (*településszerkezeti terv*) covering the entire municipal territory⁸.

The structural plan provides the guidelines for the spatial development of the municipality, setting the boundary between the areas that can be developed and those where building is not allowed. It defines the main infrastructures and other structural elements needed for the functioning of the settlement (arterial roads, large public parks, etc.) and types of land uses allowed. Regarding permitted land uses, the structural plan does not enter into detail but rather defines the floor/area ratio for each use. The plan must also indicate the areas affected by pollution and soil contamination and those that are prone to flooding and other risks, and in general, “*all other factors which are influential to the utilization of and building on the area and are specified by separate legal regulations*”. This would include noise, since it must be considered as a factor influencing land use regulated under separate legislation, as is the case with aviation noise.

Structural plans are adopted by resolution of the municipal council and become binding only on the municipal administration, but not on third parties. The plan must be observed by the local administration when preparing regulatory plans but has no binding force and generates no development rights.

In Budapest the structural plan is adopted by the Municipal Government for the entire municipality, together with a “comprehensive zoning map” defining those elements that have an impact on the entire municipality. Such elements include the boundaries of areas zoned for development or for “non-development”, “*the boundaries of public areas and other areas necessary in the everyday functions of Budapest*”, protected areas, infrastructures, and “*the boundaries of areas affected by the application of special legal institutions*”.

3.2.3. Regulatory (detailed) plans

Regulatory planning takes place by means of 2 instruments that must always combine: the “regulatory plan” (*szabályozási terv*) and the “zoning and building ordinance” (*helyi építési szabályzat*). Detailed plans are only mandatory in areas designated for new development or for urban renewal, in areas that require special attention because they include special values (i.e.: natural preservation areas, heritage buildings) and “*in all other instances where the enforcement of the local order of construction regulation otherwise requires*”. The Act specifies that these detailed plans can be prepared either for the entire municipality or for a portion of the same, but establishes a minimum size of at least one block.

⁸ For an overview of the local planning system in Hungary see: Gábor Locsmándi, Gábor Péteri, Béla Varga–Ötvös: *Urban Planning And Capital Investment Financing In Hungary*. Open Society Institute. Local Government and Public Service Reform Initiative. Budapest, 2000. <http://lgi.osi.hu>.

Regulatory plans, together with the zoning and building ordinances, provide a very detailed regulation of land uses and building activities. These planning documents are complemented by the “National Planning and Building Code” (*Országos Településrendezési és Építési Követelmények (OTÉK)*) which regulates the different type and sub-types of land uses that can be allowed in building and “non-building” land, specifying for each of them percentages of maximum lot coverage, maximum heights and minimal area that must be landscaped in each lot. These plans are usually drawn on a very detailed scale, 1:1,000, and must regulate certain conditions like the minimum size of plots, construction type, maximum lot coverage, maximum and minimum heights, infrastructure requirements, street and building lines, and environmental factors affecting each plot, including noise.

In Budapest each district adopts its own “regulatory plan” and “zoning and building ordinance”, which must be in accordance with the citywide structural plan and the “comprehensive zoning map”.

Regulatory plans and ordinances are adopted by decree of the Municipal Council and become binding to all parties. They are used as the basis for issuing building permits and give rise to legal rights for property owners.

Both local framework and regulatory plans in Hungary must include what the 1997 Act denominates “*the boundaries of areas affected by the application of special legal institutions*”. This expression is later defined in section 17 of the Act as follows:

“The following special legal institutions shall ensure the execution of zoning responsibilities:

- a) legal construction requirements,*
- b) prohibitions,*
- c) lot formation,*
- d) rights of first refusal,*
- e) expropriation,*
- f) registration for public roads,*
- g) road construction and public utility installation contributions,*
- h) mandatory measures related to zoning,*
- i) compensation regulations.”*

This would include the delimitation of areas affected by the spatial impact of airports, as is clearly the case with noise.

Airports must be included within local plans, although usually the plan will only reproduce the outline of the airport grounds but will not contain detailed regulations on land uses and buildings within this area.

3.3. Process

3.3.1. Inter-government consultation

All planning instruments are submitted to extensive inter-government consultations, both within and between levels of government. The above-mentioned “Development Councils” established at national, regional and county levels provide the forum for debate and coordination, in addition to the formal consultation requisites which allow the submission of written representations which will have to be considered in the decision making process.

The 1997 Act requires that during the preparation of local plans State and local administrations must be “included in the preparations” by notifying them of the key elements of the plan, the timeframe and the legal requirements concerning issues within their competence. Written representations can be submitted within 15 days of the notification date. It is further required by the Act that prior to the establishment and approval of local plans the Mayor has to request the opinion of the State Administration, allowing 21 days for the submission of written statements.

Following receipt of the written opinions, the local authority calls a conference with all the parties involved in the consultation and must prepare minutes of the proceedings indicating which opinions are approved and which not, along with the relevant explanations.

The plan must then be published and submitted, along with the opinions received, to the chief regional architect, or in the case of Budapest, to the Minister, for assessment. These “assessments” are mandatory, but the law gives no indication as to their extension and consequences, but seems to imply that such are connected with the necessary observation of the provisions of national and regional planning policy.

Once the plan is adopted the local authorities must send the plan or relevant extracts thereof to the parties participating in the assessment procedure.

In addition to these requirements, which apply to all local plans, the Act stipulates that structural plans must be discussed with neighbouring local authorities.

3.3.2. Policy Integration

The 1997 Act makes no specific mention of airport or any other specific infrastructure or policy. It is obvious, however, that by requiring that “the

boundaries of areas affected by the application of special legal institutions” be included in all local plans, along with the general obligation to take into consideration environmental protection or infrastructure networks, the law is giving the local planner a clear mandate to integrate other policies in general. This is clearly the case with noise protection zones which must be compulsorily included in local plans.

3.3.3. *Citizen participation*

Citizen participation takes place via consultation with social organizations during the preliminary phases of planning, but local plans must also be published and submitted to public participation by at least one month prior to their adoption.

The law does not specify how the process of citizen participation is to be carried out. It merely indicates that the plan shall be published “*in the locally accepted manner*”, and that all parties concerned can contribute their comments.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

In general all construction activities, including demolition, renovation and changes of use, require a building permit. There are a number of permits related to construction, besides the “building permit” proper. The law differentiates, among others, the “demolition permit”, the “occupation permit” and the “use amendment permit”.

In some cases municipalities can require a “preliminary building permit”, usually when the regulatory plan does not contain sufficient detail on plot subdivision or the layout of structures on the building site. Developers may also apply for these preliminary permits on a voluntary basis as a way to check the viability of their projects and the conditions that different authorities will require. Preliminary permits are binding on the issuing authority but are not sufficient to begin construction and must be complemented with an ordinary building permit.

4.1.2. *Exceptions or exemptions*

There is a list of constructions and structures that do not require a building permit. These are all of little significance and include solar panels, small wind generators, backyard recreational facilities and small swimming pools.

There are no specific exemptions or exceptions for airports or infrastructures in general.

4.1.3. *Institutions involved: inter-government relations*

Building permits are issued in general by local authorities, except in the case of “special types of structures”, such as roads, nuclear plants, etc. in which the “building authority” is the “administrative agency specified in the relevant legislation”. Local authorities participate in the proceedings but the permit is issued by the authority in charge of implementing the specific legislation.

In the case of airports this means that the construction of infrastructures is authorized by the aviation authorities and not by the municipality. At the same time, the Civil Aviation Authority must be consulted by the Municipality before any building permit can be issued in areas affected by aviation legislation.

4.1.4. *Relationship with planning*

Building permits can only be issued if the proposed project is in accordance with the land use plan and the building legislation. The 1997 Act does not contemplate any procedure to issue variance permits that would allow some

divergence from the plan, but some municipalities have adopted specific rules for cases in which a “regulation affects an owner in an inequitable manner or causes unnecessary hardship”⁹. No specific provisions exist in this respect regarding public infrastructures.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Environmental Impact Assessment was regulated in Hungary well before the country’s accession to the EU following the lines set by Directive 85/337/EEC¹⁰ (the “EIA” Directive).

Act LIII of 1995, “on the General Rules of Environmental Protection” (*1995. évi LIII. törvény a környezet védelmének általános szabályairól*) (known also as Environmental Protection Act) contains the basic legislation on environmental protection, including the rules applying to environmental impact assessments. The Act was implemented by “Government Decree No. 152 of 1995 on Activities Requiring the Completion of an Environmental Impact Assessment and on the Detailed Rules of the Connected Administrative Procedure”, which was later replaced by Decree 20/2001 “on environmental impact assessment” (*20/2001. (II. 14.) Korm. rendelet a környezeti hatásvizsgálatról*)¹¹. The list of activities has been complemented in 2005 by “Government Decree No. 2/2005 on the environmental assessment of certain plans and programmes”, which has completed the transposition into Hungarian law Directive 2001/42/EC¹² (the “SEA” Directive).

The system established by the 1995 Act requires a preliminary assessment of a long list of projects, including all permanent airports, in order to determine whether a full environmental review is necessary. The preliminary assessment allows the environmental authorities to determine whether no further evaluation is necessary and a permit can be issued or whether a detailed assessment is required. Some activities and projects, nevertheless, must always undergo a detailed evaluation.

In the case of airports the implementation decree specifies that a detailed EIA is always required whenever runway length is equal to or over 2,100 m.

⁹ Gábor Locsmándi, et al. Page 41.

¹⁰ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

¹¹ The Environmental Protection Act and the 2001 Decree have been integrated in a Unified Text.

¹² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

The 2005 Decree lists a number of planning instruments which always require an Environmental Impact Assessment, including national, regional and local spatial plans with the exception of regulatory plans covering only part of a municipality. Waste management plans, river basin plans and road plans also require an environmental assessment. In addition to this list, the Decree stipulates that this procedure will also be necessary for transportation plans setting the framework for activities included in the EIA legislation, such as airports. In some cases, such as local regulatory plans covering only part of a municipality, the decision on whether an environmental assessment is necessary or not will be made on a case by case basis following a preliminary evaluation.

4.2.2. *Other environmental controls*

The Environmental Protection Act requires all activities affecting the environment to obtain an environmental license. This is a very long list contemplating many projects not covered by EU legislation. As a result, a large number of activities are required to undergo an environmental assessment, either preliminary or detailed, in order to obtain an environmental license. Specific permits are also required under the legislation on water and basin protection. The Act also includes provisions for a “consolidated environmental use permit” integrating all the permits required to begin operations of facilities which require licenses under separate legislations such as air pollution and waste.

Council Directive 96/61/EC¹³ (the “IPPC” Directive) was transposed by “Act LV of 2001 on the modification of certain acts with the purpose of environmental protection” which modified the 1995 environmental Protection Act. The Act was implemented by Government Decree 193/2001 on the detailed regulations of the integrated permitting procedure. The list of activities is the same as in the “IPPC” Directive, with the addition of some mining permits, and does not include complex facilities like airports.

In the case of activities submitted to EIA procedures, the final decision covers all environmental permits, with the exception of those related to water.

Other activities not subject to environmental assessment must obtain a Business Site License according to Governmental Decree 80/1999, as amended by Governmental Decree 58/2003. The license is issued by the municipality after consultation with the environmental authorities.

¹³ Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

4.2.3. Institutions involved

Environmental licensing may take place at the local level in a limited number of cases but is usually handled by the regional environmental inspectorates. Many other institutions are to be consulted during the licensing procedures, including those dealing with nature conservation or national parks, public health authorities at the county or national level, plant and soil protection stations and the water management directorate.

4.2.4. Integration with other permits

Integration occurs when the activity or project must undergo an Environmental Impact Assessment, obtain a “consolidated environmental use permit” or is licensed according to the IPPC procedures.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Airport policy is formulated by the National Government. There are no statutory airport plans. Airport projects are approved by the Minister of Economy and Transport.

5.1.2. Instruments

National

The Hungarian Government has been adopting transportation policy documents for some years. The last, approved in May 2004, was the “Hungarian Transport Policy 2003-2015” (*Magyar közlekedéspolitika 2003-2015*)¹⁴ adopted by the National Assembly under Resolution number 19/2004. The document establishes priority objectives and strategic goals for the transport system, in the context of the National Development Plan, and defines the intended development according to the mode of transportation. Regarding airports and air traffic control the Transport Policy states that:

“The number one priority in this field is the development of the Budapest Ferihegy International Airport (“Ferihegy”) and its concession into a true hub port to improve profitability.

The coordinated development and operation of the Debrecen and Sármellék airports –both suited for international air traffic– has regional significance. The development of airports in the country must be harmonized with the National Plan for Regional Development and various local development programs.

.....

In the process of converting Ferihegy into a hub for the Central European region, we have identified the mid-term goals of improving capacity and service standards, and to construct a high-speed railway link between the airport and downtown Budapest. As part of a comprehensive environmental program, we will commission a sophisticated noise monitoring system, and design noise gates to protect residential zones.”

¹⁴ Available in English at:
http://en.gkm.gov.hu/balmenuangol/infrastructure/transportaccessibility/hungarian_transport_policy.html

The document goes on to underline the need to build, in cooperation with other Central European States, a “Common Airspace Air Traffic Control Centre” between 2007 and 2010, which would play an important role in implementing the Single Sky concept.

The Transportation Policy closes by declaring the Government’s responsibility for “developing the country’s trunk road and railway network, national public ports, the Ferihegy International Airport, and air traffic control” and announces the preparation of a rolling mid-term infrastructure plan which will be reviewed annually.



Figure 7. Pan-European corridors and TINA supplements in Hungary

Source: “Environmental Protection and Infrastructure Operational Programme 2004-2006”

At the same time, the Government of Hungary adopted the “Environmental Protection and Infrastructure Operational Programme 2004-2006”¹⁵, where it considers the situation regarding air traffic and reiterates the need to further improve Ferihegy International Airport and to develop a network of regional airports. The Programme’s overall objective is to improve the transport infrastructure and protect the environment, and aims at providing guidance for the use of EU structural funds listing forecasted investments under several categories. Among the different specific objectives regarding the environmental side of the Programme there is one that focuses on the development of air and noise monitoring and the preparation of strategic noise maps. Specific

¹⁵ Available in English at: www.gkm.gov.hu/data/8614/EIOP_031200_Finalen.doc

investments, nevertheless concentrate on environmental improvements and roads, with no specific provisions for airports.

Airport

There are no statutory airport plans. In Ferihegy International Airport the operator has prepared a long-term strategic plan in which the future construction of a taxiway and a new terminal are contemplated. This is, however, only an internal document designed basically for corporate purposes. The scope and contents thereof are not regulated and do not have legal repercussions.

5.1.3. *Process*

Airport strategic plans are internal documents not subject to a regulated process. In the case of Budapest the plan has been circulated to the municipalities and the aviation authorities for comment.

5.2. Spatial impact

5.2.1. *Implementation of ICAO Annex 14 requirements*

Obstacle limitation surfaces are implemented as defined in Annex 14. The affected areas are defined on the basis of the distance of the airport to the border. Municipalities are notified but the areas are not represented in spatial planning documents.

Municipalities must obtain the authorisation of the Hungarian CAA (*Polgári Légiközlekedési Hatóság, PLH*) before issuing building permits within the affected area. The CAA examines each case and determines the exact conditions to be applied to the construction.

5.2.2. *Noise Impact*

Noise protection in the vicinity of airports was regulated by Government Decree 176/1997, on Identifying, operating, and terminating noise protected zones in the neighbourhood of airports (*176/1997. (X. 11.) Korm. rendelet a repülőterek környezetében létesítendő zajgátló védőövezetek kijelölésének, hasznosításának és megszüntetésének szabályairól*).

According to the Decree, airports must calculate noise contours based on ten-year projections taking the 6 busiest months of the year. The contours are used to delineate 5 noise protection zones in which land use restrictions are applied on the basis of noise exposure.

The noise contours are submitted by the airport operator to the CAA which validates the calculations and sends the resulting map to the affected municipalities which then open a process of citizen participation of at least 30

days. During this term the proposed contours are exhibited both at the Municipality and at the aviation authority's offices, and all citizens can submit written representations. At the end of the process the Municipality formulates an opinion. In the light of the citizens' and municipalities' opinions the CAA determines the exact location of the contours on the map and prepares a proposal to be discussed with the local government. Once the final location of the contours is agreed upon with the municipality, the CAA approves the map with the noise mitigation zones.

The noise mitigation zones must be integrated into the spatial planning documents. The noise maps have been prepared for Ferihegy International Airport and are now pending final approval. For other airports, where the traffic volume is much lower, noise mapping will be compulsory when they reach a certain number of movements per day for 15 consecutive days or for 30 days within a year.

The land use restrictions deriving from the noise maps are enforced via their integration in land use plans, and are also made public by including them in the land registry records.

5.2.3. Risk prevention

There are no provisions for third party risk in the vicinity of airports in Hungarian legislation.

5.2.4. Land reserve for future construction

Land reserves for future airport development can be established by including the necessary provisions in the spatial planning instruments. The reserve can only be maintained for a limited period, since owners can request that the land be bought to the effect that expropriation procedures must begin within 3 years of such request.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: A building permit issued by the local authority is required for the construction of airport buildings (i.e.: a terminal). Airport infrastructures, such as runways, taxiways, etc., do not require such permit but must be authorized by the aviation authority, after hearing the opinion of the municipality.
- b) Environmental permits: Airports are required to obtain all environmental permits in the same terms as with other activities. In the case of a new airport or a major expansion requiring EIA, the final decision at the end of the assessment procedure will cover all environmental permits,

except those related to water, which must always follow their specific procedure.

Ferihegy International Airport is in the process¹⁶ of obtaining a “consolidated environmental use permit” according to Act LIII of 1995, “on the General Rules of Environmental Protection”. This permit would cover all the necessary environmental permits.

- c) Civil aviation: Before buildings may be put into operation it is necessary to obtain from the municipality an “occupation permit”. This permit is intended to allow the building authorities to verify that a construction has been built in accordance with the terms of the building permit and is safe to use.

5.3.2. *Institutions and processes involved*

- a) Authorization: Infrastructure construction is authorized by the aviation authorities, but first they must hear the opinion of the municipalities. In the case of buildings the roles are reversed as it is the municipality which issues the building permit after consultation with the aviation authorities.

The environmental impact assessment and consolidated environmental use permits are handled by the environmental inspectorates.

- b) Supervision: Supervision is carried out by the same authorities that issue each permit.

5.3.3. *Integration with planning and environmental controls*

The environmental inspectorate may inspect “ex officio” the operation of any facility or activity requiring an environmental permit and can order a full environmental audit or even suspend operations if the conditions of the permit are not being fulfilled.

5.4. **Airport operation**

5.4.1. *Operating permit*

Airports are required to obtain a licence from the CAA before they can begin operation.

The CAA licence is independent from the “occupation permit” which may be required for buildings under the spatial planning legislation or the consolidated environmental use permit prescribed by the Environmental Protection Act.

¹⁶ As of September 2005.

All different requirements regarding aviation, construction or environment are treated separately.

5.4.2. Airport certification

Airport certification is required by the CAA according to ICAO provisions.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

The Act LIII of 1995, “on the General Rules of Environmental Protection” (Environmental Protection Act) includes some generic references to air pollution (section 22) and noise (section 31). The Act has been implemented by a series of Decrees dealing separately with noise and air quality issues.

Regarding air quality Hungarian law is in line with the EU *acquis* having adopted all the necessary legislation. There are no specific regulations concerning air quality at or around airports.

With respect to noise, all the necessary legislation is also in place, having transposed Directive 2002/49/EC¹⁷ (the “noise” Directive) with Section 2 of Act LXXVI of 2004 which amended the unified text of the Environmental Protection Act (2004. évi LXXVI. törvény a környezet védelmének általános szabályairól szóló 1995. évi LIII. törvény, valamint a természet védelméről szóló 1996. évi LIII. törvény módosításáról).

Noise regulations have been in place for some years, beginning with Decree 12/1983. (V. 12.) “on the protection against noise and vibration” (12/1983. (V. 12.) MT rendelet a zaj- és rezgésvédelemről), Decree 4/1984 (I. 23.) “on the Specification of limit values of noise and vibration load” (4/1984. (I. 23.) EüM rendelet a zaj- és rezgésterhelési határértékek megállapításáról) and Decree 8/2002 establishing noise immission limits (8/2002. (III. 22.) KöM-EüM együttes rendelet a zaj- és rezgésterhelési határértékek megállapításáról).

Airport noise was the object of a specific regulation, Decree 176/1997, “on Identifying, operating, and terminating noise protected zones in the neighbourhood of airports” (176/1997. (X. 11.) Korm. rendelet a repülőterek környezetében létesítendő zajgátló védőövezetek kijelölésének, hasznosításának és megszüntetésének szabályairól), modified by Decree 53/2004¹⁸. The calculation of noise levels was regulated by Joint Decree 18/1997 of the Ministry of Transport, Communication and Water Management and the Ministry of Environmental Protection and Land Planning. Said Decree defines detailed technical rules for the creation, utilization and abolition of protection zones around airports for the purpose of noise prevention (18/1997. (X.11.) KHVM-KTM együttes rendelet a repülőterek környezetében létesítendő

¹⁷ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

¹⁸ 53/2004. (III.31.) Korm. r. A repülőterek környezetében létesítendő zajgátló védőövezetek kijelölésének, hasznosításának és megszüntetésének szabályairól szóló 176/1997. (X.11.) Korm. rendelet módosításáról

zajgátló védőövezetek kijelölésének, hasznosításának és megszüntetésének részletes műszaki szabályairól), modified by Decree 36/2004¹⁹.

6.2. Institutions

Chapter IV of the Environmental Protection Act spells out the “Environmental responsibilities of Local governments” requiring municipalities not only to implement national legislation, but also to prepare an “environmental programme” in which one of the topics that must be compulsorily included is:

“protection against noise, vibration and air pollution, and the action plan devised around the strategic noise map prepared by the local authorities subject to the obligations of strategic noise mapping by virtue of specific legislation”

The objectives of the program may be implemented by means of specific bylaws when necessary, but must always be integrated into the community’s development plans.

Municipalities can set their own standards for environmental protection, but they must be more restrictive than the general legislation. Municipal bylaws and programmes on environmental protection must be sent to neighbouring municipalities and to the regional environmental authorities prior to being adopted.

Municipalities are also responsible for drafting and implementing emergency air pollution plans and adopting specific measures to reduce contamination by ordering the use of alternative fuels or restricting the operation of certain facilities as well as the use of motor vehicles.

6.3. Instruments

- a) Planning: Noise abatement planning should be included in the local environmental programmes but there is no experience as yet to reveal how noise strategic planning or noise action planning can be put into practice.
- b) Land use restrictions: In the vicinity of airports land uses will be restricted within noise protection zones set forth in the noise maps described above in 5.2.2. Within the 5 zones resulting from the noise contours land uses are restricted as follows:

¹⁹ 36/2004. (III.31.) GKM-KvVM *együttes rendelet a repülőterek környezetében létesítendő zajgátló védőövezetek kijelölésének, hasznosításának és megszüntetésének részletes műszaki szabályairól* szóló 18/1997. (X.11.) KHVM-KTM együttes rendelet módosításáról

ZONE	06:00-22:00	22:00-06:00	LAND USE RESTRICTIONS
A	Leq, M>75	Leq, M>65	No residential, office or social*
B	75 \geq Leq, M>70	65 \geq Leq, M>60	No residential, office or social
C	70 \geq Leq, M>65	60 \geq Leq, M>55	No new residential. No social uses. Insulation program for existing homes.
D	60 \geq Leq, M>55	55 \geq Leq, M>50	New residential only with insulation. Social only if no alternative available, must be insulated
E	60 \geq Leq, M>55	50 \geq Leq, M>45	Insulation requirements for new residential and social uses

*Social uses includes hospitals, schools, and similar uses.

Table2. Land use restrictions around airports

The noise contours and the resulting zones must be integrated into the spatial planning documents and become binding in the same manner as other provisions of the regulatory plan.

There is no specific provision for the establishment of land use restrictions for reasons of air pollution, but municipalities are obliged by law to integrate all environmental considerations into their land use plans. This means that, at least in theory, they could regulate the use of land on the basis of air pollution criteria.

- c) Compensation: Land use restrictions deriving from noise zoning do not give rise to economic compensation unless they deprive property owners of rights to which they were already entitled.

Homeowners within zone C may receive specific grants for soundproofing purposes. The resources will derive from the noise charges collected by airports. No insulation programme has yet been initiated, since prior approval of the noise contours is required and no such approval has been granted as yet.

6.4. Integration with spatial planning

Spatial planning legislation requires land use plans to integrate environmental considerations, and all local land use plans must include a specific section on environmental protection. The “National Planning and Building Code” (OTÉK) goes even further and prescribes that regulatory plans shall set immission and

emission standards for each zoning category, although this prescription has not in effect been implemented in current plans.

Noise contours in the vicinity of airports and the ensuing land use restrictions must necessarily be integrated into the local land use plans of the affected municipalities.

There has been no experience yet as to how the system will operate since the noise contours for Ferihegy International Airport have not been approved, being the only airport where the obligation to delimit noise protection zones applies.

6.5. Integration with development, construction or operation controls

Environmental Impact Assessments determine the controls to be adopted during the construction and operation phases. The aviation authorities regulate in detail all operating conditions regarding noise, such as night restrictions, preferential runways, noise abatement procedures, etc.

Directive 2002/30/EC²⁰ (the “noise-related operating restrictions” Directive) was transposed in 2004 with the modification of the 1997 noise legislation.

In Ferihegy International Airport night operations have been limited to 8% of the daily standard average movements, between 22:00 and 06:00h, and no scheduled landings or takeoffs may be planned between 24:00 and 05:00h.

The airport operates a noise monitoring system, regulated by Decree 176/1997, which requires that the system allow the authorities to verify compliance with noise abatement rules for each flight. The system is made up of 6 monitoring stations located in the vicinity of the airport.

The operator has supplied a telephone number to register citizen complaints and investigates each occurrence to determine whether a breach of operational rules has occurred. The number of complaints is, however, rather limited at an estimated 200 per year.

There is a noise surcharge which is applied on the basis of aircraft category, time of day and type of movement, landings being charged more than take-offs. The funds from the noise surcharge are used in “noise mitigation” activities under the control of the CAA. Once the noise contours are approved and the home insulation programme can be implemented, the resources will come from these funds.

²⁰ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

Air quality does not seem to pose any special problem in relation to the airport, the operator is now installing a measuring station within the airport grounds but no data are yet available. The National Government has a network of monitoring stations operated by the regions, but no data are provided specifically for the vicinity of the airport.

7. CASE STUDY – BUDAPEST - FERIHEGY INTERNATIONAL AIRPORT

Ferihegy International Airport was built between 1939 and 1944 as a civil and military aerodrome. It was only after the war, in 1947, that the decision was taken to reconstruct the airport for civil aviation purposes only. When it opened in 1950 it was operated by the “Hungaro-Soviet Civil Aviation Company” (*Magyar-Szovjet Polgári Légiforgalmi Rt.*), a predecessor of the “Malev” Hungarian Airlines.

In 1973 the airport was placed under the operation of the “Aviation and Airport Directorate” (LRI), which performed the multiple functions of operator, regulatory authority and air navigation service provider. In 2002 the Hungarian Government totally renovated the institutional setup and split these functions. The Civil Aviation Authority (*Polgári Légiközlekedési Hatóság*, PLH) performs the regulatory role, HungaroControl is in charge of integrated civil/military air navigation services, and Budapest Airport Rt. operates the Ferihegy Airport together with Siófok-Kiliti airport near Lake Balaton.

The airport operator is a private company owned until now by the Hungarian State which has decided to privatise the operation by selling 75% of the company’s stock. The ownership of the airport grounds and facilities would remain in public hands.

The privatisation process launched in July 2005 suffered a setback in September when the Municipal Labour Court of Budapest ruled that tender proceedings were invalid because they breached workers’ rights. This ruling was upheld by the Budapest High Court and the Hungarian Privatisation Agency (APV) is now preparing to launch a new tender. According to some of the selected bidders, the court’s ruling does not influence their interest in the airport and they intend to maintain their bid.²¹

When originally built in 1950 the airport had a large hangar, a terminal and a 2,500 m runway. In 1961 the runway was extended to 3,010 m and in 1985 a second runway of 3,706 m and a new terminal were added.

The airport currently has 2 runways and 2 terminal buildings. Terminal 1, the original building, has been recently renovated and was reopened in September 2005 to cater for low cost flights. Terminal 2 is divided into “A” and “B” buildings which are linked internally.

²¹ <http://news.airwise.com/story/view/1127515138.html>

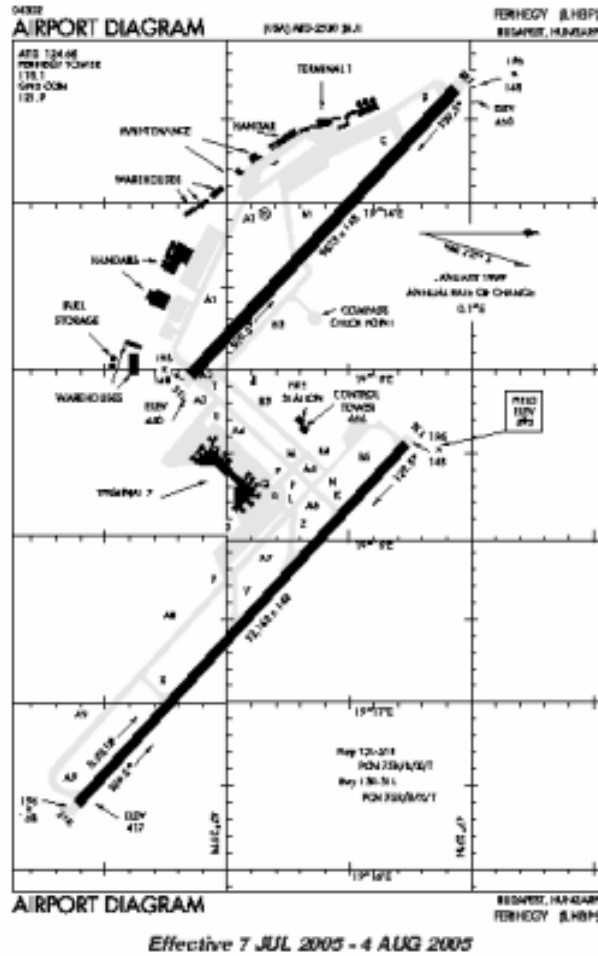


Figure8. Budapest Airport

The long-term strategy developed by the airport operator includes the construction of a new taxiway and, very probably, a new terminal to accommodate the expected increase in the number of passengers. The airport is also enlarging the cargo facilities and is building a logistics centre.

The National Development Plan has included within the country's priorities the development of Budapest Airport, and contemplates the possibility of building a rail link which would provide a much needed improvement in transport connection from the airport to the capital.

Traffic at this airport has been rapidly growing in the past few years as evidenced by the fact that the first quarter of 2005 evidenced a 35.60% increase over the same period in 2004, as shown in the following table:

	March 2005	Index 2005 /2004 March	January-March 2005	Index 2005/2004 January-March
Passenger traffic	581.311	41,80%	1.466.430	35,60%
Low cost traffic	176.312	840%	445.42	
Cargo (tons)	5.524	-16%	15.627	-6%
Aircraft operations	10.046	29,50%	27.54	25,60%

Source: www.bud.hu/index.nfo?tPath=/english/facts_and_figures/traffic_figures&prk=6933472161

Table3: Traffic growth at Budapest Airport

Future development of the airport does not include the construction of new runways and does not require an expansion of the airport grounds, which would entail extensive land use planning changes.

The noise contours have not yet been approved but may have a considerable impact on the airport surroundings, since it is in close proximity of developed areas. In the future any change in flight paths or increase in traffic that varies significantly from the calculation basis used for the definition of the noise maps will require an Environmental Impact Assessment.

COUNTRY CONTACTS

- **Budapest Airport Rt.**

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- **Ministry of Environment and Water**

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- **Hungarian Office for Territorial and Regional Development**

Péter Szegvári, Chairman

Péter Szendrényi, Deputy Head of Department

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”²²)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

²² European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Megyék</i>	Counties
<i>megyei jogú város</i>	County towns
<i>főváros</i>	Capital City
<i>Országos Területfejlesztési Konceptió</i>	National Regional Development Concept
<i>Nemzeti Fejlesztési Hivatal</i>	NFH – National Development Office
<i>Országos Területfejlesztési Hivatal</i>	OTH – Hungarian Office for Territorial and Regional Development
<i>A területfejlesztésről és a területrendezésről</i>	Regional Development and Spatial Planning Act
<i>településfejlesztési koncepció</i>	Urban development strategy
<i>településszerkezeti terv</i>	Structural plan
<i>szabályozási terv</i>	Regulatory plan
<i>helyi építési szabályzat</i>	Zoning and building ordinance
<i>Országos Településrendezési és Építési Követelmények</i>	OTÉK – National Planning and Building Code
<i>Magyar közlekedéspolitika 2003-2015</i>	Hungarian Transport Policy 2003-2015
<i>Polgári Légiközlekedési Hatóság</i>	PLH – Hungarian CAA

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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

IRELAND

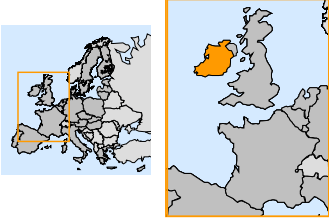


This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

The European Commission does not guarantee the accuracy of the data included in this publication, nor does it accept responsibility for any use made thereof.

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IRELAND		Location Map	
Population	4 mill. (58.7 inhabitant per sq. Km)		
Airports network	Ireland has 9 main passenger airports. The 3 main airports (Dublin, Cork and Shannon) are owned and managed by three State owned companies, split from Aer Rianta on 2004		
Spatial planning system			
<p>Irish spatial planning system is fully decentralised, being local authorities the primary bodies responsible. Physical planning system in Ireland is run by 88 local planning authorities</p> <ul style="list-style-type: none"> Institutions <ul style="list-style-type: none"> National level <ul style="list-style-type: none"> Planning appeals board (An Bord Pleanála). Local planning decision appealed and decision about major infrastructure projects Minister of the Environment, Heritage and Local Government defines planning legislation Regional level <ul style="list-style-type: none"> Ad hoc grouping of adjoining local authorities Local level <ul style="list-style-type: none"> Local planning authorities Instruments <ul style="list-style-type: none"> Strategic plans <ul style="list-style-type: none"> National Spatial Strategic (National planning framework) Local (framework) plans <ul style="list-style-type: none"> Development Plan (Authority's policies for land uses, development control, etc.) Regulatory plans <ul style="list-style-type: none"> Detailed Plans (Individual projects) Process: local planning authority must notify relevant government departments, relevant organizations, and public in general its development plan. All the comments must be considered, and before the plan is adopted, copies of the draft must be sent to specialist authorities who may give new recommendations 			
Regulation and permits			
<p>All infrastructures and constructions need a planning and environmental permits. Local authorities grant or refuse planning permissions, and their decisions can be appealed to An Bord Pleanála. General small constructions or development within an airport are exempt. All application for Planning Permission must be present with an environmental impact assessment</p>			
Airport planning			
<ul style="list-style-type: none"> Policy and planning: No specific instruments, but it is necessary a negotiation process with local authorities Spatial impact: Safeguarding maps (including advisory noise contours), bird hazard areas, and risk contours (Dublin airport) Airport construction: Planning permission from local authority, licence from EPA, and approval from IAA Airport operation: Licence and airport certification from IAA 			
Airport noise and air quality			
<p>At this time, aviation activities are not included within current Irish environmental legislation and European Directives have not yet been transposed. Then, there are no regulations about integrating airport noise or air quality within the spatial planning processes</p>			

1. SUMMARY

SPATIAL PLANNING SYSTEM

The National Spatial Strategy (NSS) is a coherent national planning framework for Ireland up to 2022. Key to the strategy is the concept of balanced regional development.

The primary bodies responsible for spatial planning in Ireland are 88 Local Authorities (29 County Councils and 59 City or Town Councils). Every Local Authority is required to prepare a Development Plan. In general, the Plan shows the authority's objectives for the sole or primary use of particular areas (e.g. residential, commercial, industrial, agricultural), for road improvements, for development and renewal of obsolete areas, and for preserving, improving and extending amenities.

Detailed plans are made on an individual project basis.

REGULATIONS AND PERMITS

Construction permits

All material developments or material changes of use of lands or property, unless specifically exempted, need planning permission. In deciding applications, authorities consider the proper planning and development of the area concerned, the development plan, and any valid, written submissions or observations made on a proposed development.

Exemptions include taxiways and navigation aids at licensed aerodromes.

All applications for development must be made initially to the Local Authority. Any Local Authority decisions can be appealed to the independent national appeals body, *An Bord Pleanála*.

Environmental permits

The regulation of EIA, both for projects as well as for plans and programs, follow closely along the lines of EU Directives on the subject.

Certain industrial processes require a licence from the Environmental Protection Agency, but Aerodromes and aviation are not included among them.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no central strategic aviation planning body in Ireland.

- Airport

The airport operator is responsible for the planning and development of the airport. There are no specific instruments for airport planning. Each airport operator must liaise with the relevant Local Authority and have the development of the airport incorporated into the local Development Plan.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

The Irish Aviation Authority has issued a Notice to the public Licensed Aerodromes to prepare a safeguarding map, showing approach surfaces and other areas of concern to aviation such as bird hazard areas. The aerodrome operator is responsible for monitoring any proposals for developments which may penetrate the Obstacle limitation surfaces for the aerodrome. The Irish Aviation Authority is also issued with copies of any development proposals which may effect the safe navigation of aircraft. There is a statutory period of five weeks for any interested parties to comment on any planning application to the local Authority.

- Noise Impact

There are presently no noise restrictions at airports. Advisory noise contours are on the safeguarding maps for some of the airports. Where an application is located within this noise intensive area, the local authority is informed that the occupants of the proposed development could be subject to the effects of intrusive aircraft noise. The final decision on the granting of planning permission lies with the Local Authority, subject to appeal to *An Bord Pleanála*.

- Risk prevention

A recent consultants report commissioned by the Department of Transport and the Department of Environment and Local Government established risk contours around the State Airports at Dublin, Cork and Shannon. These risk contours have been incorporated into the Fingal County Development Plan (the Local Authority responsible for Dublin Airport).

- Land reserve for future construction

The long-term needs of Dublin Airport's infrastructure have been included in local development plans for a number of years,

Construction

Before any development can proceed it must have Planning Permission from the Local Authority. No permit is required for extensions of an existing airport operational buildings, aprons, taxiways, airside roads, fences, ground signals and navigation aids.

Depending on the size and nature of the development, it may require an Environmental Impact Statement and/or licenses from the Environmental Protection Agency.

All construction works require approval from the Irish Aviation Authority to ensure safety and regulatory standards are maintained.

Operation

All commercial airports must be licensed by the Irish Aviation Authority, which ensures that all ICAO standards are met.

AIRPORT NOISE AND AIR QUALITY

Aviation activities are not included within current Irish environmental legislation. In effect, there are no regulations integrating noise or air quality with spatial planning in the vicinity of airports.

Local Authorities may impose conditions on the Granting of Planning Permission for a new development, such as restricting the hours of operation or equivalent.

At present the Dublin Airport Authority is in the process of commissioning a Noise Monitoring System in the environs of Dublin Airport. The purpose of this is to establish a baseline noise level record for any future environmental obligations. There is no other aerodrome with this facility.

Local authorities operate air pollution stations, concentrating usually on urban areas.

2. CONTEXT

Ireland is a republic occupying most of the island of Ireland in the northwest of Europe. The Irish Free State was established by treaty with Great Britain as a dominion within the Commonwealth of Nations in 1922, and it officially became the sovereign state of Eire in 1937. Full independence came in 1949 when the Republic of Ireland was proclaimed.

The Republic of Ireland is comprised of 26 counties and 4 provinces (Leinster, Munster, Connaught and Ulster). The Chief of state is the President and this is largely a ceremonial role. The Irish Parliament is known as Dail Eireann and comprises of 166 seats; members are elected by popular vote on the basis of proportional representation to serve five-year terms. Ireland joined the European Community in 1973.



Figure 1. Map of Ireland

Ireland is a small, modern, trade-dependent economy with growth averaging a robust 7% in 1995-2004. Agriculture, once the most important sector, is now dwarfed by industry and services. Industry accounts for 46% of GDP, about 80% of exports, and 29% of the labor force. Although exports remain the primary engine for Ireland's growth, the economy has also benefited from a rise in consumer spending, construction, and business investment. Per capita GDP is well above that of the EU average (22,400 €)¹ and the second highest in the EU behind Luxembourg.

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

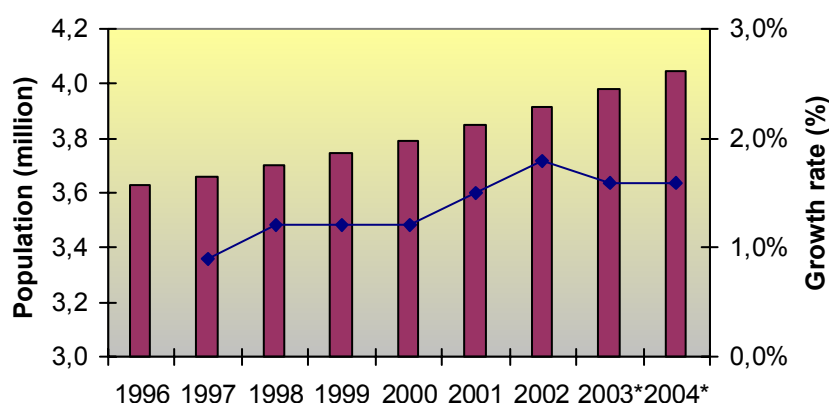
Over the past decade, the Irish Government has implemented a series of national economic programs designed to curb price and wage inflation, reduce government spending, increase labor force skills, and promote foreign investment.

Characteristic	Description
Population	4,027,700 (April 2004 est.)
Latitude / Longitude	53°00' N, 8°00' W
Land area	68,890 sq Km
Coastline	1,448 Km
Capital City	Dublin (1.14 million) ²
GDP per capita (PPS at market prices)	31,400
GDP real growth rate	4.5 %
Inflation rate	2.3 %
Unemployment rate	4.5 %

Table 1. Ireland – Main facts and figures (2004)³

2.1. Population and statistics

The total population in 2004 is estimated at 4.03 million - the highest figure since 1871. Ireland is one of the few Member States with a growing population. As well as continued natural increase in the population (i.e. births less deaths), since 1996, the level of immigration has surpassed the level of emigration.



*preliminary

Figure 2. Irish Population Evolution⁴

² Source: Central Statistics Office (2004 preliminary estimate)

³ Source: EUROSTAT

⁴ Source: Central Statistics Office, Ireland

As shown in Figure 2, Ireland has been experiencing population growth of between 1.0 and 1.8% since 1996.

Relative to other Member States, the young dependency ratio, which is derived by expressing the population aged 0-14 as a percentage of the population of working age (15-64 years), is very healthy in Ireland at 30.7% in 2004 (it peaked at over 50% in the 1970s).

People aged 65 years and over account for 11.2% of the total population in the State.

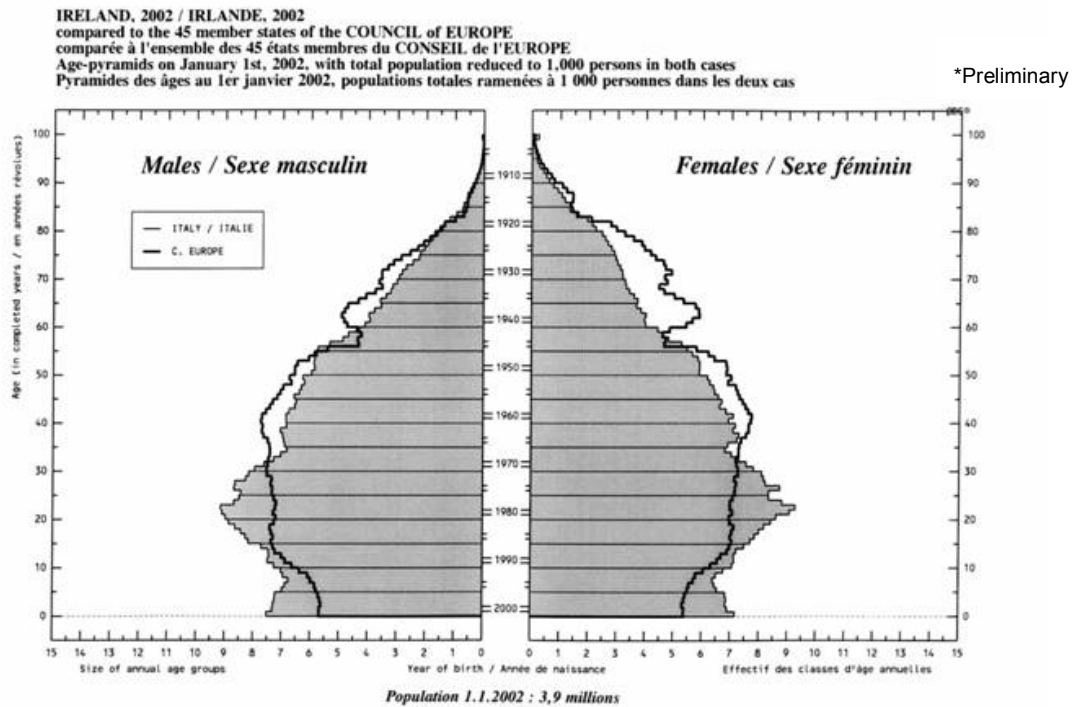


Figure 3. Irish Age-Pyramids (April 2002)⁵

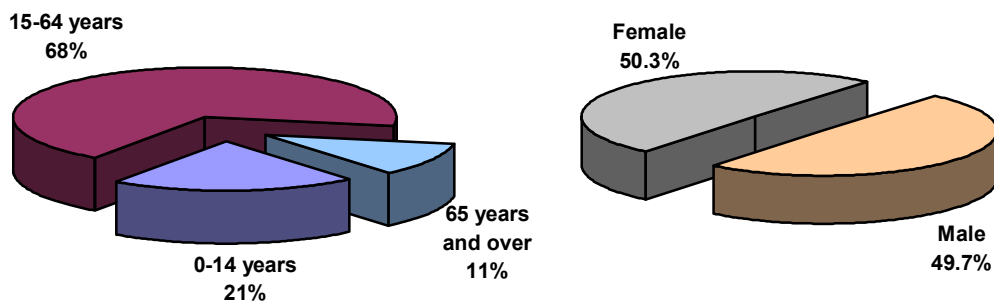


Figure 4 and 5. Irish Population Split⁶

⁵ Source: Council of Europe

⁶ Source: Central Statistics Office, Ireland (April 2004)

2.2. Government structure and powers

Ireland is a parliamentary democracy. The National Parliament (Oireachtas) consists of the President and two Houses: Dáil Éireann (the House of Representatives) and Seanad Éireann (the Senate) whose powers and functions derive from the Constitution of Ireland enacted by the People on 1 July 1937.

2.3. Main airports

Ireland has 9 main passenger airports with a total of 21.2 million passengers and 200,000 tonnes of freight (2003).

There are 3 State owned Airports at Dublin, Cork and Shannon. These three airports are currently being separating into three independent airport authorities, from the previous single Aer Rianta Authority. On the 1st October 2004, Aer Rianta was renamed the Dublin Airport Authority plc, in accordance with the *State Airports Act 2004*. From that date, all assets and liabilities previously owned by Aer Rianta and all contractual arrangements with Aer Rianta, were transferred to the Dublin Airport Authority plc.

The *State Airports Act 2004* also establishes new airport authorities at Shannon and Cork Airports. The Shannon Airport Authority plc and the Cork Airport Authority plc have separate boards of directors and have been authorised under the Act to prepare business plans, which may lead to their full separation from the Dublin Airport Authority plc, by May 2005 at the earliest.

Regional Airports are located at Donegal, Sligo, Knock, Galway, Kerry and Waterford. Other public Aerodromes are located at Connemara, three Arran Islands in Galway Bay and Weston near Dublin.

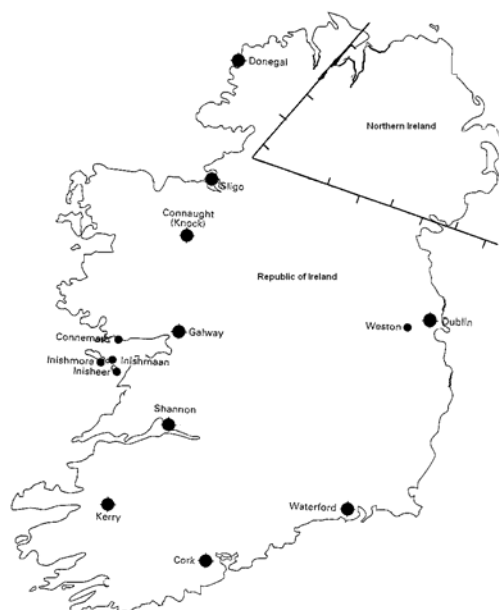


Figure 6: Public Licensed Aerodromes in the Republic of Ireland

Airport	Passengers	Cargo (Tons)
Dublin ⁷	15,856,084	133,871
Shannon	2,400,677	47,473
Cork	2,182,157	13,720
Knock ⁸	250,000	< 100
Galway ⁹	240,000	< 100
Kerry	156,000	30
Waterford ¹⁰	59,000	< 100
Sligo ¹¹	43,000	< 100
Donegal	38,355	< 100
Total	21,225,273	195,064¹²

Table 2. Main Irish passenger airports (2003)

⁷ www.aerrianta.ie – latest available statistics for Dublin Shannon and Cork

⁸ www.azworldairport.com for Knock, Kerry, Donegal

⁹ www.galwayairport.com

¹⁰ Waterford airport direct source (2004 passenger figure)

¹¹ Sligo airport direct source (2004 passenger figure)

¹² Cargo statistics are only available for the three State airports. It has been assumed that all other airports have cargo throughputs of less than 500 tonnes per annum

3. SPATIAL PLANNING SYSTEM

3.1. Institutions

The primary bodies responsible for spatial planning in Ireland are the local authorities.

3.1.1. National

The only statutory body at National level is the Planning Appeals Board, *An Bord Pleanála*¹³, through which decisions of the local authority can be appealed by affected parties. *An Bord Pleanála* also decides on major infrastructural projects outside the remit of the local authorities, primarily road developments. The development of road infrastructure is under the remit of the National Roads Authority. There is no equivalent organisation for the strategic planning and development of other forms of infrastructure.

3.1.2. Regional

There are no statutory regional planning institutions. There are ad hoc groupings of adjoining local authorities. Dublin Transport Office which plans and oversees transport projects in the greater Dublin Area is such a body. It guided transport policy in six local authority areas in the vicinity of Dublin.

3.1.3. Local and area wide

The physical planning system in Ireland is run by 88 local planning authorities: which consist of 29 County Councils and 59 City or Town Councils.

There are no metropolitan governments in Ireland.

3.2. Instruments

The Minister for the Environment, Heritage and Local Government is responsible for planning legislation.

Ireland's planning system was introduced on the 1 October 1964, when the *Local Government (Planning and Development) Act, 1963* came into effect.

The large body of planning legislation and regulations in the years since then, reflects the expansion of the statutory development control system to meet the demands arising from economic growth, rising public concern in the area of environmental control. It also reflects a desire on the part of the public for a statutory and independent planning appeals system.

¹³ www.pleanala.ie

Ireland is unique among European countries in that it has an independent third party planning appeals system which is operated by *An Bord Pleanála* (the Planning Appeals Board).

Arising out of the commitments in the Government Programme *An Action Programme for the Millennium*¹⁴, a comprehensive review of planning legislation was initiated in August 1997. The principle of the Review was to ensure that the planning system of the twenty first century would be strategic in approach and imbued with an ethos of sustainable development and would deliver a performance of the highest quality. The *Planning and Development Act, 2000* arose out of the Review. This Act consolidates all previous Planning Acts and much of the Environmental Impact Assessment Regulations. As well as consolidating existing provisions, the Act contains many significant changes and new initiatives.

The *Planning and Development Regulations, 2001 (S.I. No. 600 of 2001)* implement the Planning and Development Act, 2000 in its entirety. The Regulations incorporate and update the Local Government (Planning and Development) Regulations, 1994 to 2000 (which were made under the 1963 Planning Act) and all the Regulations made to date under the Planning and Development Act, 2000 itself. A number of important changes have been made to the procedural requirements set out in the 1994 Regulations, firstly to reflect the new provisions of the 2000 Act and, secondly, to ensure that the Regulations reflect new circumstances and requirements arising since the 1994 Regulations were made. In particular, changes have been made to procedures for the processing of planning applications to ensure that the great number of applications now being made annually can be processed as efficiently as possible.

3.2.1. *Strategic plans or policy documents*

The National Spatial Strategy¹⁵ was launched by Irish government in November 2002.

The National Spatial Strategy (NSS) is a coherent national planning framework for Ireland up to 2022. Key to the strategy is the concept of balanced regional development. The NSS sustains Dublin's role as the engine of the economy while strengthening the drawing power of other areas, bringing people, employment and services closer together.

The NSS also recognises the importance of other plans and programmes and their relevance to achieving the aims of the Strategy. In addressing spatial issues for the island of Ireland as a whole and strengthening cross-border co-

¹⁴ www.epan.ie/index.asp

¹⁵ www.irishspatialstrategy.ie

operation, the NSS acknowledges the importance of Shaping Our Future, the Regional Development Strategy for Northern Ireland.

3.2.2. *Local (framework) plans*

The main instrument for regulation and control of development is the *Development Plan*. Each planning authority is required to publish notice of its intention to review its plan, not later than 4 years after the making of a development plan. A new plan must be made every 6 years (ie. 2 years after the notice of the intention to review the plan has been published). The plan states the authority's policies for land use and for development control and promotion in its area. The authority, in exercising control, must consider the provisions of the Plan, and try to secure its objectives.

In general, the Plan shows the authority's objectives for the sole or primary use of particular areas (i.e. residential, commercial, industrial, agricultural), for road improvements, for development and renewal of obsolete areas, and for preserving, improving and extending amenities.

3.2.3. *Regulatory (detailed) plans*

Detailed plans are made on an individual project basis. A project developer has to show how the proposed development will comply with the objectives of the county development plans, and justify any variations. In certain cases the development plan can be amended to permit particular development proposals.

3.3. **Process**

3.3.1. *Inter-government consultation*

When making its development plan, a local authority must notify relevant government departments and other organizations listed in the Planning and Development Regulations.

3.3.2. *Policy Integration*

Any comments made by the organizations consulted must be taken into consideration while making the Development Plan.

3.3.3. *Citizen participation*

Before a Development Plan can be adopted, there is a public consultative process where any interested party can make comments on the proposal.

Public participation in making the Plan is important. The public can become involved in the making of the development plan, at the initial stage, when the planning authority publishes its intention to review the plan, at the draft plan stage and if applicable, at the amended draft plan stage. At all these stages, the

public can make submissions or observations, within specified time periods, on what is being proposed by the planning authority. Notice of the making of the draft plan is published and the draft plan goes on public display for at least 10 weeks, during which time the public may make submissions on its content. Any submissions received within the specified period must be considered before the Plan is adopted. Before a plan is adopted, copies of the draft must be sent to various statutory and voluntary bodies who may be able to give the authority specialist advice.

4. REGULATIONS AND PERMITS

The development control system operates in a fairly homogenous way throughout the country despite the fact that it is governed by National legislation and implemented by the Local Authorities. National infrastructure projects (over several Local Authorities) are coordinated through one nominated Local Authority.

All infrastructures and constructions need development and environmental permits granted by different administrative levels

4.1. Development control system

Planning Process

All decisions to grant or to refuse planning permission are firstly for the relevant planning authority and for An Bord Pleanála (the Planning Appeals Board) in an appeal. The Local Government Act, 2001 provides the framework for reserved and executive functions. Reserved functions are performed by elected councilors, executive functions by the authority's manager or delegated officials. Granting or refusing planning permission is an executive function. Under the Local Government Act, 2001, elected councilors can, by resolution, direct the manager to take a particular action. The use of this power for planning applications is restricted, and only occurs in a small number of cases (0.01% of applications in 1999).

All development, unless specifically exempted, needs planning permission. Where there is doubt over what constitutes development, anyone can refer the case to the planning authority for a decision on payment of the prescribed fee. The declaration made can be appealed to An Bord Pleanála, within 4 weeks of the issuing of the declaration, on payment of the prescribed fee. In general, authorities must decide planning applications within 8 weeks of the date of receipt of the application. The applicant or any person who made a valid submission in writing, in relation to the planning application, to the planning authority can appeal to An Bord Pleanála, within 4 weeks of the decision.

In deciding applications, authorities are restricted to considering the proper planning and development of the area concerned, including the preservation and improvement of amenities, the development plan, and any valid, written submissions or observations made on a proposed development. The fee for making a submission or observation on a planning application is currently €20. For details on the fees for making planning applications, the local planning authority should be contacted. Where permission is refused, or granted with conditions, the authority must give reasons for the decision. A planning permission normally lasts for five years, but may be extended in certain cases

Appeals

An applicant for permission and any person who has made a submission or observation on a planning application may appeal a planning decision to *An Bord Pleanála*, the Planning Appeals Board. Appeals must be made within 4 weeks of the decision. In an appeal, the planning application is considered anew by the Board, who examine all relevant issues independently. The Board must, among other things, consider the proper planning and development of the planning authority's area and any submissions or observations received. The Board's decision may only be challenged, within 8 weeks, by judicial review in the High Court. However, the Court may extend this period where it considers that there is sufficient reason for doing so. The Court will not reopen the planning merits of the case. It may only give leave to pursue the review process where it is satisfied that there are substantial grounds for claiming that the Board's decision is invalid or should be quashed. The person seeking leave must also have a substantial interest in the decision making process or have good and sufficient reason for doing so.

Enforcement of planning control

Enforcement of planning control is the responsibility of the planning authority. Where development takes place without permission, or where it does not comply with conditions of a permission, the authority may take enforcement action. Under the Planning and Development Act, 2000, planning authorities are obliged to follow up genuine complaints about breaches of planning control within a given timeframe, are entitled to retain fines imposed by Courts for planning offences to help finance more active planning control and can refuse to grant planning permission, subject to the consent of the High Court, to any developer who has seriously failed to comply with a previous permission. These provisions came into force on 11 March 2002. The authority must issue a warning notice then an enforcement notice and possibly initiate court action. Also the authority, or any individual or group, may seek a High or Circuit Court order against a developer, stopping an unauthorized development or use.

4.1.1. Activities subject to development control

All material development or material changes of use of lands or property.

4.1.2. Exceptions or exemptions

Certain categories of development are listed in the Planning and Development Act and regulations as exempt developments. There is a comprehensive schedule of exempt developments. These range from small domestic extensions, garages and sheds to, among other things, taxiways and navigation aids at licensed aerodromes. The construction of major roads are controlled under the Roads Act, and railways under the Railways Acts. Offshore developments are made under the Foreshore Acts.

4.1.3. *Institutions involved: inter-government relations*

The planning and development regulations list many State and other Bodies and Organisations who must be consulted by a Local Authority if certain conditions are met. Examples contained in the regulations include;

- where it appears to the authority that the development might obstruct or detract from the value of any tourist amenity or tourist amenity works—to Bord Fáilte Éireann,
- where it appears to the authority that the development might endanger or interfere with the safety of, or the safe and efficient navigation of, aircraft — to the Irish Aviation Authority,
- where it appears to the authority that the development might interfere with the operation and development of a licensed airport, whose annual traffic is not less than 1 million passenger movements — to the airport operator,
- where it appears to the authority that the area of another local authority might be affected by the development — to that local authority,
- where the development comprises or is for the purposes of an activity requiring an integrated pollution control licence or a waste licence—to the Environmental Protection Agency,

4.1.4. *Relationship with planning*

When a Planning Officer is deciding whether or not to grant permission on a planning application, he/she will take into account the development's conformance with the local Development Plan.

4.2. Environmental permits

4.2.1. *Environmental Impact Assessment*

All proposed new developments, over a certain size or of certain categories must present an Environmental Impact Statement with the application for Planning Permission. Projects needing environmental impact assessment are listed in Schedule 5 of the Planning and Development Regulations 2001.

The regulation of EIA follows closely on the lines of Directive 85/337/EEC¹⁶ (the "EIA" Directive).

¹⁶ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

Strategic Environmental Assessment has been implemented in Ireland through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 S.I. No. 435 of 2004, which do not include spatial planning, and the Planning and Development (Strategic Environmental Assessment) Regulations 2004, S.I. NO 436 of 2004, which transpose Directive 2001/42/EC¹⁷ (the “SEA” Directive).

4.2.2. Other environmental controls

Certain industrial processes require a licence from the Environmental Protection Agency. The schedule of industrial process and activities requiring a permit is under continuous review, and at present aerodromes and aviation are not included in this list.

4.2.3. Institutions involved

The Local Authority can impose additional controls on a proposed development by means of conditions attached to the grant of any planning permission.

4.2.4. Integration with other permits

There is little integration of permits between the agencies involved.

¹⁷ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

There is no central strategic aviation planning body in Ireland. The airport operator is responsible for the planning and development of the airport.

5.1.2. Instruments

The airport operator must liaise with the immediate and adjacent local authorities. The airport's plans should be incorporated into the local County Development Plans.

There are no specific instruments for airport planning.

5.1.3. Process

At intervals not exceeding five years, each Local Authority is obliged under the Planning and Development Regulations to revise and adopt a County or Area Development Plan. Proposals for these plans must be published locally and the public and institutions can comment and contribute to them. The finalised plan is formally approved by a vote in the elected council assembly.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The Irish Aviation Authority has issued a Notice to the public Licensed Aerodromes to prepare a safeguarding map, showing approach surfaces and other areas of concern to aviation such as bird hazard areas. The aerodrome operator is responsible for monitoring any proposals for developments which may penetrate the Obstacle limitation surfaces for the aerodrome. The Irish Aviation Authority is also issued with copies of any development proposals which may effect the safe navigation of aircraft. There is a statutory period of five weeks for any interested parties to comment on any planning application to the Local Authority.

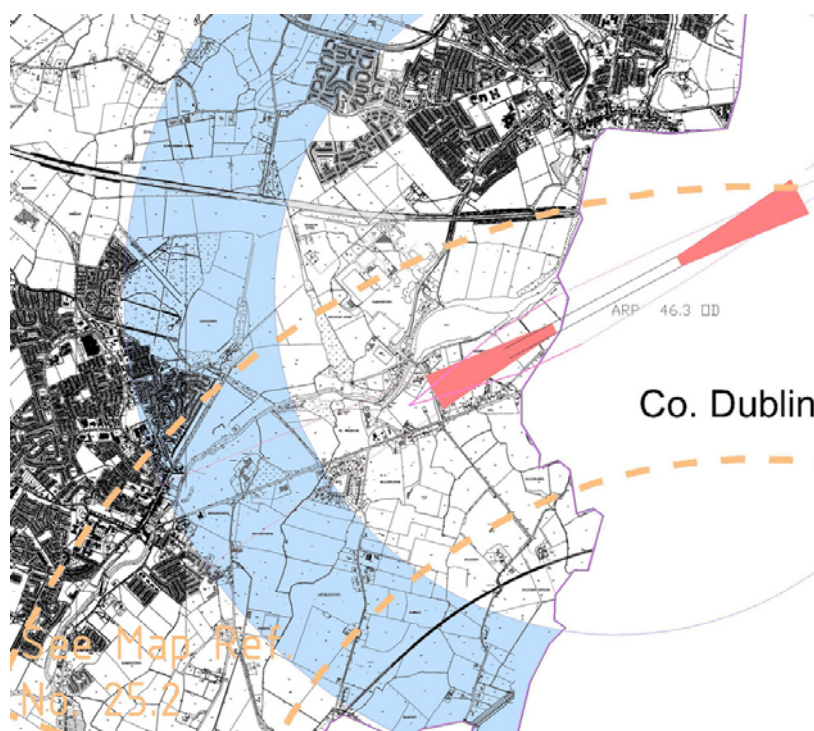


Figure 7. Sample map from Kildare County Development Plan safeguarding Weston Aerodrome which is located in the adjoining County

5.2.2. Noise Impact

There are presently no noise restrictions at airports. Advisory noise contours are on the safeguarding maps for some airports. Where an application concerns proposed development within this noise intensive area, the local authority is informed that the occupants of the proposed development could be subject to the effects of intrusive aircraft noise. The final decision on the granting of planning permission lies with the Local Authority, subject to appeal to An Bord Pleanála.

5.2.3. Risk prevention

A recent consultants' report commissioned by the Department of Transport and the Department of Environment and Local Government established risk contours around the State Airports at Dublin, Cork and Shannon. These risk contours have been incorporated into the Fingal County Development Plan (the Local Authority responsible for Dublin Airport).¹⁸

¹⁸ <http://www.transport.ie/aviation/publicsafetysones/index.asp?lang=ENG&loc=1862>



Figure 8. Extract from Fingal County Development Plan 2006-2011. Risk contours for Dublin Airport, including proposed Northern Parallel Runway 10L/28R in the current Fingal County Development Plan.

5.2.4. *Implementation of restrictions derived from servitudes*

When a land use is defined in the County Development Plan, no compensation is payable to the landowner because of any development restrictions on the property. An applicant for planning permission cannot claim compensation if the application is refused. There have been some claims for compensation in the courts, one concerning a proposed development within an airport approach area, but these have not been successful.

5.2.5. *Land reserve for future construction*

This is for the airport operator to place on the County or Local Development Plans. An example of this is the proposed Northern parallel runway at Dublin Airport, which has been in the County Development Plan since the 1970s. The developer will need to own or otherwise show legal title to the lands before development can commence. There is currently no legal provision for an airport operator to compulsory purchase adjoining land.

5.3. **Airport construction**

5.3.1. *Permits and authorizations required for airport construction or development*

All major developments will require planning permission from the Local Authority. Decisions of the Local Authority can be appealed to An Bord Pleanála (national Planning Appeals Board). Approval is also required from the aviation safety regulator (Irish Aviation Authority) to ensure safety and regulatory standards are established and maintained. This is a condition of the airport's licence or certification.

Some construction activities are, however, exempted under the Planning Development Regulations 2001, Schedule 2, Part 1, Class 32¹⁹. This grants

¹⁹ <http://www.irishstatutebook.ie/ZZSI600Y2001.html#ZZSI600Y2001SCHE2>

specific exemption to anyone holding an airport licence for development consisting of:

- (a) the construction or erection of an extension of an airport operational building within an airport (subject to certain floor area limitations),
- (b) the construction, extension, alteration or removal of aprons, taxiways or airside roads used for the movement of aircraft and the distribution of vehicles and equipment on the airside, within an airport,
- (c) the construction, erection or alteration of visual navigation aids on the ground including taxiing guidance, signage, inset and elevated airfield lighting or apparatus necessary for the safe navigation of aircraft, within an airport,
- (d) the construction, erection or alteration of security fencing and gates, security cameras and other measures connected with the security of airport infrastructure, within an airport, or
- (e) the erection or alteration of directional, location or warning signs on the ground, within an airport.

These exemptions are only applicable to the planning process; the licensee is still required to seek the approval of the Irish Aviation Authority for all infrastructural works at a licensed aerodrome.

5.3.2. Institutions and processes involved

The appropriate Local Authority is the primary body. For large projects, the Local Authority's decision is often appealed to *An Bord Pleanála*, the Planning Appeals Board.

5.3.3. Integration with planning and environmental controls

The Local Authority will ensure that any licenses required by the Environmental Protection Agency are in place. The Local Authority will consider the proposed development and how it complies with the County Development Plan.

5.4. Airport operation

5.4.1. Operating permit

Airports can only operate for commercial purposes when they are licensed by the Irish Aviation Authority (See 5.4.2 below).

5.4.2. *Airport certification*

All commercial airports need to be licensed by the Irish Aviation Authority (IAA). This licensing is the State's certification process. All flight procedures must be approved by the IAA and published in the Aeronautical Information Publication (AIP) Ireland.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

At this time, aviation activities are not included within current Irish environmental legislation.

The Environmental Protection Agency Act 1992 (Noise) Regulations, 1994 (S.I. No. 179 of 1994), set the procedures for noise complaints and possible redress measures to be adopted, but aircraft noise is currently not included.

Directive 2002/49/EC²⁰ (the “noise” Directive) has not yet been transposed, but Directive 2002/30/CE²¹ (the “noise-related operating restrictions” Directive) has already been transposed.

Air quality is governed by a general Air Pollution Act, 1987, and a number of Regulations, like the Air Quality Standards Regulations 2002 (S.I. No. 271 of 2002) of 5 June 2002, which specifies the limits for six pollutants, the European Communities (National Emissions Ceilings) Regulations 2004 - SI No 010 of 2004, and the Ozone and Ambient Air Regulations 2004.

6.2. Institutions

The Environmental Protection Agency is the institution charged with pollution control, including noise levels (no aircraft noise) and air quality. The IAA deals with aircraft noise in terms of airworthiness certification and compliance with current airworthiness noise requirements.

At present the Dublin Airport Authority is in the process of commissioning a Noise Monitoring System in the environs of Dublin Airport. The purpose of this is to establish a baseline noise level record for any future environmental obligations. There is no other aerodrome with this facility.

6.3. Instruments

It is possible for a Local Authority to impose conditions on the Granting of Planning Permission for a new development, such as restricting the hours of operation or equivalent. It is more difficult to impose such conditions on an existing operation.

²⁰ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

²¹ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

6.4. Integration with spatial planning

There are no regulations in effect integrating noise or air quality with spatial planning in the vicinity of airports.

6.5. Integration with development, construction or operation controls

The only opportunity for integration is during the preparation of the County or Area Development plans every five years.

7. CASE STUDY – DUBLIN AIRPORT

PROPOSED PARALLEL RUNWAY

Overview

Dublin Airport serves domestic, UK, European and Transatlantic markets and has enjoyed significant growth in recent years. Passenger traffic has more than doubled in the past 10 years from 8 million passengers in 1995 to 15.9 million passengers in 2003 (and 17 million in 2004). According to future passenger forecasts this trend is set to continue and by 2020 passenger traffic is forecasted to be over 30 million per annum.

Current Runway Capacity

Master planning studies in the 1960s concluded that, due to the substantial increase in air traffic forecast, two parallel runways orientated east/west should be constructed at the airport. With this in mind, airport planners set about purchasing the land necessary for a southern and northern parallel runway. During this time a consultative process was initiated with Dublin City Council²² resulting in the incorporation of plans for two parallel runways in the 1972 County Development Plan. The southern runway, Runway 10/28 was completed and officially opened on 21 June 1989. The length of the runway is 2,637 m.

Utilization of runway 10/28 is now over 40 aircraft movements per hour at peak periods. It has been argued that additional capacity could be achieved through better utilization but the potential capacity gains may not be sufficient to meet long-term traffic growth.

Proposed Northern Parallel Runway

To meet future traffic demands, in 2004 the Dublin Airport Authority²³ submitted a planning application for the development of a northern parallel runway which would enable the airport to accommodate approximately 30 million passengers per annum.

The length of the proposed runway is 3110 m. This length is based on consultation with the users and with minimising the impact of the construction on the surrounding road network. The length is derived from the take-off distance required for an A330-200/300. The length of the existing main runway

²² Dublin City Council has since been subdivided into 4 Local Authorities; Dublin Airport is now subject to the jurisdiction of Fingal County Council.

²³ From 1st October 2004, Aer Rianta has been renamed the Dublin Airport Authority plc, in accordance with the State Airports Act 2004.

is 2,637 m. The horizontal separation between the two runways would be 1,690.6m.

The width of the runway would be 60 m with 7.5 m shoulders either side. The shoulders may be constructed at the same time as the runway, or construction deferred to a later stage, subject to a review of the exact timing of the need.

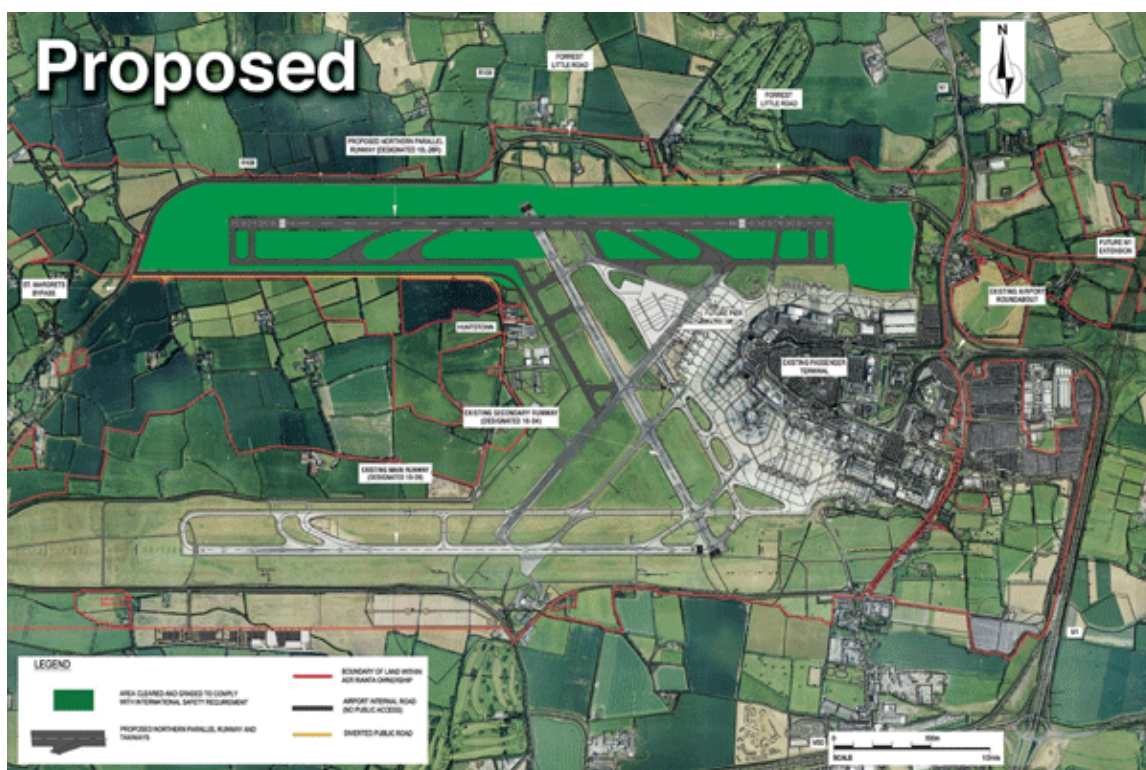


Figure 9. Proposed Northern Parallel Runway

Aerial photograph Dublin Airport

Spatial Planning

In accordance with the development requirements, the Dublin Airport Authority submitted its proposal to the local authority, Fingal County Council. As stated above, land has been reserved for this development within the local Development Plans since the 1970s (please see Figure 10).

As well as the reservation of land, the risk of noise from the proposed new runway has been integrated into Fingal County Development Plan (please see Figure 11).

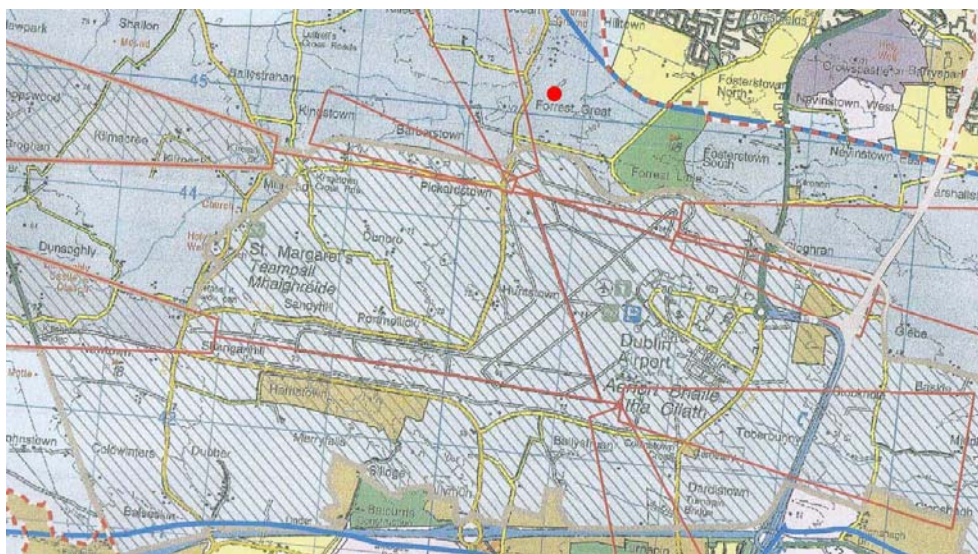


Figure 10. Old Fingal County Development Plan map showing approach areas to Dublin Airport. The approaches to the proposed Northern Parallel Runway, 10L/28R are clearly superimposed over the existing runway 11/29



Figure 11. Extract from Fingal County Development Plan 2006-2011. Risk contours for Dublin Airport, including proposed Northern Parallel Runway 10L/28R in the current Fingal County Development Plan.

Conclusions of Dublin Airport Case Study

The long-term needs of Dublin Airport's infrastructure have been included in local development plans for a number of years, i.e. integration of land reserve, noise and risk contours. The coordination between Airport Operator and Local Authority has worked well in this case.

COUNTRY CONTACTS

- **Irish Aviation Authority**

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- **Dublin Airport Authority**

Alan Levey – Manager Aviation Standards

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”²⁴)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

²⁴ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

Oireachtas

National Parliament

Dáil Éireann

The House of Representatives

Seanad Éireann

Senate

An Bord Pleanála

Planning Appeals Board

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- Irish planning laws: www.irishstatutebook.ie
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- Planning and Development Act, 2000
- Planning and Development Regulations, 2001 (S.I. No. 600 of 2001)
- State Airports Act 2004
- Local Government Act, 2001



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

ITALY



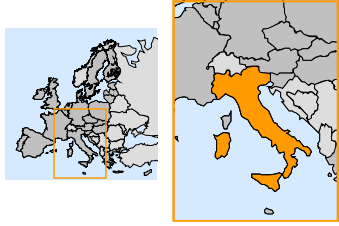
This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

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ITALY		Location Map
Population	58.1 mill. (197.6 inhabitant per sq. Km)	
Airport network	Large airport network owned by the State, which handed over airport management (including airport systems such as Milan and Rome) to concessionaries, which, in some cases, are private enterprises.	
<p>Spatial planning system</p> <p>Most planning powers have been devolved to the regions but legislative powers are shared between the national and regional levels.</p> <ul style="list-style-type: none"> • Institutions <ul style="list-style-type: none"> National level: National government is not directly involved in spatial planning Regional level: Regions Local level: Provinces and municipalities • Instruments <ul style="list-style-type: none"> Strategic plans: Regional plans, depending on the regional legislation Framework plans: Provincial Spatial Plan, depending on the regional legislation Regulatory plans: Local plans (Detailed Plans) , depending on the regional legislation • Process: Different but similar processes in each Region 		
<p>Regulation and permits</p> <p>Building permits granted by the local authorities, with some exceptions. EIA coordinated by different authorities, depending on the project (Ministry of Environment for airport projects)</p>		
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: Airport Development Plans by Law, sometimes integrated into the spatial planning system. • Spatial impact: Safeguard maps and noise contours, based on national legislation. Noise protection zones must be defined around airports. Risk impact assessment. • Construction: Building permit not required. Special procedures aimed at reaching agreement between administrations in order to protect the national interest • Operation: License to airport operators. Aerodrome certification (ENAC) 		
<p>Airport noise and air quality</p> <ul style="list-style-type: none"> • Noise: Noise protection zones impose land use restrictions. These zones must be integrated into local land use plans. Compensation measures financed through taxation. • Air quality: Air quality plans, which could be integrated into local land use plans 		

1. SUMMARY

SPATIAL PLANNING SYSTEM

Spatial planning is entirely a regional competence. Each region has its own planning legislation. Initially all regional planning systems were very similar but they are gradually diverging.

All regions have strategic plans covering the entire region and these normally define major developments, protected areas and the main infrastructures. The provinces are the basis of rather more detailed planning which can set specific reservations regarding future infrastructures. Provincial plans are binding on local plans and can have a direct effect on property owners when setting land reservation.

Strategic planning for an airport area has taken place at Milano-Malpensa independently of the normal spatial planning system.

Local plans usually leave the airport areas as a blank to be defined by means of their own planning instruments, but the perimeter cannot be expanded unless this is in accordance with the local plan or follows a special procedure. Local plans are required by law to include noise contours and the resulting zones, as well as the areas in which building restrictions are established in order to protect obstacle limitation surfaces.

Local land use plans are not used for airport planning purposes.

REGULATIONS AND PERMITS

Construction permits

In principle, all construction activities, except some minor work, require a building permit. However, public works undertaken by the State or its concessionaries are not subject to the building permit requirement stipulated by law, but to a special procedure required to ascertain the conformity of the project with spatial planning.

These procedures are based on negotiations aimed at reaching a consensus within a certain period of time, if this is not possible an "inter-administrative conference" (*conferenza di servizi*) which brings together all the representatives from departments in the affected Region and local authorities are convened for a period of another 60 days. If an agreement is not reached, the decision will be taken by the Central Government.

Environmental permits

EIA is regulated according to EU legislation, but airports require evaluation when runways over 1,500 m in length are involved. EIA decisions in these cases are taken at central level. As regards smaller airports the evaluation is carried out by the regional authorities. The evaluation of plans and programs has not yet been regulated by the State but several regions have already legislated on this matter.

Separate permits are often required as regards water, waste, or air pollution.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The 2001 National Transport Plan defines an “Integrated National Infrastructure System” including 23 airports for which some general policy guidelines are provided. The Italian CAA is preparing a National Airports Plan.

- Airport

“Airport Development Plans”, (*Piano di Sviluppo Aeroportuale*) are prepared for each major airport as approved by the CAA. These plans are not compulsory but if there are no plans, the airport must obtain CAA approval for each project. If the airport development plan is not in conformity with spatial planning the aviation authorities will endeavour to reach an agreement with the local and regional authorities. If this is not possible, the “*conferenza di servizi*” procedure will be followed.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The Regulation for the Construction and Operation of Airports (*Regolamento per la Costruzione e l'Esercizio degli Aeroporti*) defines obstacle limitation surfaces and obstacle evaluation, in accordance with Annex 14 of the ICAO. These surfaces, as well as the operation of navigation aids, are protected by delimiting safeguarded areas where building restrictions apply. Safeguarded area maps are made public through the municipalities and should be reproduced in land use plans.

- Noise Impact

Noise contour maps must be approved by an airport commission where all affected municipalities are represented. The maps define 3 noise protected zones where land use is restricted on the basis of noise exposure levels.

The resulting zones and zoning regulation must be included in land use plans.

- Risk prevention

The Navigation code adopted in May 2005 introduces a so called “risk impact assessment” to be taken into consideration in spatial planning and management. The concept has not been developed and needs specific implementation regulations.

- Land reserve for future construction

Current airport development plans do not include land for long term development but only for those expansions that may be needed to carry out the projects already defined in the plan.

Some spatial plans have included areas for future airport development.

Construction

Airport construction does not require a building permit, but must be subjected to a special procedure to ascertain whether it is in accordance with spatial planning. When no consensus is reached within a given term, the decision may be referred to the Cabinet of Ministers.

The environmental impact assessment procedure will usually cover all the permits required within the airport. If a facility is not included in the development plan it may be necessary to obtain permits for waste disposal or sewage discharge.

All airports must be authorized by the CAA. Individual projects not included within an airport master plan or not conforming to such a plan also require the authorization of the Italian CAA.

Operation

No environmental permit is required for operation.

No operation license is required, but the CAA must certify new airports or developments.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise has been regulated at national level. Regions can adopt more demanding standards on noise in general but not regarding airport noise.

Municipalities must adopt noise abatement plans to contain and mitigate noise pollution. In the vicinity of airports. The airport operator must prepare the plan and submit it to the regional and local authorities.

Noise maps are of use both as regards establishing restriction areas and determining eligibility for insulation aid. Airports must reserve 7% of their maintenance budget for noise insulation purposes.

Air quality

There is no specific legislation on air quality for airports.

Air quality must be taken into consideration in spatial planning instruments in order to prevent activities which would decrease air quality below the approved standards.

Air quality monitoring in the vicinity of the major Italian airports has not yielded any evidence of pollution levels above legal standards.

2. CONTEXT

Italy is a country of southern Europe comprising the peninsula of Italy, Sardinia, Sicily, and several smaller islands. It is generally mountainous, with the Alps in the north and the Apennines running the length of the peninsula.

Italy is divided into 20 regions (*regioni*): Abruzzo, Basilicata, Calabria, Campania, Emilia-Romagna, Friuli-Venezia Giulia, Lazio, Liguria, Lombardia, Marche, Molise, Piemonte, Puglia, Sardegna, Sicilia, Toscana, Trentino-Alto Adige, Umbria, Valle d'Aosta, and Veneto.



Figure 1. Map of Italy

Italy's per capita GDP is 105% of the European Union average (22,400¹), and as from 1 January 2002, the Euro became the sole currency.

¹ per capita GDP in PPS (Purchasing Power Standards) at market prices 2004
Source: EUROSTAT

Characteristic	Description
Population	57,888,200
Latitude / Longitude	42°50' N, 12°50' E
Land area	294,020 sq Km
Coastline	7,600 Km
Capital City	Rome
Per capita GDP (PPS at market prices)	23,500
GDP real growth rate	1.2 %
Inflation rate	2.3 %
Unemployment rate	8.0 %

Table 1. Italy: Main facts and figures (2004) ²

2.1. Population and statistics

Currently, the population of Italy is approximately 58 million with a density of 197.6 inhabitants per sq Km.

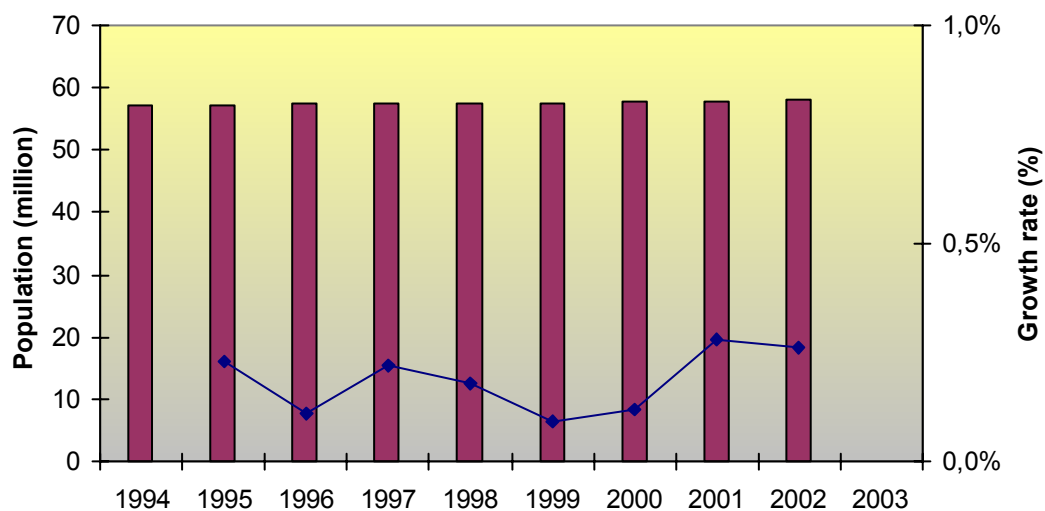


Figure 2. Population evolution

² Source: EUROSTAT

During the last 10 years the population in Italy has grown with growth rates of under 0.5%. The main reason for this low growth is the rate of 8.89 births per 1,000 population. The current Italian median age is 41.7.

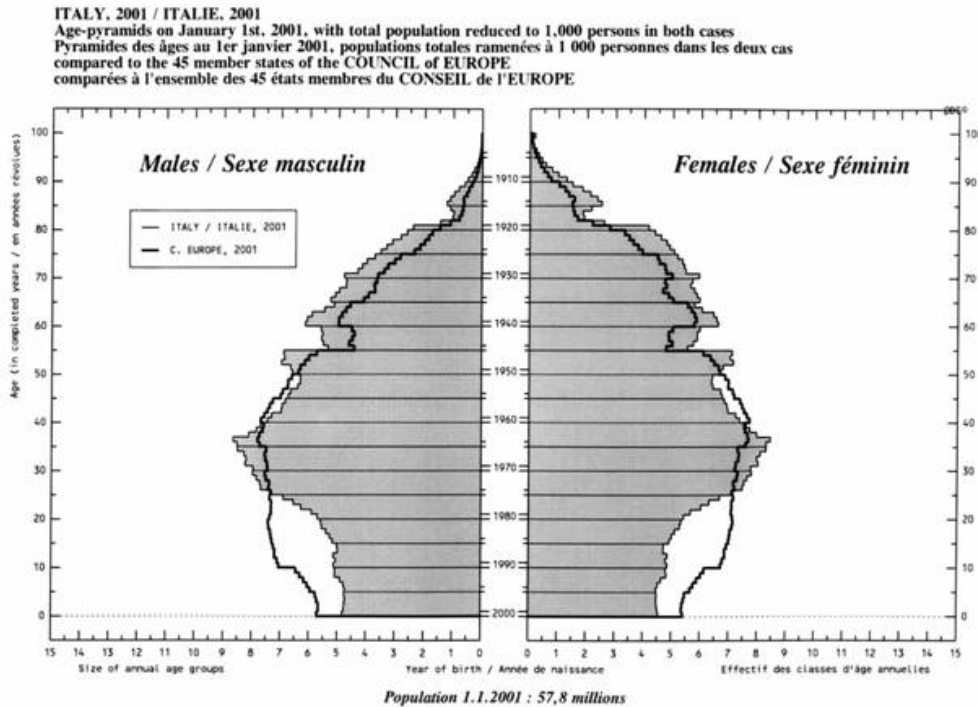
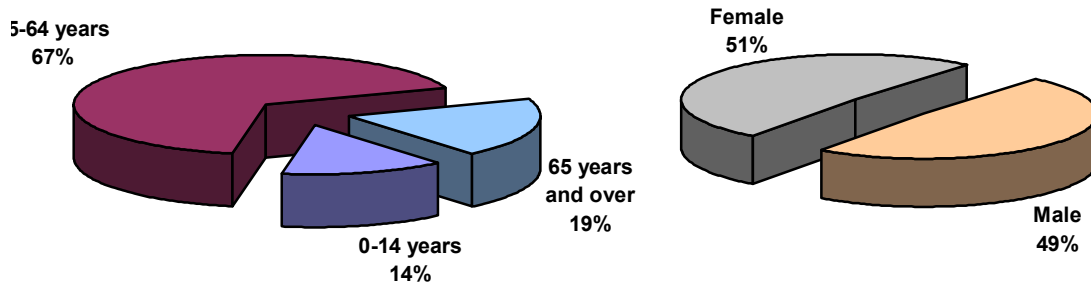


Figure 3. Age-pyramids (2001)³

The figure above shows the low Italian birth rate and the age structure, with the bulk of the population between 15 and 64 (66.7%).



Figures 4 and 5. Italian population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Under the 1948 constitution, Italian legislative power is vested in a bicameral parliament consisting of the 630 members of the Chamber of Deputies, which is elected by the people, and the Senate, made up of 315 members elected by region, plus 11 life members. Most deputies and senators are directly elected, but approximately a quarter of the seats in both houses are assigned on a proportional basis. The chamber of deputies is the more important body. The council of ministers, led by the premier, is the country's executive and it must have the confidence of the parliament. The Head of State is the President, chosen in a joint session by Parliament.

The country is divided into 20 regions, which are subdivided into a total of 94 provinces. The country's 20 regions also have parliaments and governments. As a result of a 2001 constitutional revision which increased the regional powers, the central government is responsible for foreign affairs, defence, public order and justice, electoral law, and basic environmental legislation, with the regions in charge of all other matters.

Regional autonomy has been an issue in Italian politics in recent years, undoubtedly supported by the emergence of parties such as the *Lega Nord*.

2.3. Main airports

In Italy, the network of 49 airports is owned by the State, which handed over airport management to concessionaries. In many cases, these concessionary companies are shared between private and public entities, especially in the larger airports.

An example of the airport management companies high public share is SEA (*Società Esercizi Aeropurtuali S.p.A*), which is the company managing the airports of Linate and Malpensa; all its activities are performed in compliance with the regulations set out by the Aviation Control Boards. SEA is a joint stock company controlled by the Municipality of Milan with a 84.56% share, while the remaining shares are held by the Province of Milan (14.56%) and other minor public and private shareholders (0.88%).

In addition, AdR (*Aeroporti di Roma*), has a high level of private involvement (Macquarie Airports Group – 44.74%, Leonardo S.r.l – 51.15%, local government – 3%, and others 1.11%). AdR manages the Rome airport system, which comprises the Fiumicino and Ciampino airports.

ENAC – the Italian Civil Aviation Authority -, the regulatory body of air transport activities in Italy, comprises in a single body the competences formerly carried out by three distinct entities, namely *Direzione Generale dell'Aviazione Civile* (Directorate General of Civil Aviation), *Registro Aeronautico Italiano* (Italian Airworthiness Authority) and *Ente Nazionale Gente dell'Aria* (National Body for

Air Men). It deals with the various regulatory aspects of the air transport system, and is committed to performing monitoring functions in relation to the enforcement of the rules adopted and to regulating the administrative and financial issues deriving from the system itself.



Figure 6. Airports and ANS network

The following table shows the commercial passenger traffic at the main Italian airports during 2004:

Airport	Passengers
Rome-Fiumicino	28,118,600
Milano-Malpensa	18,554,000
Milano-Linate	8,947,900
Venice-Marco Polo	5,859,181
Turin	3,132,716
Milano-Orio al Serio	3,334,161
Napoles-Capodichino	4,632,390
Bologna	2,908,523
Rome-Ciampino	2,517,000
Florence	1,485,207

Table 2. Main Italian airport data (2004)

3. SPATIAL PLANNING SYSTEM

3.1. Institutions

3.1.1. National

The National Government is not directly involved in spatial planning. Most planning powers have been devolved to the regions but legislative powers are shared between the national and regional levels⁴.

3.1.2. Regional

- Types of “regions”

Italy is divided into 20 regions, 4 of which are “special regions” which achieved a considerable degree of autonomy before the others. In terms of spatial planning and environmental competences, the system is nowadays homogeneous and there are no real differences among regions.

- Scope of powers as regards planning

All regions have full legislative and executive powers in the planning field. All regions have adopted their own spatial planning laws and regulations and control the activities of local governments in this area.

3.1.3. Local and area wide

Regions are divided into Provinces, 103 in the entire country. Until 1990, provincial governments had a rather limited set of powers but the “Law of 8 June 1990, No.142 on the reform of local autonomies” (*Legge 8 giugno 1990, n. 142 Ordinamento delle Autonomie Locali*) and the “Unified text of Legislation on Local Government” of 2000 (*D. Lgs. 18 agosto 2000, n. 267 - Testo Unico sull'Ordinamento degli Enti Locali*) granted provinces significant powers in the field of spatial planning.

Metropolitan areas gained legal status as “Metropolitan Cities” (*città metropolitane*) with Law 142 of 1990 which gave this status to the 9 largest cities in the country. Metropolitan Cities should take the place of provinces and assume all provincial competences, including spatial planning. A constitutional amendment in 2001 (*Legge costituzionale 18 ottobre 2001, n. 3 "Modifiche al titolo V della parte seconda della Costituzione*) ratified the existence of metropolitan government but in September 2005, none of the planned metropolitan cities had yet been institutionalised.

⁴ Article 117 of the Constitution as amended on 18 October 2001.

There are 8,103 municipalities in Italy, 46 of which have more than 100,000 inhabitants and 1,039 more than 10,000. More than 7,000 municipalities have a population of less than 10,000 inhabitants, and more than half have less than 3,000. The large number of very small municipalities was one of the reasons that prompted the reform of the system under the 1990 Law, together with the attribution of more powers to the provinces.

- Scope of powers in planning

Provinces, and metropolitan cities, adopt a “Provincial Spatial Plan” which becomes binding on municipalities, and exercises some control on the performance of spatial planning functions by municipalities.

Municipalities have powers to draft and adopt local plans under the control of provinces and regions, and are also in charge of issuing building permits and enforcing planning and construction legislation.

3.2. Instruments

The current planning system in Italy has its origins in “Law 17 August 1942, 1159, on town planning” (*Legge 17 agosto 1942, n.1150, generale urbanistica*)⁵ which was modified on numerous occasions and has been replaced by regional laws which share many common aspects which are becoming increasingly different. In this report special reference will be made to the legislation of the Lazio and Lombardia Regions, where the airports of Rome and Milan are located.

3.2.1. Strategic plans or policy documents

There are no strategic spatial plans at the national level. Regions prepare and adopt regional plans which vary somewhat depending on the region, since this field is now governed by regional legislation.

A.- Lazio

Regional planning in Lazio is executed through the “regional general spatial plan” (*piano territoriale regionale generale*, PTRG) pursuant to “Regional Law No. 38 of 12 December 1999, on spatial governance” (*Legge regionale N. 38 del 22-12-1999 "Norme sul governo del territorio"*). The plan provides guidelines and criteria for the location of industrial and commercial developments of regional importance, defines the structure of the infrastructure networks of regional significance and provides for the coherence of provincial and local plans. The PTRG also includes an investment program which states the priorities and the estimated resources required.

⁵ A new bill of law was introduced in July 2005 to replace the 1942 act and adapt the regulation of spatial planning to the constitutional reform of 2001.

The regional plan is adopted by the Regional Council and is binding on the lower level plans.

At the provincial level, as well as the metropolitan city of Rome, when it is institutionalised, planning is performed by means of the “Provincial General Spatial Plan” (*Piano Territoriale Provinciale Generale*, PTPG) which provides the framework of strategic action and sets out the spatial prescriptions required for the implementation of provincial powers in fields such as environmental protection, roads, transportation, heritage, education and sports. The PTPG defines spatial objectives and strategies and includes provisions for provincial infrastructures and services by determining their location and setting localization criteria. The plan includes also an investment program setting out priorities and cost estimates. It may also fix the term for the adoption or review of local plans.

Provincial plans are adopted by the Provincial Council and become binding on local plans. When it defines the precise location of land reserves, it is directly binding on property owners and the reserve is maintained for a period of 5 years.

The provisions pertaining to provincial planning will apply to the Metropolitan City of Rome once it is institutionalised.

B.- Lombardia

According to article 19 of Regional Law n. 12 of 11 March 2005, on “spatial governance” (*Legge regionale n. 12 del 11-03-2005 per il governo del territorio*) The “Regional Spatial Plan” (*piano territoriale regionale*, PTR) provides guidelines for regional programs as well as for provincial and municipal planning and sets social and economic development objectives. It includes a framework for the construction of regional and national infrastructures and criteria for environmental protection concerning not only natural areas but also the reduction of air and noise pollution.

Regional plans are adopted by the regional council.

At provincial level, the Spatial Coordination Plan (*piano territoriale di coordinamento provinciale*, PTCP) sets out social and economic development objectives and defines guidelines for municipal plans stating supra-municipal elements which must, of necessity, be taken into consideration at local level. These plans define mobility infrastructures, for which they state criteria as to the dimension and environmental integration and program construction. Provincial plans also delimit agricultural zones and areas protected for natural or landscape purposes.

Provincial plans are drafted and adopted by the provincial authorities, which must send a copy of the plan to the Region for information purposes.

Regional and provincial plans are binding on municipal plans and can have direct effects on property owners when defining the location of infrastructures or other projects of regional or national interest. In this case the required land is reserved for 5 years. After this term, the plan becomes only indicative.

In order to facilitate the integration of the Malpensa airport into a rather complex area from the ecological and urban points of view, the Region of Lombardy adopted “Regional Law No. 10 of 12 April 1999, Spatial Plan for the Malpensa Area. Special Regulation for the Malpensa Airport” (*Legge regionale 12 aprile 1999, n. 10 “Piano territoriale d’area Malpensa. Norme speciali per l’aerostazione intercontinentale Malpensa 2000*), which approved a spatial plan for the Malpensa area. This plan was rather atypical since, despite its spatial dimension, it was not drafted under the spatial planning legislation, but under the regional legislation on investment programming and finances⁶.

3.2.2. Local (framework) plans

A.- Lazio Local framework planning takes place via “municipal general spatial plans” (*piano urbanistico comunale generale*, PUCG) which must set out the guidelines for the spatial development and the long term strategic transformation of the municipality, divide non urbanized areas into zones according to their environmental, agricultural or landscape values, and define the perimeter of urbanized areas. In urbanized areas the plan will define sectors according to their historic and architectural values and regulate their possible transformation and use. PUCGs cover the entire territory of one or several municipalities.

Local plans regulate historic preservation areas and zones where no urban transformation is planned in detail, and provide guidelines for urban renewal and new development areas. The PUCG defines the infrastructure network, detailing the provisions of regional and provincial plans where these cannot be directly implemented.

Local land use plans are adopted by the municipal councils and become legally binding on all parties.

B.- Lombardia

Local land use planning takes place through “spatial governance plans” (*Piano di Governo del Territorio*, PGT) which cover entire municipalities and must be prepared by all municipal administrations. In small localities the contents of the plan can be simplified. PGTs, are made up of three separate parts, the “plan

⁶ See below in chapter 5

document” (*documento di piano*), the “services plan” (*piano dei servizi*) and the “regulations plan” (*piano delle regole*).

The first part, the “plan document”, which acts as a framework plan, setting goals and policies, as well as defining new development areas has no direct effect on the legal situation of the land.

Local framework plans in both Lazio and Lombardy show the airport boundaries, but do not regulate airport use or building conditions within airport grounds. The airport perimeter included in these framework plans is binding in the sense that any further extension must be in accordance with the local plan or needs to be approved in accordance with a special procedure. Local plans are required by law to include noise contours and the resulting zones, as described in chapter 6, as well as the areas in which building restrictions are established in order to protect obstacle limitation surfaces.

3.2.3. *Regulatory (detailed) plans*

A.- Lazio

In urban renewal and new development areas, detailed planning is contained in the “Municipal spatial implementation plans” (*piani urbanistici operativi comunali*, PUOC). These plans can be drafted not only by the municipalities but also by land owners representing at least 75% of the fiscal value of the property within the plan’s perimeter, and are adopted by the municipal council.

B.- Lombardy

The “services plan” and the “regulations plan” contain the regulatory part of the PGT. The first sets out the location and characteristics of infrastructures, public services and green areas, establishing land reserves for a period of 5 years. The regulations plan defines detailed zoning, and designates protected buildings as well as agricultural and ecological or landscape areas.

Both the “services plan” and the “regulations plan” are legally binding on all.

Local plans are drafted and adopted by the Municipal authorities subject to the Province’s check on the compatibility with provincial planning. Adopted plans are sent to the provincial and regional administrations for information purposes.

Local land use plans have not been used for airport construction or development. The airport area is left blank which makes it possible for the airport master plan to act as a regulatory plan within its grounds.

The Region can also adopt “regional area plans” (*piani territoriali regionali d’area*), setting out specific and detailed regulations for a particular area. These plans become legally binding on all parties. The Malpensa Area Spatial Plan mentioned in other parts of this report should not be confused with these area

plans despite its name, as it is based on different legislation and serves a different purpose.

Detailed plans have not been used in Lombardia and Lazio for the purposes of airport development.

3.3. Process

A.- Lazio

3.3.1. *Inter-government consultation*

- Horizontal: within the same level of government

The law does not specify what internal procedures must be followed in order to adopt spatial plans at the regional, provincial or local level, but it does require regional and provincial plans to be submitted to a “Regional Spatial Committee” (*Comitato regionale per il territorio*) for consultation. The Committee is a consultative body made up of representatives from the different regional departments dealing with spatial and environmental planning, together with 7 experts from outside the regional administration.

- Vertical: between levels of government

Prior to the adoption of a draft regional plan, the Regional government submits a draft outline of the plan to a “conference” where the regional and national administrations are represented. Once the draft outline is approved it must be sent to the provinces where it will be submitted to a provincial conference where all the municipalities will be able to participate, together with cultural, environmental, trade and professional associations, as well as the trade unions. These organizations are also consulted at the regional level during the same period of time. The resulting draft is then sent to the regional council, together with a report on all the consultations, for the final adoption of the PTRG.

A similar procedure is followed at provincial level to ensure coordination with the regional administration on the one hand and local authorities on the other. Regional-provincial coordination is achieved within a specific structure, the “inter-administrative conference” (*conferenza dei servizi*) where all pertinent departments of the regional and provincial administrations are represented. If the “inter-administrative conference” cannot reach an agreement on how to adapt the provincial plan to regional planning or policy, then, the final decision on the adequacy of the will rest with the President of the region and must be ratified by the provincial Council.

Prior to initiating the procedure for the adoption of a local plan, the Mayor must submit a preliminary document to a “planning conference” (*conferenza di pianificazione*) where representatives of the regional and provincial

administrations will express their opinions on the adequacy of the proposal as regards their respective plans and policies. Following the public participation process, the draft land use plan must be submitted, to the province and an “inter-administrative conference” (*conferenza dei servizi*) is convened to verify the conformity of the plan with provincial planning. If no agreement can be reached at the conference, the President of the province will issue the final decision on the above mentioned conformity. The decision of the conference decision must be ratified by the municipal Council.

3.3.2. *Policy Integration*

All spatial plans must integrate the provisions of higher level planning or policy instruments, as well as the constraints on property deriving from state legislation.

In the case of airports this means that spatial plans must include, if any, airport development provisions included in national programs, and are required to integrate land use restrictions arising from the legislation on noise and obstacle limitation surface protection.

3.3.3. *Citizen participation*

In Lazio the regional plan is not submitted to the citizens directly but only through consultation with social, cultural, environmental, trade and professional organizations. Provincial and municipal plans, on the other hand, are both open to citizen participation and anyone can submit written observations. The law does not specify how the draft plan is to be made available to the public and leaves provinces and municipalities at liberty as to how to instrument the citizen participation process.

B.- Lombardy

3.3.4. *Inter-government consultation*

- Horizontal: within the same level of government

Regional, provincial and municipal plans are adopted by the respective councils, made up of directly elected representatives. There are no specific provisions as to how horizontal coordination has to be arranged.

- Vertical: between levels of government

Notification of the decision to draft or revise a regional plan must be sent to all provinces and to the “local authorities Conference” (*Conferenza delle autonomie*), where all local governments are represented. Provinces and local

authorities may submit proposals before the plan is prepared and after the draft plan is adopted.

In the case of provincial plans, local participation is managed via a “conference of municipalities” (*conferenza dei comuni*) which must give its opinion prior to the adoption of the draft plan. The Region also examines the draft plan and issues an opinion on the basis of compliance with spatial planning law and regional plans or programs.

Municipal plans are submitted to the province and the region. The province will check only for compliance with the Provincial Plan, and the Region, through the regional agencies, will check for health and the environment (A.S.L. and A.R.P.A.), and may issue an opinion on health and environmental issues as well as land use and industry location.

3.3.5. *Policy Integration*

There are no specific provisions regarding policy integration concerning airports and spatial planning.

3.3.6. *Citizen participation*

All spatial planning documents are submitted to the citizens and to associations representing social and economic interests. Citizen participation procedures are usually announced in the press and anyone can submit an opinion in writing. Regional, provincial and municipal authorities may decide how to conduct the information process and use any means of dissemination and debate which they consider to be advisable.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. Activities subject to development control

In principle, all construction activities, except some minor works, require a building permit⁷.

4.1.2. Exceptions or exemptions

Public works are not subject to the same rules. According to article 7 of the Decree of 6 June 2001, n. 380 on the unified text of building legislation (*DPR 6 giugno 2001, n. 380, Testo unico delle disposizioni legislative e regolamentari in materia edilizia*)⁸ public works undertaken by the State or its concessionaries are not subject to the building permit requirement set out by law, but to a special procedure in order to ascertain the conformity of the project' with spatial planning.

This procedure was regulated in Decree 383 of 18 April 1994 on procedures for the location of public works of interest to the State (*Decreto del Presidente della Repubblica 18 aprile 1994, n. 383, regolamento recante disciplina dei procedimenti di localizzazione delle opere di interesse statale*). Article 2 states that verification of the conformity of State public works with land use planning is given by means of a consensus building procedure (*intesa*) between the State and the regional administrations.

Whenever the project is not in accordance with spatial planning or the State and regional administrations are not able to reach an agreement within 60 days, then an "inter-administrative conference" (*conferenza dei servizi*) is convened for a period of another 60 days. The "conference" brings together representatives from all the administrations involved, including local governments and consultative institutions. The conference tries to reach a consensus on whether the project is to be authorized and under what conditions within the stated period. If a unanimous decision is reached in order to authorize the construction, then this authorization takes the place of whatever permits, approvals, licences, etc. may be required to start the project.

If such a consensus cannot be reached within the stipulated term of 60 days, then a decision will be made by the President of the Republic following the

⁷ DPR 6 giugno 2001, n. 380, Testo unico delle disposizioni legislative e regolamentari in materia edilizia. Art. 6. and regional laws on this subject, i.e. in Lombardia Legge Regionale 11 marzo 2005 –N. 12, Legge per il governo del territorio, Art. 33.

⁸ The Law has been challenged before the Constitutional Court by several Regions who contend that it is contrary to the new division of powers set out in the 2001 constitutional amendment.

deliberation of the Cabinet in accordance with the procedure set out in article 81.4 of Decree No. 616, of 27 July 1977 (*Decreto del Presidente della Repubblica 24 luglio 1977, n. 616, attuazione della delega di cui all'art.1 della legge 22 luglio 1975, n.382*).

Besides this special procedure for public works, some special legislation has streamlined the procedure for specific projects approved under “Law No. 443, of 21 December 2001” (*Legge 21 dicembre 2001, n. 443, Delega al Governo in materia di infrastrutture ed insediamenti produttivi strategici ed altri interventi per il rilancio delle attività produttive*), known as the “goal law” (*legge obiettivo*), which lists a long series of projects that can be built following abbreviated procedures. The list does not include airport infrastructures, other than one case of a link with ground transportation networks.

4.1.3. Institutions involved: inter-government relations

Building permits are granted by the municipal authorities. When the construction involves public works of the State the special procedures to be followed are outlined in the preceding paragraph.

4.1.4. Relationship with planning

Building permits cannot be granted unless they are in accordance with the land use plan. However, the law allows for variance procedures usually involving a formal modification of the plan. In the case of State public works, an agreement may be reached in order to modify the plan or a decision can be made by the “inter-administrative conference” (*conferenza dei servizi*) or the President of the Republic to go ahead with a project even against the land use plan.

If a project is in accordance with the spatial plan the building permit has to be granted.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

The Environmental Impact Assessment procedure was introduced in Italy with Law No. 349 of 8 July 1986, on the establishment of the Ministry of the Environment and rules on environmental damage” (*Legge 8 luglio 1986, n.349, Istituzione del Ministero dell'ambiente e norme in materia di danno ambientale*), which transposed Directive 85/337/EEC⁹ (the “EIA” Directive) into Italian Law. The law was implemented with a Decree of the President of the Cabinet of Ministers of 10 August 1988, No. 377 (*Decreto del Presidente del Consiglio dei*

⁹ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

Ministri del 10 agosto 1988, n. 377), and this has been amended on several occasions.

The 1986 law included only Annex I of the “EIA” Directive, and the Commission took legal action against the Italian Republic due to the inadequate transposition of Community Law. In 1996, a Decree of the President of the Republic (*Decreto del Presidente della Repubblica 12 aprile, 1996 Atto di indirizzo e coordinamento per l'attuazione dell'art. 40 comma 1, della Legge n.146/1994, concernente disposizioni in materia di valutazione di impatto ambientale*) completed the transposition of the “EIA” Directive by declaring that projects in Annex II would be evaluated by the regions or submitted to a “verification” procedure in order to ascertain whether they should be subject to a full EIA.

Concerning airports, current legislation includes airports with runways longer than 1,500 m¹⁰ within the list of projects that require a full EIA, while all the rest are subject to the verification procedure. Article 8.4 of the Decree of December 27, 1988 (*D.P.C.M. 27 dicembre 1988. Norme tecniche per la redazione degli studi di impatto ambientale e la formulazione del giudizio di compatibilità di cui all'art. 6, L. 8 luglio 1986, n. 349, adottate ai sensi dell'art. 3 del D.P.C.M. 10 agosto 1988, n. 377*) states that the EIA requirement is applied both to the airport as a whole and to individual projects when they imply a substantial modification of the airport configuration, and specifically in the case of new runways over 2,100 m in length or the extension of existing runways beyond that length. Evaluation is also necessary in airports with runways longer than 2,100 m in cases of substantial modification of the airport master plan linked to an increase in air traffic with substantial spatial implications. EIA legislation changed in 1998 to reduce the runway length requiring evaluation to 1,500 m.¹¹

In the case of airports with runways longer than 1,500m, the EIA is processed by the State and the final decision is made after hearing the regional authorities. The regional opinion is not binding. Projects concerning airports with runways shorter than 1,500 m should be verified by the regional authorities, unless they impinge on an environmentally protected area, in which case they must be submitted to EIA.

Airport plans are regularly being submitted to the EIA procedure since they usually involve either the construction or extension of runways or substantial modifications to existing plans and entail an increase in air traffic.

No evaluation is conducted when modifying procedures, or when transferring flights between airports. This has also been the position of the courts in at least

¹⁰ The “EIA” Directive 85/337/EEC sets the limit at 2.100m.

¹¹ *DECRETO DEL PRESIDENTE DELLA REPUBBLICA 11 febbraio 1998. Disposizioni integrative al decreto del Presidente del Consiglio dei Ministri 10 agosto 1988, n. 377, in materia di disciplina delle pronunce di compatibilita' ambientale, di cui alla legge 8 luglio 1986, n. 349, art. 6.*

two cases concerning this issue, one of them regarding the transfer of flights from Linate to Malpensa in Milan.¹²

In order to transpose Directive 2001/42/EC¹³ (the “SEA” Directive), the Italian Parliament adopted “Law No. 72, of 18 April 2005, on complying with the obligations arising from Italy’s participation in European. Community Law 2004” (*Legge 18 aprile 2005, n. 62, "Disposizioni per l'adempimento di obblighi derivanti dall'appartenenza dell'Italia alle Comunita' europee. Legge comunitaria 2004"*). Article 19 of this Law delegates to the Government the responsibility for regulating the environmental evaluation of plans and programs within six months and sets out some very general guidelines. A full transposition had not, however, taken place by early September 2005.

Several regions have already introduced legislation involving the evaluation of plans and programs. Lombardy Regional Law No. 38 of 12 December 1999, on “spatial governance”, takes into account the strategic evaluation of spatial plans in article 4, although it does not include a complete regulation of the subject.

4.2.2. *Other environmental controls*

Airports are required to obtain environmental permits for waste sewage discharge in the same conditions as other industries. Buildings are also subject to municipal control regarding matters related to health and safety. Some facilities such as power stations or fuel storage will be subject to an environmental evaluation process or to a specific authorization if they are not included within the EIA project for the airport.

Airports as such are not required to obtain an environmental permit for operation.

4.2.3. *Institutions involved*

Environmental Impact Assessment procedures are conducted by different authorities depending on the projects. In the case of airports, the competence falls to the Ministry of the Environment and Spatial Planning together with the Ministry of Culture, as the responsible body for the cultural heritage. Regional and local authorities are heard during the process but the decision is made at national level.

All environmental impact evaluations at the national level are examined by the “National Commission for Environmental Impact Assessment” “*Commissione Nazionale per le Valutazioni di Impatto Ambientale*”, a consultative body

¹² T.A.R. LAZIO, Roma, Sez. III ter - 26 marzo 2004, n. 2886.

¹³ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

presided by the head of the EIA department at the Ministry of the Environment, made up of 18 members appointed by the Cabinet of Ministers from among university professors, experts and civil servants¹⁴. When evaluating infrastructure projects with a recognised regional component, the Commission will also include a representative from the region. The Commission provides an opinion which is taken into consideration in the environmental impact statement but is not binding.

4.2.4. Integration with other permits

In the case of airports and other infrastructures of national interest the environmental impact statement will cover most of the authorizations required but it may still be necessary to obtain local permits regarding building ordinances with regard to health and safety.

¹⁴ *Decreto-legge 14 novembre 2003, n.315. Disposizioni urgenti in tema di composizione delle commissioni per la valutazione di impatto ambientale e di procedimenti autorizzatori per le infrastrutture di comunicazione elettronica.*

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Airport plans and projects are approved by the Italian Civil Aviation Authority, “ENAC” (*Ente Nazionale per l’Aviazione Civile*), a specialized agency within the Ministry for Infrastructures and Transport. The procedure includes holding an “inter-administrative conference” (*conferenza dei servizi*) with regional representatives in order to integrate the plan or project within spatial planning documents and policies at regional and local level. When no agreement is reached at the “conference” as to how to achieve this integration, the decision may be left to the Cabinet of Ministers and the President of the Republic.

5.1.2. Instruments

Italy has had national airport planning instruments for, at least, the last thirty years. Currently ENAC is working on a new National Airports Plan which will implement the provisions of the National Transport Plan of 2001 (*Piano Generale dei Trasporti*, PGT), and is preparing the list of airports of national interest which will be used as a basis for future policy.

The National Transport Plan was introduced by Law No. 245, of 15 June 1984 (*Legge n. 245 del 15 giugno 1984, Elaborazione del Piano Generale dei Trasporti*) in order to provide transport policy with a harmonized orientation and coordinate the competences of State and Regions. It is drafted by an inter-ministerial committee where the Regional Presidents are represented and is adopted by the Cabinet of Ministers. The first PGT was approved in 1986¹⁵, and reviewed in 1991¹⁶. The current Plan was adopted in 2001 (D.P.R. 14 marzo 2001¹⁷). The PGT defines the “Integrated National Infrastructure System” (*Sistema Nazionale Integrato dei Trasporti*, SNIT) in order to determine what the infrastructures with national relevance are. In the case of airports this included 23 locations for which the PGT adopts some proposals (i.e. development of the Malpensa “hub”), but, for the most part, the PGT only gives general policy guidance and leaves more specific proposals for the “Airport Plan” which ENAC expects to complete before the end of 2005.

Airport planning is regulated by a “memorandum” of the Ministry of Transport and Public Works (*Circolare Ministero dei Trasporti e dei Lavori Pubblici 23*

¹⁵ [D.P.C.M. del 10 aprile 1986](#)

¹⁶ [D.P.R. del 29 agosto 1991](#)

¹⁷ It can be downloaded at

<http://www.ocs.polito.it/mobilitatrasporti/html/strumenti/biblioteca/PGT.zip>

Febbraio 1996, n.1408) which defines the purpose and contents of the “Airport Development Plan”, (*Piano di Sviluppo Aeroportuale*). Until 1995, airport master plans were known as “*Piano Regolatore Aeroportuale* or “*Piano Regolatore Generale di Aeroporto*”, and many airports are still operating under such instruments.

Airport Development Plans include the spatial distribution of works and services, both public and private, within the entire airport and may define building characteristics. The plan is essentially a technical and programmatic document which must be in consonance with the National Transport Plan and must analyse the relationship with spatial planning. In principle the airport development plan should conform to existing spatial plans, but in practice regional and local plans may be compulsorily modified in order to accommodate the new or expanded infrastructure.

Airport plans are usually implemented with three year programs precisely defining the projects to be undertaken during that period. If a project was not included in the plan, or in the absence of a master plan, the project must be authorized by ENAC.

Most airports are covered by master plans, but there are some, such as Milan-Linate and Rome-Ciampino¹⁸, which do not have any approved plan and must submit all their projects for approval to ENAC.

In the Milan-Malpensa area the Lombardy Region adopted in 1999 a spatial plan, the “Malpensa Area Territorial Plan” (*Legge Regionale 12 aprile 1999, n. 10 “Piano territoriale d’area Malpensa. Norme speciali per l’aerostazione intercontinentale Malpensa 2000”*). The plan covered 17 municipalities and identified some priority actions in several fields. Such actions were sometimes related to the airport (improvement of connecting roads) but were often mitigation and compensation measures in other areas (i.e. reforestation). It also contained a list of other possible actions involving economic development, such as creating a “business park”, a trade centre or an industrial area in some of the municipalities included within the territory of the plan.

With regard to the airport, the Law adopting the plan ratified the works executed according to the airport plan which were to be considered included in the consenting opinion issued by the Regional Board (*Giunta Regionale*) in 1986. Article 6 of the Law, concerning noise protection, as modified by the Law on “Spatial Governance” of 2005, states that within six months of the reception of the approved noise contours by the Regional Board, the municipalities must adapt their local land use plans to include the resulting noise protection areas. In the event that the municipalities fail to do so, the Region can modify the local

¹⁸ The Ciampino airport development plan has already been drafted and is being discussed with a view to adopting it in the near future.

plan. Prior to the adoption of the contours, no building permits can be granted within zone C, and only non-residential uses are allowed within zone B. Both zones are delimited in an Annex to the Malpensa area plan.

The Malpensa area plan is now under review.

5.1.3. Process

Airport plans are drafted by the airport operator and follow a procedure that involves a preliminary approval by ENAC, an environmental impact assessment by the Ministry of the Environment and Spatial Planning, and consultation with regional and local authorities to ascertain the conformity of the proposal with spatial planning. The plan is submitted to an “inter-administrative conference” (*conferenza dei servizi*) in order to reach an agreement among administrations and integrate airport development with the plans and policies of regions, provinces and municipalities. The final approval is granted by ENAC.

The procedure of the airport master plan does not include citizen participation, as this is already required for the environmental impact assessment.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The Italian Civil Aviation Authority, ENAC, was enabled by Law No. 166, of 1 August 2002 (*Legge 1 agosto 2002, n.166, Disposizioni in materia di infrastrutture e trasporti*), ratified by the recently adopted revision of the Navigation Code¹⁹, to incorporate the Annexes to the ICAO Convention into Italian Law. This was done by means of technical regulations (*regolamenti tecnici*), covering, among other topics, airport construction and operation.

Chapter 4 of the Regulation for the Construction and Operation of Airports (*Regolamento per la Costruzione e l'Esercizio degli Aeroporti*) of 2003 defines obstacle limitation surfaces and obstacle evaluation according to Annex 14 of ICAO. These surfaces, as well as the operation of navigation aids, are protected by delimiting protected areas in the vicinity of the airports. The Regulations also sets out rules for obstacle marking outside the protected areas.

Chapter III of the newly revised Navigation Code regulates what is known as “limitations to private property”, granting ENAC the power to delimit protected areas and require or install obstacle marking. Article 707 specifically requires local governments to adapt their spatial plans to ENAC’s prescriptions. These areas must be defined in maps which are made public by depositing them in the

¹⁹ *Decreto Legislativo 9 maggio 2005, n. 96 (in G.U. n. 131 dell'8 giugno 2005. Revisione della parte aeronautica del Codice della navigazione, a norma dell'articolo 2 della legge 9 novembre 2004, n. 265.*

offices of the local government and publishing an announcement in the regional gazette. The municipalities are responsible for providing this information to affected persons in whichever way they consider suitable. Any interested party may oppose the restrictions by submitting written notice to ENAC within 60 days. ENAC will decide on the opposition within 60 days. Protected areas may be defined both for obstacle limitation surfaces and for navigation aids.

These limitations were already regulated in the former Navigation Code, although in a rather different way, and local spatial planning has usually reproduced the protected areas map for each airport within their own documentation. The obligation to include these restrictions in spatial plans derives not only from aviation law but from spatial planning law, which requires land use plans to include all limitations arising from national legislation.

5.2.2. Noise Impact

The vicinity of airports must be divided into three noise protection zones, according to article 6 of the “Ministerial Decree of 31 October 1997 on the methodology for measuring airport noise” (*Decreto Ministeriale 31 ottobre 1997, Metodologia di misura del rumore aeroportuale*). The zones must be established taking into consideration the airport master plan and the approved noise mitigation flight procedures according to the noise levels indicated below. Land use in these zones is restricted as follows:

Zone A	Lower than 65 dB(A) L_{VA}^{20} .	No restrictions
Zone B	Lower than 75 dB(A) L_{VA}	No residential uses allowed; offices and similar uses with adequate sound-proofing
Zone C	Higher than 75 dB(A) L_{VA}	Only airport activities

Table 3. Noise levels and restricted land use

The delimitation of these zones must be defined by a commission set up for each airport with representatives from the civil aviation administration, the airport operator, and the regional, provincial and municipal administrations. This commission is responsible for agreeing on noise mitigation procedures.

²⁰ The LVA index used in Italy “is a 21 day, 24 hour LAeq, with a 10 dB night-time (2300-0600) weighting, averaged over the busiest weeks from each of the three periods 1st October to 31st January, 1st February to 31st May, and 1st June to 30th September.” According to the Technical Report prepared for the EEA by Ian H Flindell and Andrew R McKenzie in 2000, AN INVENTORY OF CURRENT EUROPEAN METHODOLOGIES AND PROCEDURES FOR ENVIRONMENTAL NOISE MANAGEMENT, page 26.

These commissions have not been very effective in some cases since the law requires that decisions be taken by unanimity. The lack of unanimity in the definition of air routes has prevented the commissions of airports like Milan Linate and Malpensa from adopting a decision and leaves these areas with no noise protection zones. In order to break the impasse, the law contemplates the possibility of calling an “inter-administrative conference” (*conferenza dei servizi*) where the decision can be taken by a majority vote or referred to the Council of Ministers if the regional administration opposes the agreement²¹.

The limits of the noise protection areas are defined on the basis of noise modelling results provided by ENAC and the airport operators taking into account air traffic routes published in the AIP Italia. The noise maps must be drawn at a scale of 1:5,000, or a more detailed scale.

Municipalities are required to include these zones in their land use plans and to adapt their regulations to allow only the permitted land use. Lombardy, Regional Law No. 13, of 10 August 2001, on noise pollution (*Legge Regionale 10 agosto 2001 n. 13, Norme in materia d'inquinamento acustico*), which applies to regional airports, requires local authorities to adapt their local land use plans to the noise zones within 3 months of their delimitation. For the Malpensa area this term is 6 months according to article 6.2 of Regional Law No. 10 of 12 April 1999 on the spatial plan for the Malpensa area. Once the zones have been established, no building permits may be issued in contravention of the accepted land use.

5.2.3. Risk prevention

Risk prevention was not included in Italian legislation until very recently. The revision of the Navigation Code adopted in May 2005 includes a new article 715 “Evaluation of aeronautical activity risk” instructing ENAC to designate the airports in which a “risk impact assessment” (*valutazione dell'impatto di rischio*) is to be carried out. It also orders municipalities to take into account such evaluation when exercising the spatial planning and management functions.

ENAC is now considering the legislation that will allow these requirements to be implemented.

5.2.4. Land reserve for future construction

Current airport development plans do not include land for long term development but only for those expansions that may be needed to carry out the projects already defined in the plan. There is no legal limit on the areas that the plan could reserve for future expansion but it has not been customary to include large external areas.

²¹ Legge 7 agosto 1990, n. 241, Nuove norme in materia di procedimento amministrativo e di diritto di accesso ai documenti amministrativi. (as amended by law 340/2000)

In some instances, land has been reserved for airport use by means of spatial planning, as is the case, for example, of the Provincial Plan (PCTP) for Brescia, adopted in December 2004, which included the land necessary for the development of Brescia-Montichiari (*Gabriele D'Annunzio*) airport which started operations in 1999.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: Airport construction does not require a building permit, but it must undergo a special procedure to ascertain whether it is in accordance with spatial planning. The procedure is based on achieving a consensus (*intesa*) among administrations in order to cooperate in projects of national importance. Once the consensus is reached it takes the place of all necessary authorizations or permits. When no consensus may be reached within a given term, the decision may be referred to the Cabinet of Ministers (*Consiglio dei Ministri*).
- b) Environmental permits (water, waste, air, etc.): The environmental impact assessment procedure will usually cover all the permits required within the airport. If a facility is not included in the development plan it may be necessary to obtain permits for waste disposal or sewage discharge Municipal permits regarding health and safety requirements are usually necessary.

Facilities falling under the major-accident hazard legislation will be evaluated in the EIA if included in the airport plan or project, if not, they will be subject to the requirements of Decree No. 334, of 17 August implementing Directive 96/82/EC²² (the "SEVESO II" Directive) (*Decreto Legislativo 17 agosto 1999, n. 334. Attuazione della direttiva 96/82/CE relativa al controllo dei pericoli di incidenti rilevanti connessi con determinate sostanze pericolose*), and the implementation regulations of May 16 2001 (*Decreto Ministeriale 16 maggio 2001, n. 293: "Regolamento di attuazione della direttiva 96/82/CE, relativa al controllo dei pericoli di incidenti rilevanti connessi con determinate sostanze pericolose"*).

- c) Other permits: All airports must be authorized by ENAC. Individual projects not included within an airport master plan or not conforming to such a plan also require the authorization of the Italian Civil Aviation

²² Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances

Authority. Projects included within the airport plan will be sent to ENAC in order to verify whether they are in accordance with the master plan.

5.3.2. *Institutions and processes involved*

- a) Authorization: airport projects are authorized by ENAC and submitted to an “inter-administrative conference” (*conferenza dei servizi*) with representatives from all the administrations involved in order to reach a consensus decision which replaces all regional and local authorizations. If an environmental impact assessment is required, the Ministry of the Environment and Spatial Planning and the Ministry of Culture will have the final decision on the EIA.
- b) Supervision: Airport works are supervised by ENAC.

5.3.3. *Integration with planning and environmental controls*

Environmental control is essentially a local competence, even for activities within an airport of national interest.

Airport construction should, in principle, be in accord with spatial planning, but the “consensus procedure” allows for decisions in which the plan must be adapted to the project and not the other way round. In this case, the project or plan must be accompanied by a study of the spatial and environmental impact of the proposal, together with the measures needed to improve integration within the municipal territory. The decision reached in this process covers all necessary permits.

5.4. **Airport operation**

5.4.1. *Operating permits*

- a) Institutions involved: ENAC is the only institution involved in authorising and controlling airport operation.

Airports are operated under concession and ENAC exercises a double control, one at the time of granting the concession and another when issuing the airport certificate.

- b) Requirements: The only requirements are those applied regarding airport certification.

5.4.2. *Airport certification*

Airport certification is required for all airports open to public transport activities involving aircraft with capacity for more than 10 passengers or a maximum take off weight of more than 5,700 kg. New airports need the certificate to begin operation and existing commercial airports are currently being certified. In July

2005, it was estimated that 95% of the traffic in Italy passes through airports that have obtained their certificates.²³

Certification is conducted according to the Regulation for the Construction and Operation of Airports of 2003, which follows ICAO requirements on this matter and does not cover environmental issues. The Regulation includes the verification of obstacle limitation surfaces and their protection as part of the certification requirements.

²³ ENAC, press release of July 8, 2005.

6. AIRPORT NOISE AND AIR QUALITY

NOISE

6.1. Legislation

In 1995 the Italian Parliament adopted a Framework Law on Noise Pollution (*Legge quadro 26 ottobre 1995, n. 447, sull'inquinamento acustico*) setting out the basic principles to deal with noise issues in a systematic way. The law defines the competences and obligations of each level of government, makes the adoption of Noise Abatement Plans mandatory in certain situations, requires that the noise impact be integrated into the environmental evaluation of several projects, among which are airports, and establishes a series of fines in case of non-compliance. In defining the competences of the Central Government, the Law specifies what functions are to be carried out in connection with aviation noise.

The 1995 Law was subsequently implemented by a series of regulations adopted by Decree for a number of noise sources.

Aviation noise has received a considerable amount of legislative attention, resulting in the adoption of the following legislation:

- *DM²⁴ 31/10/1997: Metodologia di misura del rumore aeroportuale ai fini del contenimento dell'inquinamento acustico negli aeroporti civili e negli aeroporti militari aperti al traffico civile* (Airport noise measurement methodology for purposes of noise pollution containment in civil airports and military airports open to civilian traffic)
- *DPCM²⁵ 14/11/1997: Determinazione dei valori limite delle sorgenti sonore in attuazione dell'art. 3, comma 1, lett. a), L. n. 447/1995* (Definition of limit values for the implementation of article 3.1.a) of law 447/1995)
- *DPR²⁶ 11 dicembre 1997 n. 496: Regolamento recante norme per la riduzione dell'inquinamento acustico prodotto dagli aeromobili civili* (Regulation for the reduction of noise pollution produced by civil aircraft)
- *D. M. 20 maggio 1999: Criteri per la progettazione dei sistemi di monitoraggio per il controllo dei livelli di inquinamento acustico in prossimità degli aeroporti nonché criteri per la classificazione degli aeroporti in relazione al livello di inquinamento acustico* (Design criteria

²⁴ DM = Decreto Ministeriale

²⁵ DPCM = Decreto del Presidente del Consiglio dei Ministri

²⁶ DPR = Decreto del Presidente della Repubblica

for systems to control noise pollution in the vicinity of airports and for the classification of airports according to the noise pollution level)

- *D.P.R. 9 novembre 1999 n. 476: Regolamento recante modificazioni al decreto del Presidente della Repubblica 11.12.1997, n. 496, concernente il divieto di voli notturni* (Modification of DPR 11.12.1997, No. 496, with regard to the ban on night flights)
- *D.M. 3 dicembre 1999: Procedura antirumore e zone di rispetto negli aeroporti* (Noise abatement procedures and protected areas in airports)
- *D. M. 29 novembre 2000: Criteri per la predisposizione, da parte delle società e dagli enti gestori dei servizi pubblici di trasporto o delle relative infrastrutture, dei piani degli interventi di contenimento e abbattimento del rumore* (Criteria for the preparation of noise containment and abatement plans by the operators of transport services or their infrastructures)
- *Decreto Legislativo 17 gennaio 2005, n.13: Attuazione della direttiva 2002/30/CE relativa all'introduzione di restrizioni operative ai fini del contenimento del rumore negli aeroporti comunitari* (Implementation of Directive 2002/30/EC²⁷ (the “noise-related operating restrictions” Directive)

Directive 2002/49/EC²⁸ (the “noise” Directive) is in the process of being integrated into Italian Law according to the press release of the Cabinet of Ministers of 29 July 2005.

Many regions have also adopted their own legislation in this field, Lazio, for example, adopted a “Regional Law on noise pollution and noise abatement planning” (*Legge regionale del 3 agosto 2001, n. 18: disposizioni in materia di inquinamento acustico per la pianificazione ed il risanamento del territorio - modifiche alla legge regionale 6 agosto 1999*). In 2001, Lombardy passed a Regional Law on noise pollution (*Legge regionale 10 agosto 2001, No. 13 “Norme in materia di inquinamento acustico”*). These laws make municipalities responsible for defining acoustic zones within their territory and regulating noise abatement plans, control measures, incentives and administrative sanctions.

²⁷ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

²⁸ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

6.2. Institutions

The National Government defines basic principles and instruments as well as noise limit values and measurement methodology. Regions legislate on how to implement national legislation within their territory and municipalities adopt noise zoning and implement noise regulations when adopting spatial plans or issuing construction and operation permits.

Both regions and municipalities can set their own, more stringent, standards in some zones but aviation related noise is governed by national legislation and there is no room for local or regional standards when dealing with airports.

Article 5 of Ministerial Decree 21 October 1997, provides for the establishment in each airport of a commission presided by the head of the civil aviation administration in the area, bringing together representatives from the regional, provincial and local administrations, the regional environmental protection agency, air traffic control, aviation industry and airport operator. These commissions are responsible for defining both noise abatement flight procedures and noise protected zones in the vicinity of the airport. The Civil Aviation Authority is now reviewing the operation of these commissions, as the legal requirement that their decisions be taken unanimously has led to a deadlock in a minority of airports.

6.3. Instruments

a) Planning:

Noise related planning takes two separate forms. On the one hand there is the delimitation of noise protection zones and on the other hand there are noise mitigation and abatement plans.

There are no specific plans defining noise protection zones but these are included in local land use plans.

Noise containment and abatement plans (*Piani degli interventi di contenimento e abbattimento del rumore*) must be prepared by airport operators when noise levels reach certain limits in the vicinity of the infrastructure. The responsibility for determining areas where noise levels are higher than permitted levels and for ascertaining to what extent the airport contributes to such noise pollution falls also on the airport operator. Municipalities are required by law to adopt noise containment and abatement plans, but by the end of 2003 only 10 municipalities in Italy had done so²⁹.

²⁹ Annuario APAT (Agenzia per la Protezione dell'Ambiente) 2004. Available at www.annuario.apat.it/databaseannuario/apat/annuario2004/pdf_files/ANNUARIO_APAT_17.pdf

According to the Ministerial Decree of 29 November 2000, the airport operator must indicate the areas where estimated or measured noise levels are beyond the established limit within 18 months from the date on which the noise protection zones are approved and provide such data to local and regional authorities. No later than 18 months after such date, if the established levels are surpassed, the operator must present the noise containment and abatement plan to the regional and local authorities. The plan must set out the objectives to be attained within 5 years in order to bring noise levels down to the permitted levels.

The typical measures contained in these plans in the case of aviation noise are sound insulation and relocation.

b) Land use restrictions:

Noise protected zones are delimited on the basis of maps representing isophonic contours at a minimum scale of 1:5,000. Noise levels are established by starting with actual measured levels and applying modelling techniques to planned growth on the basis of AIP published routes. Once adopted, these zones must be integrated into land use plans and permitted land use defined. In practice only 17% of the municipalities had adopted their noise zoning by 2003. The figure for Lombardy was 24.1% representing 32.6% of the population, and for Lazio 10.8% and 55.3% of the population³⁰.

c) Compensation:

Noise based land use restrictions are made public through land use planning and are treated in the same way as any other planning related limitations on the use of property.

Noise containment and abatement plans may include both insulation and relocation to be financed by airport operators, which are obliged by law to set apart 7% of their infrastructure maintenance and improvement budget for such purposes. The situation in practice is that, in some of the more important airports such as Linate, Malpensa and Fiumicino, these plans have not been adopted, since the noise protection zones have not been approved yet, while in Fiumicino the noise maps are only provisional.

Despite the absence of a noise abatement plan, in Malpensa, on the basis of the Malpensa Area Territorial Plan, in 2000, State, Regional, Provincial and Municipal authorities signed a regional "Framework Program Agreement" (*Accordo di Programma Quadro*)³¹ according to which national governments

³⁰ Annuario APAT 2004.

³¹ *Accordo di Programma Quadro "Aeroporto intercontinentale di Malpensa 2000 - Interventi di mitigazione d'impatto ambientale e di delocalizzazione degli insediamenti residenziali ricompresi nell'ambito territoriale prioritario del Piano Territoriale d'Area Malpensa, ed in particolare, in*

provided funds for insulation and relocation activities. Insulation has been applied only to schools and relocation aid has taken the form of the voluntary acquisition of affected residences. The program has led to the acquisition of about 70% of the programmed homes. The “Framework Program Agreement” estimated the required investments at five billion Italian Lire (€2,582,284) for public building insulation and thirty billion/year Italian Lire (€15,493,706) over 15 years for relocation and private building insulation.

In order to finance the operation of noise monitoring systems and the implementation of mitigation measures, a tax was created by Law No. 342, of November 2000, on fiscal measures (*Legge, 27 novembre 2000 n. 342, “Misure in materia fiscale”*). The tax is to be implemented by the regions, and many regions (including Lombardy) have adopted their own regional laws for this purpose. The tax is paid by airlines per landing and takeoff movement, on the basis of the weight and noise classification of the aircraft. The Region may levy an additional surcharge of up to 15% for night flights within a range of times yet to be determined.

6.4. Integration with spatial planning

Noise protection zones must be integrated by municipalities into their local land use plans. This should be done by including the noise contours within the planning maps and regulating land use in accordance with what the law allows for each zone.

6.5. Integration with development, construction or operation controls

The above mentioned legislation includes a range of possible sanctions in order to ensure compliance with noise legislation, both at the level of aircraft operations and as regards land use around the airport.

At the time of construction, the Environmental Impact Statement will regulate which measures have to be adopted in each case.

In most airports, procedures have been defined in order to minimize noise, and preferential runways are allocated for some time periods, e.g. in Fiumicino runway 16R is not used from 23:00 to 06:00. DPR No. 496, of December 11 1997, established a general ban on night flights, but excluded the Rome-Fiumicino and Milan-Malpensa “intercontinental airports”. The Decree was reviewed in 1999 to allow more exceptions to be granted on a case by case basis.

prima istanza, siti nel territorio dei Comuni di Somma Lombardo, Lonate Pozzolo e Ferno, adiacenti al sedime aeroportuale”. Available at:
http://www.regione.lombardia.it/wps/portal/ s.155/606/.cmd/ad/.ar/sa.link/.c/502/.ce/628/.p/408?PC_408_linkQuery=pagename=PortaleLombardia/GenDoc/PL_GenDoc_light.c=GenDoc.cid=1113372968415#628

Airports are required by law to operate noise monitoring stations under the control of regional authorities. In Linate there are 6 monitoring terminals and 18 in Malpensa operated in coordination with the regional environmental protection agency (ARPA)³². The system integrates radar and meteorological data for each flight in order to enforce noise limitation regulations. The noise monitoring system for Fiumicino connected to radar data in order to track individual flights begins operation in the late summer of 2005,.

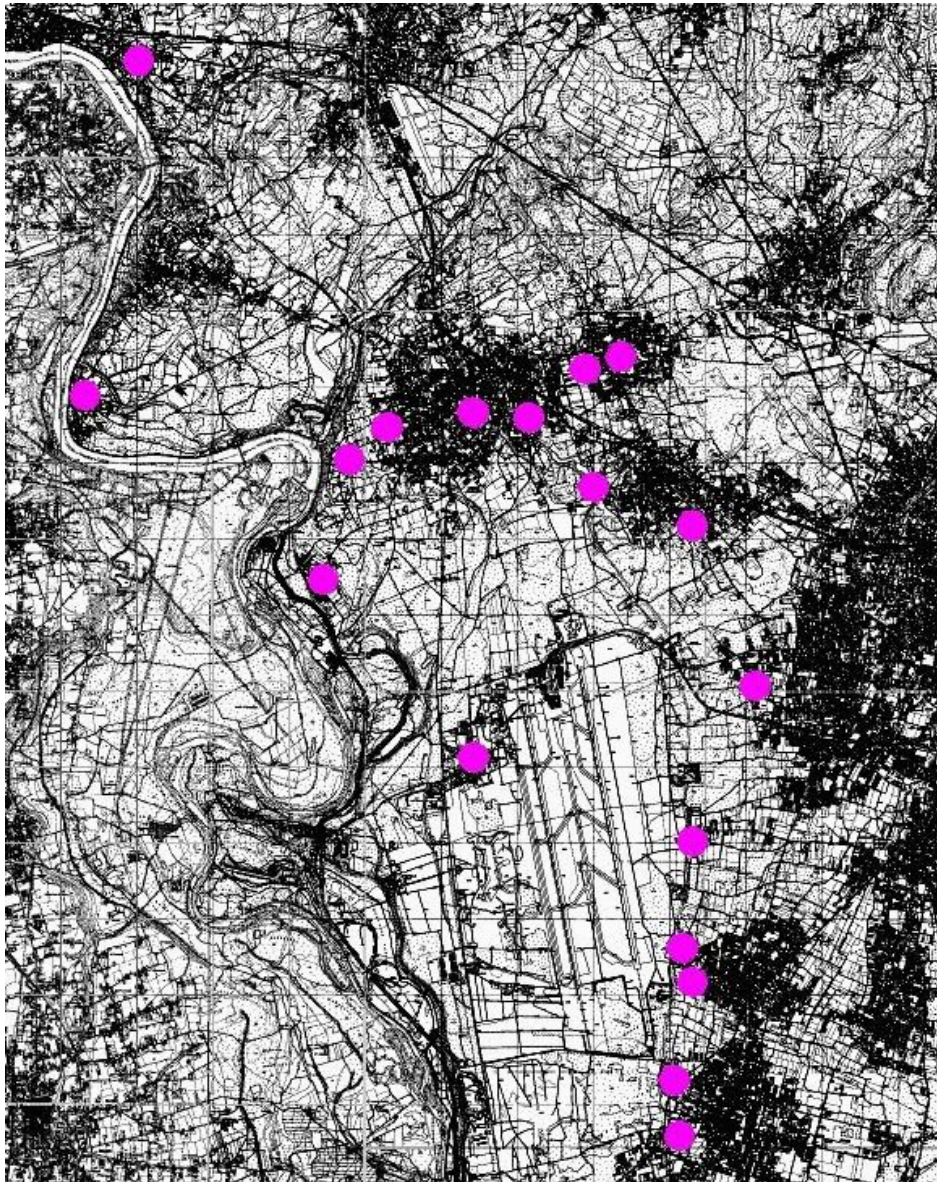


Figure 7. Noise monitoring stations around Malpensa airport

³² Noise monitoring data in the Milan airports can be accessed via <http://www.sea-aeroportmilano.it/Ambiente/ambiente.htm>

AIR QUALITY

6.6. Legislation

Italian legislation on air quality for years focused on specific sources of pollution. Currently the basic legislation can be found in Legislative Decree No. 351 of 4 August 1999, which transposed Directive 96/62/EC³³ (the “air quality framework” Directive) (*Decreto Legislativo 4 agosto 1999, n.351 Attuazione della direttiva 96/62/CE in materia di valutazione e di gestione della qualità dell'aria*). This Decree has been implemented by Decree No. 261 of 1 October 2002 on air quality evaluation, plans and programs (*Decreto 1 ottobre 2002, n. 261: Ministero dell'Ambiente e della Tutela del Territorio.Regolamento recante le direttive tecniche per la valutazione preliminare della qualità dell'aria ambiente, i criteri per l'elaborazione del piano e dei programmi di cui agli articoli 8 e 9 del decreto legislativo 4 agosto 1999, n. 351.*). Specific quality limits have been set by Decree No. 60 of 2 April 2002 (*Decreto Ministeriale 2 aprile 2002, n. 60. Recepimento della direttiva 1999/30/CE del Consiglio del 22 aprile 1999 concernente i valori limite di qualità dell'aria ambiente per il biossido di zolfo, il biossido di azoto, gli ossidi di azoto, le particelle e il piombo e della direttiva 2000/69/CE relativa ai valori limite di qualità dell'aria ambiente per il benzene ed il monossido di carbonio.*).

There is no specific legislation on air quality for airports.

6.7. Institutions

National government sets basic legislation and defines minimum standards but regions and local authorities can adopt their own more restrictive limits and are charged with monitoring and enforcing air quality legislation.

6.8. Instruments

a) Planning:

In areas where air quality is below approved standards or at risk of becoming so, the regional administration must adopt action plans to achieve the desired values. These plans may include a variety of control measures, including the suspension of activities, such as automobile traffic, which contribute to degrading air quality. In large cities like Milan or Rome these plans focus essentially on restricting car traffic.

³³ Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

b) Land use restrictions:

Air quality plans may establish air pollution limits for specific areas in which a certain level of air quality is to be maintained. These provisions should be coordinated with spatial plans in order to restrict potentially contaminating land use that might increase pollution in the area.

c) Compensation:

No compensating measures are provided for in the case of land use restrictions arising from air quality considerations.

6.9. Integration with spatial planning

Air quality must be taken into consideration in spatial planning instruments in order to prevent activities that would decrease air quality below approved standards. There are, however, no specific rules as to how to achieve such integration.

6.10. Integration with development, construction or operation controls

Municipalities are not supposed to issue building or activity permits for constructions or industries that may lower air quality below approved standards for a specific area, and must enforce national and regional legislation or local ordinances on emissions.

No specific air quality problems have been reported in airports and studies conducted in some of them have evidenced that air quality within the airport boundaries was better than the quality outside. In Malpensa, for example, studies conducted by the regional environmental agency (ARPA) with data from 2 fixed monitoring stations in the vicinity of the airport show that average monthly concentrations of SO₂ and NO₂ are lower in the vicinity of the airport than in the nearby towns. The emission inventory for 2001 shows also that airports contribute a minimal part of the pollutants in the region.³⁴ Similar data can be obtained for the Rome area, where automobile transport and electrical power generation continue to be the main sources of air pollution.³⁵

³⁴ SEA Environmental Report 2004, pages 33 and 34.

http://www.sea-aeroportmilano.it/newsea/it/pdf/Sea_abstract_rapporto_ambientale.pdf

³⁵ The Environmental Report 2004 for Regione Lazio can be found at:

http://www.regione.lazio.it/ambiente/qualita_ambientale/rapporto.shtml

7. CASE STUDY – MALPENSA 2000

Airport planning stage

The development of Malpensa as a future hub with a European dimension actually began in 1985, when the General Airport Plan for Malpensa 2000 (*Piano Regolatore Aeroportuale per Malpensa 2000*) was drawn up by the airport management company as requested by the Central Government through Act 449/1985 of 22 August 1985.

On 23 December 1985, the Civil Aviation General Directorate (*Direzione Generale Aviazione Civile*) officially forwarded the draft General Airport Plan for Malpensa 2000 to the Regione Lombardia for an opinion.

On 13 February 1987, the Ministry of Transport approved the Plan, following the opinion expressed by the municipalities involved (Malpensa airport lies in the territory of seven municipalities) and the consortium of the regional “*Parco del Ticino*” (Park of the River Ticino).

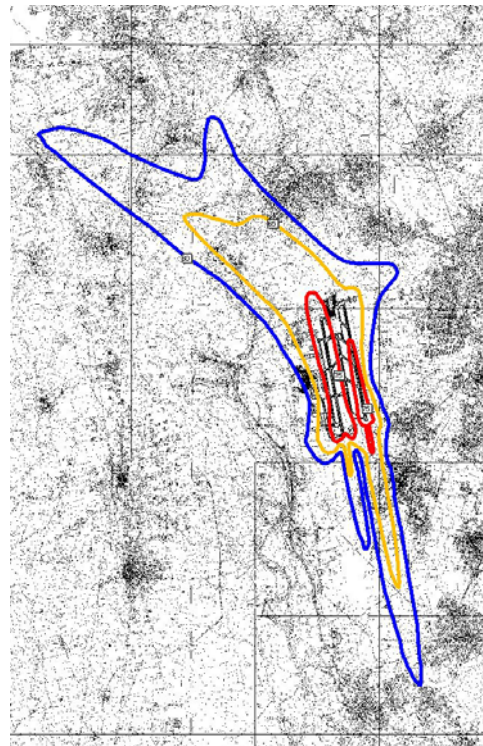
Comments from the municipalities expressed reservations on the adoption and implementation of the Plan, stressing the need to protect the quality of life of the communities in the neighbourhood and the environment. Unfortunately, no environmental concerns were in fact taken into account in the first stage of the implementation of the Plan, due to delays in the Italian transposition of the “EIA” Directive.

Finally, in 1988, the Ministry of Transport approved the General Airport Plan for Malpensa 2000, with unconditional approval by the Council of the Regione Lombardia.

The Ministry asked SEA (*Società Esercizi Aeroportuali S.p.a.*), the Regione Lombardia, the Park of Ticino and other relevant Ministries to co-operate in the implementation of the Plan, and to take into consideration subsequent airport-related issues that might have arisen over the years.

SEA launched an environmental impact assessment of Malpensa on 26 July 1988.

Figure 8. Noise contours. Malpensa airport



Integration of the airport into the spatial planning system

In 1999, the Malpensa Area Territorial Plan (*Piano Territoriale Di Area Malpensa*) was prepared, in order to set up a regulatory framework for the spatial and economic integration of Malpensa Airport in the territorial planning system of the region, the provinces and the local municipalities affected.

These players with completely different interests in most cases, were coordinated by a Committee, chaired by the province of Varese (where the airport is located). This Committee included representatives from the municipalities, the provinces of Milan, Varese and Novara, the Regione Lombardia, SEA and the consortium of the Park of Ticino.

The *Piano di Area* was adopted by the Regione Lombardia in 1999, representing the programmatic and normative reference defining the strategies for the economic, social and environmental implementation of Malpensa 2000. The Plan identified 48 municipalities affected by Malpensa.

The *Piano di Area* proposed to distribute as much as possible of the potential spin-off from the airport over the wider surroundings. Development on new sites on and around the airport was to be minimized, while re-use of the former industrial areas available within the limits of the surrounding cities was to be boosted to the maximum. The sites near the airport were to be reserved for a limited amount of specifically airport-related activities

On 8 June 2001, the Malpensa Area Territorial Plan was put under review and some new requirements were introduced. In 2003 the Region made a call inviting the municipalities to present proposals for the revision of the plan. The proposals are now being evaluated and a document describing the current situation regarding the approval of the Plan was published in January 2005 as a first step in the updating process.

COUNTRY CONTACTS

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”³⁶)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

³⁶ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Regioni</i>	Regions
<i>Direzione Generale dell'Aviazione Civile</i>	Directorate General of Civil Aviation
<i>Registro Aeronautico Italiano</i>	Italian Airworthiness Authority
<i>Ente Nazionale Gente dell'Aria</i>	National Body for Air Men
<i>Città metropolitane</i>	Metropolitan City
<i>Piano Territoriale Regionale Generale, PTRG</i>	Regional General Spatial Plan (Lazio)
<i>Piano Territoriale Provinciale Generale, PTPG</i>	Provincial General Spatial Plan (Lazio)
<i>Piano Territoriale Regionale, PTR</i>	Regional Spatial Plan (Lombardia)
<i>Piano Territoriale di Coordinamento Provinciale, PTCP</i>	Spatial Coordination Plan (Lombardia)
<i>Piano Urbanistico Comunale Generale, PUCG</i>	Municipal General Spatial Plan (Lazio)
<i>Piano di Governo del Territorio, PGT</i>	Spatial Governance Plan (Lombardia)
<i>Documento di piano</i>	Plan document
<i>Piano dei servizi</i>	Services plan
<i>Piano delle regole</i>	Regulations plan
<i>Piani urbanistici operativi comunali, PUOC</i>	Municipal spatial implementation plans (Lazio)
<i>Piani territoriali regionali d'area</i>	Regional area plans (Lombardia)
<i>Comitato regionale per il territorio</i>	Regional Spatial Committee (Lazio)

<i>Conferenza dei servizi</i>	Inter-administrative conference
<i>Conferenza di pianificazione</i>	Planning conference
<i>Conferenza delle autonomie</i>	Local authorities conference
<i>Conferenza dei comuni</i>	Conference of municipalities
<i>Intesa</i>	Consensus building procedure
<i>Commissione Nazionale per le Valutazioni di Impatto Ambientale</i>	National Commission for Environmental Impact Assessment
<i>Piano Generale dei Trasporti, PGT</i>	National Transport Plan
<i>Sistema Nazionale Integrato dei Trasporti, SNIT</i>	Integrated National Infrastructure System
<i>Piano di Sviluppo Aeroportuale</i>	Airport Development Plan
<i>Giunta Regionale</i>	Regional Board
<i>Regolamenti tecnici</i>	Technical regulations
<i>Valutazione dell'impatto di rischio</i>	Risk impact assessment
<i>Piani degli interventi di contenimento e abbattimento del rumore</i>	Noise containment and abatement plans
<i>Accordo di Programma Quadro</i>	Framework Program Agreement

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- Lombardia – Legge per il Governo del territorio

- Lombardia – Legge Piano Malpensa



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

LATVIA

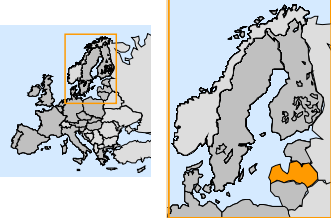


This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

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LATVIA		Location Map
Population	2.3 mill. (36 inhabitants per sq. km)	
Airports network	<p>Riga International Airport (1.06 million passengers handled during 2004) is managed by a joint-stock company whose shares are owned (100%) by the Republic of Latvia. The other two airports in Latvia, Ventspils and Liepaja, are owned and managed by their respective local governments.</p>	
<p>Spatial planning system</p> <p>Spatial planning system regulated by recent legislation promoting the participation of the local levels of government. Hierarchical set of planning instruments.</p> <ul style="list-style-type: none"> • Institutions <ul style="list-style-type: none"> National level: Ministry of Regional Development and Local Government – National Regional Development Committee – State Regional Development Agency. Regional level: Planning Regional Development Councils – Planning Regional Development Agencies. Local level: District local government and Territorial local government. • Instruments <ul style="list-style-type: none"> Strategic plans National Spatial Plan. Framework plans Planning region spatial plans. Planning region development programmes. Regulatory plans District local government spatial plans. Territorial local government spatial plans. Development programmes. Detailed plans. • Process: 		
<p>Regulation and permits</p> <p>A construction permit issued by a building authority is required for any construction work in Latvia. Unauthorised construction works are not permitted. The building authorities are departments of the local government.</p>		
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: No statutory airport development plans. Airport development takes place in a piecemeal fashion in Latvia. Integration of airport projects into local spatial plans. Detailed plans for certain areas of the airport. • Spatial impact: Safeguard maps and noise contours submitted to local governments for their integration into local spatial plans. • Construction: General building permit from the local government required. Public consultation in case of large developments. • Operation: Airport licence reviewed by the CAA after each development. Airport certification. 		
<p>Airport noise and air quality</p> <ul style="list-style-type: none"> • Noise: No land use restrictions defined on the basis of noise contours, even though they are integrated into local spatial plans. The building authority may take noise levels into consideration when granting building permits. No right to compensation. 		

1. SUMMARY

SPATIAL PLANNING SYSTEM

The National Spatial Plan, to be drawn up by the Ministry of Regional Development and Local Government in accordance with the recent legislation in this area, shall set out all national interests and requirements for the utilisation and development of the territory of the State.

Spatial plans and development programmes to be drawn up by the planning region agencies and by the two levels of local governments (district and territorial) shall define the land uses permitted in each area.

Detailed plans drawn up by the territorial local governments will specify the spatial utilisation and building conditions of a particular piece of land.

These plans are organised in a hierarchical structure in which lower levels must always be in conformity with higher levels.

REGULATIONS AND PERMITS

Construction permits

A construction permit issued by the relevant building authority is required for any construction work in Latvia. Only small individual buildings in rural areas are exempted. In general, construction permits are granted by the local governments. However, the Cabinet of Ministries may specify special procedures, including a different building authority, for the construction of transport infrastructures. In any case, those special construction permits must always be registered by the building authority of the local government where the structure will be located.

Environmental permits

EIA and SEA are regulated according to EU Directives. They will integrate most of the environmental permits. Airport plans are not included in the list of planning documents requiring SEA. Solely in cases where an EIA is not required, the respective Regional Environmental Board shall issue technical provisions regarding environment protection.

Separate environmental permits are required for waste management activities and emission of pollutants.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

A National Programme for Transport Development has been recently adopted by the Cabinet of Ministries, establishing the general guidelines for the expansion of the transport infrastructures in Latvia until 2010. This is a national sectoral programme to be considered by any spatial plan drawn up at the planning region or local government levels. This plan was prepared by the Ministry of Transport. Although it was not subject to public participation, all the institutions and stakeholders involved in transport, including the airport operators, were consulted.

- Airport

There are no statutory airport development plans as such in Latvia. Airport planning takes place through integration of airport plans into the spatial plans of the towns and municipalities where they are located. Detailed plans could also be drawn up by the airport operators for certain areas of the aerodrome, and submitted to the local government for their adoption.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The airport companies and the CAA are responsible for keeping maps with “obstacle protection zones”, based on the ICAO obstacle limitation surfaces, up to date. These maps are sent to the affected municipalities. A separate construction permit from the CAA is required within those areas.

- Noise Impact

Noise contours are only calculated for Riga airport. They are integrated into the spatial plans of the affected municipalities.

- Risk prevention

There are no third party risks considerations in Latvia.

- Land reserve for future construction

Land reserves for future airport developments must be included in spatial plans of the town and municipalities where the airports are located.

Construction

Any construction activity at an airport requires a construction permit from the building authority of the local government where the airport is located. In the case of large airport developments, public consultation will take place before the permit is granted. Environmental permits, in accordance with the EIA or the Regional Environmental Board conditions, and CAA agreement are also required.

Operation

The CAA must update the airport license granted to the airport operator for the whole aerodrome once any development has taken place. Airport certification is already regulated in Latvia.

AIRPORT NOISE AND AIR QUALITY

Noise

There are no maximum noise levels determined by legislation around Latvian airports. The “noise” Directive 2002/49/EC has already been transposed but there are no “major airports” in the country. Although there are no land use restrictions determined by the legislation, the noise levels caused by the operation of Riga airport, including those forecast after the expansion of the runway, are included in the spatial plan of Marupe municipality, whose building authority takes them into consideration when granting construction permits.

Air quality

There are no specific provisions on airport related air pollution.

2. CONTEXT

Latvia is a Republic of north-central Europe, on shore of the Baltic Sea, bordered by Estonia, Russia, Belarus and Lithuania. Latvia was annexed in 1940 by the USSR and became known as the Latvian Soviet Socialist Republic. The collapse of the Soviet Union enabled Latvians to reassert their national identity, and they declared their country independent in August 1991. Latvia became a member of the European Union in May 2004.

At the regional level, Latvia is divided into 26 districts (*rajons*) and 7 “republican or major cities”: Aizkraukles, Aluksnes, Balvu, Bauskas, Cesu, Daugavpils (district and major city), Dobeles, Gulbenes, Jekabpils, Jelgava (district and major city), Jurmala (major city), Kraslavas, Kuldigas, Liepaja (district and major city), Limbazu, Ludzas, Madonas, Ogres, Preilu, Rezekne (district and major city), Riga (district and major city), Saldus, Talsu, Tukuma, Valkas, Valmieras and Ventspils (district and major city).

At the local level, there are (at the time of writing) 444 rural municipalities (*pagasts*), 26 amalgamated town and rural municipalities (*novads*) and 53 towns (*pilsēta*), plus the 7 major cities which have the functions of both local and regional governments.



Figure 1. Map of Latvia

Latvia's GDP per capita is the lowest of the European Union (EU 25 average 22,400¹), although, since the year 2000, Latvia has had one of the highest GDP growth rates in Europe.

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	2,319,200
Latitude / Longitude	57°00' N, 25°00' E
Land area	63,589 sq km
Coastline	531 km
Capital City	Riga
GDP per capita (PPS at market prices)	9,600
GDP real growth rate	8.3 %
Inflation rate	6.2 %
Unemployment rate	9.8 %

Table 1. Latvia: main facts and figures (2004) ²

2.1. Population and statistics

Latvian population exceeds 2.3 million, with one of the lowest average population densities of the EU, at 36 inhabitants per sq km.

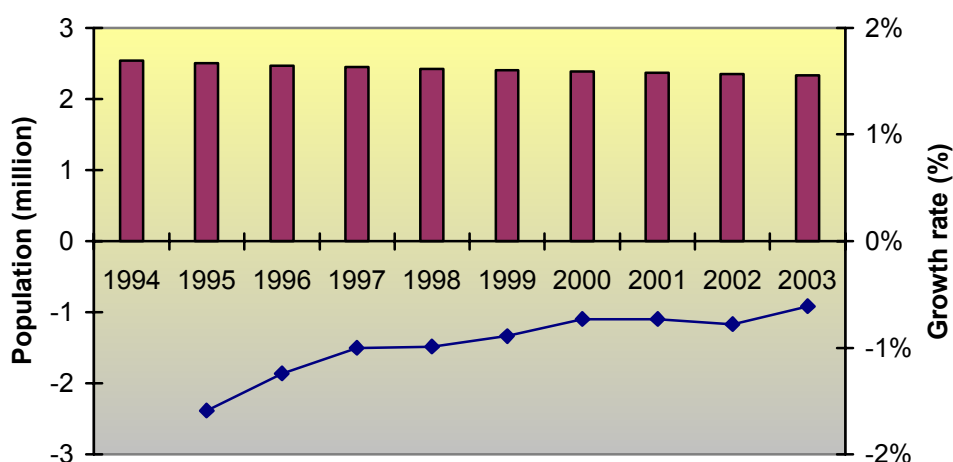


Figure 2. Latvian population evolution

During the last decade the population trend in Latvia has suffered a decline, with negative growth rates. The main causes of this downturn are emigration, with the lowest net migration of the EU, from 20.5 emigrants per 1,000

² Source: EUROSTAT

inhabitants in 1992 to 0.8 emigrants during 2002, and the sharp decline of the birth rate during the 1990's.

The Latvian median age is 39.12 years, but population growth is threatened by a very low birth rate, with 9.04 births/1,000 population (2004 est).

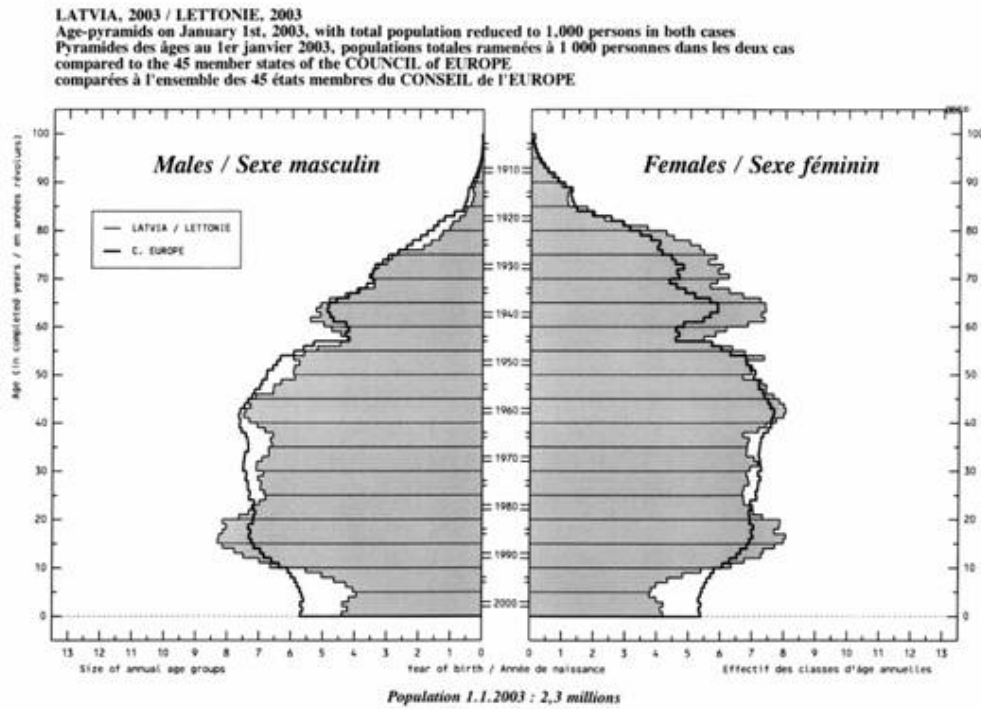
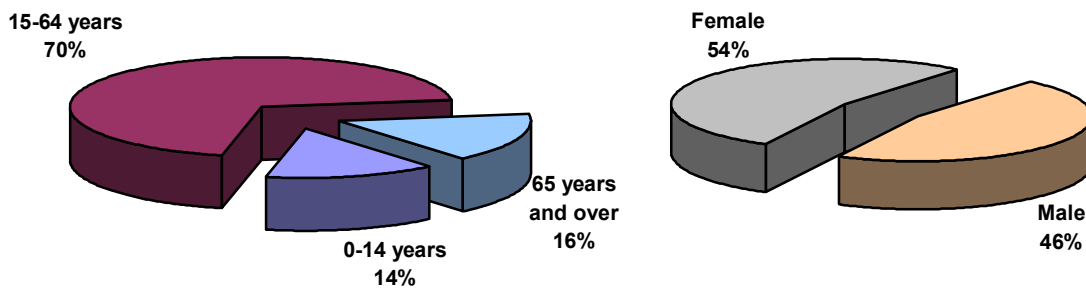


Figure 3. Latvian age-pyramids (2003)³

The figure above shows the Latvian low birth rate and the age structure, with the bulk of the population between 15 and 64 years (70%).



Figures 4 and 5. Latvian population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Latvia is parliamentary democracy. It has a unicameral Parliament, the 100-seat *Saeima*, with legislative powers. The president, who is the head of state, is elected by the *Saeima* for a four-year term. The Prime Minister, who is the head of government, is appointed by the president. Latvia has over 20 political parties and most governments are formed by coalition.

Local government is exercised in Latvia in two different levels. District local governments and territorial local governments execute the functions determined by the Article 15 of the “Law on Administrative-Territorial Reform”, adopted by the *Saeima* on 21 October 1998, and the “Law on Local Governments”, adopted by the *Saeima* on 19 May 1994.

Spatial planning is the responsibility of the Ministry of Regional Development and Local Government, with the participation of planning regions and local governments as defined by the Spatial Planning Law.

The Ministry of the Environment is the central body responsible for environmental protection.

The Department of Aviation within the Ministry of Transport is the regulatory body, while the Civil Aviation Administration is responsible for supervision of day-to-day aviation activities.

2.3. Main airports

The most important airport in Latvia is Riga, with 1.06 million passengers handled during 2004. Riga International Airport is a joint-stock company whose shares are owned (100%) by the Republic of Latvia. The holder of state capital shares is the Ministry of Transport of the Republic of Latvia.

There are two other airports in Latvia, Ventspils and Liepaja, owned and managed by the respective local governments.

	Passengers	Cargo (Tm)
Riga	1,063,000	8,752
Ventspils	1,110	-
Liepaja	2,000	12

Table 2. Traffic at Latvian airports 2004

3. SPATIAL PLANNING SYSTEM

The spatial planning system in Latvia is regulated by the “Spatial Planning Law”, adopted by the *Saeima* (Parliament) on 22 May 2002, and amended in April 2003 and January 2005.

The “Regional Development Law”, adopted by the *Saeima* on 21 March 2002, and the “Law on Local Governments” adopted by the *Saeima* on 19 May 1994, and most recently amended in December 2000, contain more provisions with regard to the participation of planning regions and local government in spatial planning.

Several regulations have been issued by the cabinet of Ministries pursuant to the above-mentioned laws.

3.1. Institutions

3.1.1. National

The Ministry of Regional Development and Local Government is the central body responsible for spatial planning in Latvia. Its main functions in this context relate to the provision of a regulatory framework and monitoring the performance of local government with regard to their competences in land-use planning.

Several departments of this Ministry deal with spatial planning. In particular, the Regional Politics Department is responsible for the preparation of the National Development Plan, promoting long-term and balanced development of the State and its regions. The Spatial Planning Department is responsible for developing spatial planning policies and supervising their implementation by the planning regions and the local government. It should ensure the participation of citizens in the spatial planning process.

Other institutions involved in spatial planning at the national level are the Cabinet of Ministries (responsible for determining the ministry in charge of spatial planning and for approving the National Spatial Plan), the National Regional Development Committee (responsible for evaluating both the National Spatial Plan and the spatial plans of the planning regions) and the State Regional Development Agency (responsible for the development of regional policy, regional development planning and coordination of the implementation of the State support measures for regional development).

Further to the scope of powers and responsibilities at the national level determined by the Spatial Planning Law, on 26 November 2002 the Cabinet of Ministries adopted the “Regulations regarding the National Spatial Plan”, where the whole process for its preparation, adoption and implementation is defined.

3.1.2. Regional

In terms of planning, there are five “planning regions” whose competences are defined by the Regional Development Law, adopted by the *Saeima* on 21 March 2002. According to Section 5 of that Law:

“(1) For regional development planning, co-ordination and ensuring co-operation of local governments, five planning regions shall be established – Kurzeme Region, Latgale Region, Riga Region, Vidzeme Region and Zemgale Region.

“(2) The Cabinet shall determine the territories of the planning regions in accordance with proposals submitted by local governments.”

Under the same Law, five “planning region development councils” were created as decision-making bodies for the coordination of the spatial development of the planning regions. They are responsible for approving the spatial plans of the planning regions. They are required to ensure the participation of the citizens in the spatial planning process. They can also suggest amendments to the National Spatial Plan. Members of these councils are elected from among the deputies of the local governments located in each planning region.

Each council has established a “planning region development agency” as an executive authority responsible for day-to-day planning activities, comprising the preparation of the development programmes and spatial plans for the territory of the planning region, the relationship with local governments (including both districts and towns or municipalities) and other state administration institutions.

“Planning regional development agencies”, established in the form of foundations or companies, operate in accordance with the provisions of the Public Agencies Law and any other by-laws approved by the respective “planning region development council”.

3.1.3. Local and area wide

District local governments and territorial local government are the bodies responsible for land-use planning at the local level.

District local government (of the 26 districts *-rajons-* and the 7 major cities), or district councils, are formed of all the mayors of the rural municipalities (*pagasts*), amalgamated municipalities (*novads*) and towns (*pilsēta*) located within the territory of the district.

According to the Spatial Planning Law, they are responsible for coordinating the preparation or amendment of the district spatial plan, its approval and implementation. They also assess the compliance of any spatial plan at the local level with the district spatial plan in force. They are responsible for the

implementation of those parts of a National Spatial Plan or a spatial plan of their respective planning region which apply to their territories. They ensure the participation of the citizens in the spatial planning process. They can also propose amendments to the higher level plans mentioned.

Territorial local governments of the *pagasts*, *novads* or *pilseta*, including the major cities, are the administrative local councils elected by the citizens. Territorial local governments are not subordinate to district local governments.

Their functions are determined by the Law on Local Governments, adopted by the *Saeima* on 19 May 1994 and most recently amended, after a wholesale administrative territorial reform, in 2000.

The Spatial Planning Law defines their functions in terms of planning, which includes the coordination of the preparation or amendment of the territorial local government spatial plans and the detailed plans and their approval. They ensure the participation of the citizens in the spatial planning process. They can also suggest amendments to the planning region or district spatial plans.

The scope of their powers and responsibilities with regard to spatial planning is established by the “Regulations of the Cabinet of Ministries regarding Territorial Local Government Spatial Planning”, adopted on 19 October 2004.

3.2. Instruments

The Spatial Planning Law defines a hierarchical set of planning instruments. In general, when developing a spatial plan, any other spatial plan adopted at a higher level must be observed.

3.2.1. Strategic plans or policy documents

National Spatial Plan

The National Spatial Plan is drawn up by the Ministry of Regional Development and Local Government, following the State Regional Policy Guidelines, the National Development Plan and any national and sectoral development programme. It shall apply to the whole territory of the State.

The State Regional Policy Guidelines, drawn up by the Directorate of Regional Policy and Planning, are defined by the Regional Development Law as:

“... a long-term (10 and more years) regional policy planning document which embodies the main basic principles, objectives, priorities and directions of regional development.”

It must be noted that regional development is defined by the same Law as *“productive changes in the social and economic situation in the entire territory of the State or separate parts of it”*

Moreover, the National Development Plan is defined in the Regional Development Law as:

“... a medium-term (seven years) regional policy planning document which analyses the social and economic situation, and which determines the objectives and priorities for regional development...””

The same Law defines national and sectoral development programmes as:

“... medium-term (seven years) regional policy planning document which applies to a particular sphere and sets objectives, main tasks and results to be achieved in the development of that sphere.”

Approval of the State Regional Policy Guidelines, the National Development Plan and national and sectoral development programmes is a competence of the Cabinet of Ministries.

On the basis of all these documents, the National Spatial Plan sets out all national interests and requirements for the utilization and development of the territory of the State.

In accordance with the Regulation regarding the National Spatial Plan, it comprises:

- a long-term (20 years) development prospect for Latvia, as the basic parameters of sustainable spatial development, providing an overview of the long-term distribution of the population, the open spaces and the infrastructure,
- the guidelines for the National Spatial plan, where recommendations to implement a common policy for the spatial development of the State are included, on the basis of the development prospects, and
- the binding part of the National Spatial Plan, which includes the official requirement to be observed by other spatial plans.

These documents are presented separately but follow a similar process until their approval by the Cabinet of Ministries, by means of an order, in the case of the guidelines, or a regulation, in the case of the binding parts.

The Ministry of Regional Development and Local Government is responsible for assessing the contents of the plan once a year and suggesting reviews or amendments to the National Regional Development Committee.

3.2.2. *Local (framework) plans*

Planning region spatial plans

A planning regional spatial plan determines the development potential, directions and restrictions of the territory of the planning region. It applies to the whole territory of the planning region.

It is prepared by the respective Planning Region Development Agency, in co-operation with the local governments (both district and territorial local governments) located within the territory of the planning region.

During the preparation of a planning region spatial plan, the Agency must observe the State Regional Policy Guidelines, the National Development Plan, any national and sectoral development programmes and the National Spatial Plan. Coordination must be sought with the spatial plans of adjoining planning regions.

Compliance with those documents is assessed by the respective Planning Region Development Council before approving the spatial plan. It could suggest amendments to higher level spatial plans or recommend changes to the planning region spatial plan in cases of non-conformity.

Planning region development programmes

Planning regions development agencies also prepare “development programmes” for their respective territories. These are medium-term (seven year) policy planning documents setting out the priorities for the spatial development of their territories, including specific measures.

These documents are prepared and implemented in accordance with all the planning instruments, at national and regional levels, as already described, and should also take into consideration the development programmes and spatial plans of the local governments located within the planning region.

Approval of planning region development programmes is a competence of the Planning Region Development Council.

3.2.3. *Regulatory (detailed) plans*

District local government spatial plans

A district local government spatial plan determines the development potential, directions and restrictions, including the current and planned permitted land-uses, of the territory of the district, as well as details on the implementation of any objective or requirement specified in a spatial plan at a higher level. It applies to the entire territory of the district.

It should be prepared and approved as a local binding regulation by the district local government. A joint spatial plan can be prepared for the territory of two or more districts, if the district local governments reach an agreement on the conditions and responsibilities for the preparation of such a plan.

The district local government must ensure compliance of its spatial plan with the development programme and spatial plan of the planning region where the district is located and with any previous policy planning document adopted by the district council. Coordination must be sought with the spatial plans of adjoining districts.

The district local government spatial plan is considered as the basis for the development of the territorial local governments spatial plans of the towns and municipalities located within the district.

Territorial local government spatial plans

A territorial local government spatial plan is a long-term (12 year) planning document which determines the development possibilities, directions and restrictions, including the current and planned permitted land-uses, of the territory of the town or municipality, as well as details of the implementation of any objective or requirement specified in a spatial plan at a higher level.

It applies to the whole territory of the town or municipality. Graphic materials associated to the plan are developed at a scale of 1:10,000 and, for specific areas, also 1:5,000 and 1:2,000.

The plan is prepared and approved as binding regulation by the territorial local government. A common spatial plan can be prepared for the territory of two or more towns or municipalities, if the respective territorial local government reach an agreement of the conditions and responsibilities for the preparation of such a plan.

The territorial local government must ensure consistency between its spatial plan and the development programme and the spatial plan of the district where the town or municipality is located. Coordination must be sought with the spatial plans of adjoining towns or municipalities.

Development programmes

Each district and territorial local government also prepares a “development programme” for their respective territories. These are medium-term (seven year) policy planning documents setting out the priorities for the spatial development of their territories, including specific measures.

They are prepared and implemented in accordance with the spatial plans of the respective district or local government, taking also into account the

development programme and the spatial plan of the planning region or district where the district or town/municipality, respectively, is located. In case of district development programmes, they should also consider the spatial plans and development programmes of the territorial local governments located within their territories.

Approval of development programmes is a competence of the district or territorial local governments.

Detailed plans

Taking into account the planned permitted land-uses determined by a territorial local government spatial plan, a detailed plan specifies the spatial utilization and building conditions of a particular piece of land.

Graphic materials associated to the plan are drawn up at a scale of 1:2,000 and, for specific areas, 1:500.

The process of preparing a detailed plan can be initiated either by the territorial local government or by a natural or legal person interested in a specific development. If the initiative of a natural or legal person conforms to the territorial local government spatial plan in force, then the town or municipality and the natural or legal person can enter into a contract to define conditions for the preparation and financing of the detailed plan.

A detailed plan can only be drawn up after a decision by the affected town or municipality, and is approved once the respective territorial local government has entered into force. It is approved by the territorial local government as a binding regulation.

3.3. Process

3.3.1. Inter-government consultation

The fact that any spatial plan must conform with any other planning document adopted at a higher level ensures a good level of coordination between different authorities.

In accordance with the Spatial Planning Law, each institution involved in spatial planning at the national, planning region, district or territorial local government levels, has the right to be consulted regarding spatial plans drawn up at the same or lower levels of government, in order to ensure compliance with spatial plans already in force at a higher level.

For instance, the National Regional Development Committee is responsible for the evaluation of the National Spatial Plan and the spatial plans of the planning regions. The same applies to each district local government, which is

responsible for evaluating the conformity of the spatial plans of the towns and municipalities located within its territory with the district spatial plan in force.

With regard to all the documents drawn up as part or support of the National Spatial Plan, all state administrative institutions, local governments and public organizations must be consulted by the Ministry of Regional Development and Local Government during their preparation. They can also be invited to take part in an inter-institutional national spatial plan steering group or specific working groups for certain areas.

Moreover, not only the institutions at a higher level must be consulted to show compliance with their plans; any institution involved in spatial planning can also suggest amendments to the spatial plan in force at the next two levels of government.

Coordination is also ensured at the same level of government. Not only do state administrations co-operate for the development of part of the National Spatial Plan. Districts, towns and municipalities must also work together, sometimes to prepare common spatial plans or just to ensure a certain level of coordination between the spatial plans of adjoining territories regarding the potential impacts of proposed developments on the territory of the neighbouring towns or municipalities.

3.3.2. Policy Integration

Integration of planning policy documents into local spatial plans is mandatory. For instance, the Spatial Planning Law states that the district local government shall:

“...evaluate those parts of the National Spatial Plan, National Development Plan, sectoral development programme and spatial plan of the planning region, which apply to the territory of this district local government...”

The territorial local governments are also obliged to consider in their spatial plans all the planning policies and specific measures proposed at higher levels, for example, transport infrastructures.

Airport development plans are integrated into territorial local government spatial plans and detailed plans, as is any other major infrastructure located within the territory of a town or municipality. In fact,, it is necessary for any airport development to be included in the adopted spatial plan, and even to become the subject of a detailed plan prepared by the airport operator and adopted by the local government.

3.3.3. *Citizen participation*

Public involvement is regulated by the Spatial Planning Law, which makes it compulsory for all institutions involved in spatial planning to ensure the participation of the general public in the development process of the respective spatial plan.

The Ministry of Regional Development and Local Government, the planning regions, the district local governments and the territorial local governments are required to publish information in the Official Gazette of the Republic of Latvia regarding commencement of the development of, respectively, the National Spatial Plan, a planning region spatial plan, a district local government spatial plan and a territorial local government spatial plan or detailed plan.

That information should include essential information on the contents of the plan and the procedures, place and time periods for public discussion and submission of comments and proposals.

The relevant institution must prepare a report on the public consultation, including the reasons for the acceptance or rejection of the comments and proposals.

The Regulations of the Cabinet of Ministries regarding the National Spatial Plan and the Territorial local government spatial planning also include provisions on the public consultation processes to be conducted.

In the case of territorial local government spatial plans and detailed plans, the public consultation must be organized in at least two stages: the first upon the commencement of the spatial plan development and the second once a draft plan has been prepared.

Airport development plans can also be subject to citizen participation if the airport operator decides so, even before submission to the local government for their integration into general spatial plans.

4. REGULATIONS AND PERMITS

4.1. Development control system

The permitting system is regulated in Latvia by the Construction Law, adopted by the *Saeima* on 10 August 1995 and amended for the last time on 2003. These provisions were drawn up by the General Construction Regulations, adopted by the Cabinet on 1 April 1997 and most recently amended in 2004.

4.1.1. *Activities subject to development control*

A construction permit issued by a building authority is required for any construction work in Latvia. Unauthorised construction works are not permitted.

The first stage for obtaining a construction permit is the submission of an application for construction (or registration card), including very general information on the intended activity.

The registration card must be approved by a written opinion of the building authority, which could also include conditions for the development of the building design.

The building design must be prepared indicating all the specific details for the construction. It must be submitted to the building authority for approval.

Before the commencement of construction, the application for the construction permit must be submitted to the same building authority, together with the approved building design, information on the owner of the terrains, the building contractor, the schedule for the construction works, provisions regarding the environment protection, etc.

The construction permit is granted and registered by the building authority.

If the builder or the owner of the parcel of land changes, the permit must be registered again.

4.1.2. *Exceptions or exemptions*

In accordance with the General Construction Regulations, it is not necessary to apply for a construction permit for any modification of the interior of a building, provided that the solidity of the support structure is not affected and the facades are not changed, or for the construction of small buildings in rural areas.

4.1.3. *Institutions involved: inter-government relations*

In accordance with the Construction Law, the general supervision and coordination of the construction activities in the State is a competence of the Ministry of Economics.

There is also a Construction Council, appointed by the Cabinet of Ministries, with the function, among others, of examining proposals regarding “nationally significant structures” and providing opinions regarding their design, construction and financing.

The main competences on construction belong to the local governments, which should include in their spatial and detailed plans all the specific building regulations for each development, examine and approve building designs and issue and register construction permits.

Permits as such are granted by the building authorities, which are departments of the local governments. In accordance with the General Construction Regulations, several local governments can reach an agreement to establish a common building authority for their territories.

Any decision of a building authority can be appealed first to the local government in question and, secondly, to the courts.

The Construction Law empowers the Cabinet of Ministries to specify special procedures for the construction of, among others, transport infrastructures. Those special procedures could include a different building authority responsible for granting the construction permit, although it must always be registered by the building authority of the local government where the structure will be located.

Citizen participation is required before a decision is taken by the local government regarding construction permits for structures of public importance or with a significant impact on the environment and living conditions of the population or on the value of the property.

4.1.4. *Relationship with planning*

In accordance with the General Construction Regulations, a building authority may reject an application for construction (registration card) if the proposed activity does not conform to the spatial plan, building regulations or the detailed plan in force.

If there is no detailed plan for the area where the construction is to be carried out, the written opinion of the building authority may specify additional conditions to be considered in the building design.

In any event, a building design will not be approved if it does not conform to the territorial local government spatial plan. (or detailed plan, if adopted for that area).

4.2. Environmental permits

4.2.1. *Environmental Impact Assessment*

Environmental Impact Assessment procedures, including Strategic Environmental Assessment, are regulated in Latvia by the Environmental Impact Assessment Law, adopted by the *Saeima* on 14 October 1998 and amended last on February 2004 to regulate Strategic Environmental Assessments.

This law transposes into Latvian legislation EU Directives 85/337/EEC⁴ (the “EIA” Directive), and 2001/42/EC⁵ (the “SEA” Directive).

In accordance with the EIA Law, an assessment is required for the construction of new airports with a runway length of 2,100 metres or more.

An initial impact assessment, on the basis of which a decision regarding a complete assessment would be taken by a competent authority, is required for the installations for construction or repair of aircraft and for the construction of airfields in general, no matter what the runway length.

With regard to the Strategic Environmental Assessment, the Cabinet of Ministries issued a “Regulation on Procedures for carrying out a Strategic Environmental Impact Assessment” on 23 March 2004. That Regulation determines the type of plans requiring SEA. It should be noted that all spatial plans, and also planning documents related to the development of ports are subject to SEA, while airports are not.

4.2.2. *Other environmental controls*

If an environmental impact assessment is not required for a specific activity, the respective Regional Environmental Board will issue technical provisions regarding environment protection.

According to the Law on Environment Protection, adopted by the *Saeima* on 6 August 1991 and most recently amended in May 2003, an environmental permit is required, at least for activities involving waste management and emission of pollutants.

⁴ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁵ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

4.2.3. Institutions involved

In accordance with the Law on Environment Protection, the Ministry of the Environment is responsible for supervising environmental impact assessment procedures and for granting environmental permits, usually through the Regional Environmental Boards.

Territorial local governments are also responsible for environment protection within their territories.

4.2.4. Integration with other permits

There is no integration of planning and environmental permits, which must be obtained separately.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

The institutions and organisations involved in airport planning and development in Latvia are the airport operators, the Civil Aviation Administration, the local governments of the towns and municipalities where the airports are located and the Ministry of the Environment.

With regard to the airport operators, Riga airport is owned and managed by a Joint-Stock Company whose shares belong to the State. The company is managed by a five member board and controlled by a supervisory board chaired by a representative of the Ministry of Transport and formed by representatives of the political parties and public organisations.

The remaining airports in Latvia are managed by the respective local governments (City of Ventspils and Liepaja Municipality), with some input from the Ministry of Transport.

Other institutions and the citizens may also participate in the airport planning process, usually when the airport plans or the spatial plans where airports are included are formally subject to SEA or to citizen participation.

5.1.2. Instruments

There are no statutory airport development plans as such in Latvia. Airport planning takes place through integration of airport plans into spatial plans of the towns and municipalities where they are located.

Detailed plans can also be drawn up by the airport operators for certain areas of the airport, and submitted to the local government for their adoption.

This is easily achieved in case of the two small airports managed by the local governments. In the case of Riga, the airport operator is responsible for initiating the airport planning process by drawing up a strategic master plan. This brief internal document, which only requires approval by the supervisory board of the company, identifies the long-term development possibilities of the airport, including several options for the construction of a second parallel runway.

The strategic plan is not the future airport development reflected in the spatial plans of the local governments affected by Riga airport. These spatial plans include medium-term development considering only the expansion of the existing runway.

However, airport development takes place in a piecemeal fashion in Latvia. Every time the airport requires an expansion, a specific plan and project has to be designed and must go through the whole process explained below, including approval by the Civil Aviation Administration.

At the national level, a new National Programme for Transport Development has been adopted by the Cabinet of Ministries, establishing the general guidelines for the expansion of the transport infrastructures in Latvia until 2010. This is a national sectoral programme to be considered by any spatial plan developed at the planning region or local government levels. This plan was prepared by the Ministry of Transport. It was not subject to public participation but all the institutions and stakeholders involved in transport, including the airport operators, were consulted.

Riga airport is considered as an infrastructure of national interest, but this classification does not entail any advantage for the planning process. This consideration only avoids the inclusion Riga airport in the list of companies to be privatised.

5.1.3. *Process*

Airport development prospects are communicated to the local governments where the airport is located when they are updating or reviewing their spatial plans. A negotiation process could take place to ensure consideration of all the airport proposals.

Following this, the local government spatial plan will follow the same process as any other spatial plan in Latvia, including public consultation. Compliance with spatial plans adopted at higher levels will be checked.

5.2. **Spatial impact**

5.2.1. *Implementation of ICAO Annex 14 requirements*

Airport operators are responsible for keeping the obstacle limitation surfaces maps, which are reviewed every year and sent to the Civil Aviation Administration, up to date..

The CAA is responsible, according to the Law on Aviation, adopted by the *Saeima* on 5 October 1994 and most recently amended in March 2004, for granting a permit for the construction of:

“ ...

3) *objects the height of which above the ground or water surface at the site thereof exceeds 100 meters;*

4) objects irrespective of height within aircraft take-off and landing sectors – at a distance of five kilometers from the aerodrome control tower, including the planting of trees;

5) objects the height of which exceeds the height of the aerodrome control tower by 30 meters and more – within a radius of 10 kilometers there from;

6) objects the height of which exceeds the height of the aerodrome control tower by 50 meters and more – within a radius of 30 kilometers there from;

...”

If any building is erected without that permit, the CAA is empowered to order the demolition and elimination of the obstacle at the expense of the person responsible.

Obstacle limitation surfaces maps are also included in the airport plans sent to the local government for their integration into spatial plans.

5.2.2. Noise Impact

Noise contours are only calculated for Riga airport. Noise impact has not been an important issue in Latvia in the past, and it is not yet a real concern due to the lack of complaints, the low number of total operations at the airport, still well below 50,000 operations/year, and also the low number of aircraft operations during night periods.

The noise contours calculated for Riga airport future operation were included in the airport plans sent to the affected local governments for their integration into their spatial plans.

Any airport development requiring an EIA will have to take noise impacts into consideration.

5.2.3. Risk prevention

There are no third party risk considerations in Latvia.

5.2.4. Land reserve for future construction

Land reserves for future airport developments have to be included in spatial plans of the town and municipalities where the airports are located.

Currently, the future expansion of the runway at Riga Airport can take place in terrain which already belong to the airport operator. A future second parallel runway should be integrated into territorial local governments spatial plans and

acquired by the airport operator (expropriation can not be used as it is a Joint-Stock Company).

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: Any construction activity at an airport requires a construction permit from the building authority of the local government where the airport is located.

An application for construction (registration card) has to be submitted by the airport operator to the building authority. In accordance with the conditions imposed by the written opinion where the registration card is approved, the building design has to be prepared and approved again by the building authority.

Finally, an application for the construction permit must be submitted by the airport operator, including details on the contractor in charge of the construction, which will be included in the permit.

Public consultation will take place before the permit is granted in the case of large developments, such as the extension of the runway at Riga airport.

- b) Environmental permits: The first stage for an airport development is the submission of the terms of reference of the project to the Environment Board, which shall give some guidelines on the preparation of the project and decide if an EIA is required. Those guidelines may also include conditions to be considered during the construction.
- c) Other permits: Any specific airport development requires previous approval by the supervisory board of the airport operator before the overall process is started. The CAA should also be consulted.

5.3.2. Institutions and processes involved

- a) Authorization: In accordance with the Law on Aviation, the construction of an aerodrome requires an authorisation from the Civil Aviation Administration.
- b) Supervision: The Construction Law empowers the State Construction Inspectorate to supervise any construction activity.

The “Regulations for the supervision of construction”, issued by the Cabinet of Ministries on 10 February 2004, empower the building

authority which has granted the construction permit to supervise compliance with the conditions stated in the permit.

Once the construction is finished, the building authority checks compliance with the building design and the permit and includes the building or infrastructure at the land-use register of Latvia.

5.3.3. Integration with planning and environmental controls

Full integration with spatial planning is guaranteed as a building design, and the subsequent construction permit, can not be approved if the project is not drawn up in accordance with a territorial local government spatial plan or a detailed plan in force.

With regard to environmental controls, the guidelines established by the Environmental Board on the preparation of the building design and the requirement or not for an EIA to be conducted ensures consideration of environment protection during the construction of any airport infrastructure.

5.4. Airport operation

5.4.1. Operating permit

Once the construction of any airport infrastructure is finished, the Civil Aviation Administration should review it and update the airport license granted to the airport operator for the whole aerodrome.

5.4.2. Airport certification

Airport certification is already regulated in Latvia, through the "Regulations on Aerodrome Certification" issued by the Director of the Civil Aviation Administration" in accordance with the Law on Aviation.

The airport operator must apply for an update of the aerodrome certificate every year, providing the CAA with a reviewed version of the aerodrome manual and the obstacles chart.

A Safety Management System will be adopted in Riga from November 2005.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

General rules on the areas of noise and air quality are contained in the “Law on Pollution”, adopted on 15 March 2001 and most recently amended in 2003, and related Regulations issued by the Cabinet of Ministries.

In particular, the “Regulations on the procedures for environmental noise assessment”, adopted on 13 July 2004, lay down in detail the requirements established by the last amendment to the Law on Pollution, which transposed Directive 2002/49/EC⁶ (the “noise” Directive) into the national legislation.

Regulations on the procedures for noise measurement, adopted on 4 February 2003, established the methods for noise monitoring.

Directive 2002/30/EC⁷ (the “noise-related operating restrictions” Directive) is not transposed into Latvian legislation.

According to the Law on Aviation, *“the design, construction and development of towns and other populated areas, as well as the construction and rebuilding of industrial, agricultural and other objects in a territory adjacent to an aerodrome above which territory there is a specified aerodrome traffic zone, must be performed in compliance with the requirements of safety of aircraft flight, taking into account the potentially harmful effect of aviation upon the health of inhabitants and the operation of undertakings, institutions and organisations.”*

6.2. Institutions

In accordance with the Law on Environment Protection, the Ministry of the Environment is the central body responsible for environment protection in general, including noise and air pollution matters.

The Ministry of Health is also responsible for the effects of noise on public health.

The Ministry of Transport is responsible for submitting the strategic noise maps around airports, drawn up by the airport operators and the local governments, to the Ministry of the Environment, together with a summary of the results.

⁶ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

⁷ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

6.3. Instruments

a) Planning: The National Environmental Health Action Plan of Latvia was adopted by the Cabinet of Ministries, on the proposal of the Ministry of Welfare, in 1997. The short-term (5 year) objectives were:

- to decrease environment pollution induced by transport;
- to increase quality and safety of drinking water;
- to decrease morbidity, mortality and invalidity from polluted food, occupational diseases, infectious diseases, accidents and chronic diseases;
- to decrease the influence of physical factors (e.g., noise) on health;
- to change attitude of people towards health and environment.

The only airport noise contours in Latvia are those drawn up for Riga Airport in 2001 when the spatial plan of the Marupe municipality was reviewed.



Figure 6. Noise contours calculated by the airport operator

There are no statutory maximum noise levels around Latvian airports.

Noise mapping will be required by 2007, in accordance with the transposition of the “noise” Directive; furthermore, it is expected that

Riga airport will reach the threshold of 50,000 operations/years by then.

Noise and air quality would certainly be considered in any EIA conducted for an airport development. It must be noted that no EIA has been carried out for the extension of the runway at Riga airport.

- b) Land use restrictions: There are no land use restrictions based on noise or air pollution.

However, the noise levels caused by the operation of Riga airport, including those forecast after the expansion of the runway, are included in the spatial plan of Marupe municipality, whose building authority takes them into account when granting construction permits.

Their policy regarding noise is to forbid new urban development and growth of the existing urban areas within the area affected.

- c) Compensation: There is no compensation scheme defined on the basis of noise or air pollution impacts

6.4. Integration with spatial planning

Noise contours are only included in the spatial plans of the City of Riga and Marupe municipality, which are the only local governments affected by Riga airport.

6.5. Integration with development, construction or operation controls

Potential noise impacts are considered by the building authority in Marupe municipality when analysing applications for construction permits, on the basis of its own policy for the development of its territory

Conditions can be imposed in the written approval for the registration card and in the construction permit with regard to materials and insulation conditions of the buildings.

There is no permanent noise monitoring of aircraft operations in Latvia, although the installation of a noise monitoring system around Riga airport is being considered to check the validity of noise maps in the next few years.

7. CASE STUDY – RIGA AIRPORT

Riga airport was able to handle up to 2 million passengers/year when it was fully dedicated to domestic traffic within USSR, although the acceptable standards of service were different to those expected nowadays.

With Latvian independence in 1991, the airport's management was transferred to an independent airport company, later Riga International Airport, owned by the State. Traffic fell to 300,000 passengers that year.

1.85 Million passengers are expected during 2005 at the airport, which was expanded in 1993 and 1994, when the terminal building was enlarged and the runway was reconstructed thanks to a loan from the EBRD.

A runway extension has proved to be necessary to handle traffic growth at Riga. Also, a further extension of the terminal building and a new commercial park are planned.

95% of the airport falls within the territory of Marupe municipality, the other 5% falls within the City of Riga. Specifically the land where the extension of the runway will be built, which already belongs to the airport company, falls within Marupe.

The first stage for the approval of the development was its consideration in the spatial plan of Marupe. No construction permit would be granted to the runway extension if it was not included in a spatial plan.

In 2001, the airport operator prepared a development plan including the extension of the runway, together with the associated noise contours and obstacle limitation surfaces.

The following figure shows the airport plan, with the runway extension and other related activities.

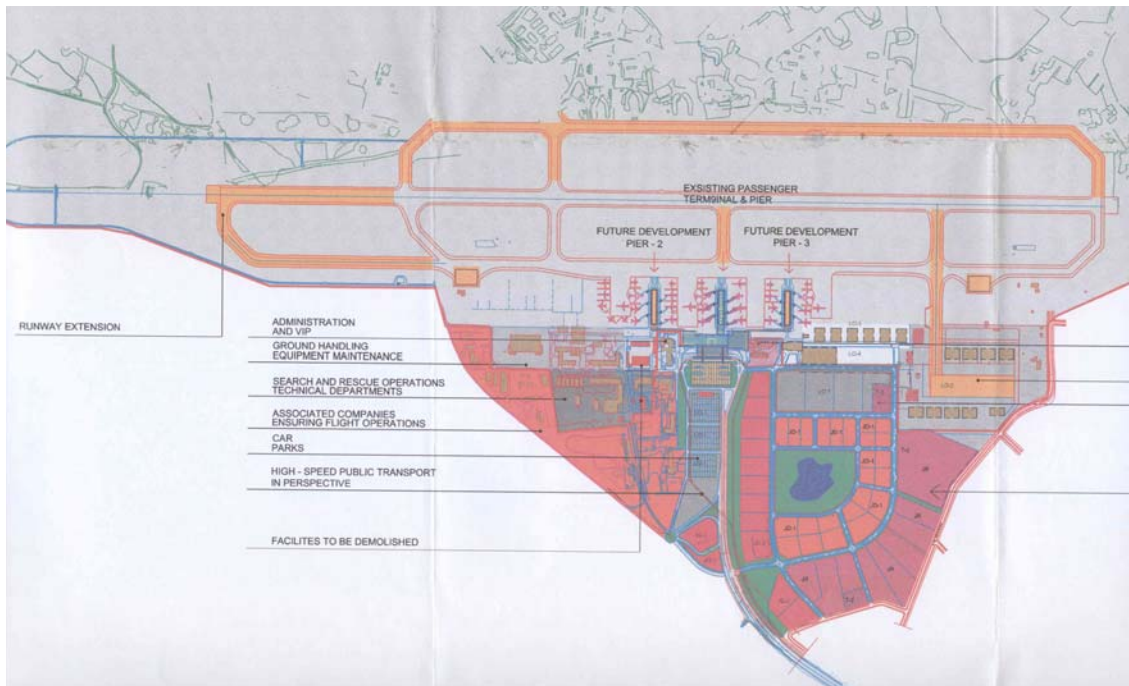


Figure 7. Riga International Airport development plan

The local government of Marupe municipality reviewed its spatial plan in 2003, establishing the guidelines for the development of its territory till 2014. This plan, currently in force, includes the runway extension, as well as the noise contours expected when the extended runway is in operation, calculated for the traffic expected in 2020.

The following figures show the airport land, in blue and delimited by a pink line, included in the general map for the overall territory of the municipality. The noise contours, which affect 33% of the territory of the municipality, are also reflected in that plan.

MĀRUPES PAGASTA ATLAUĀ TERITORIJAS IZMANTOŠANA NO 2002. - 2014. GADIEM

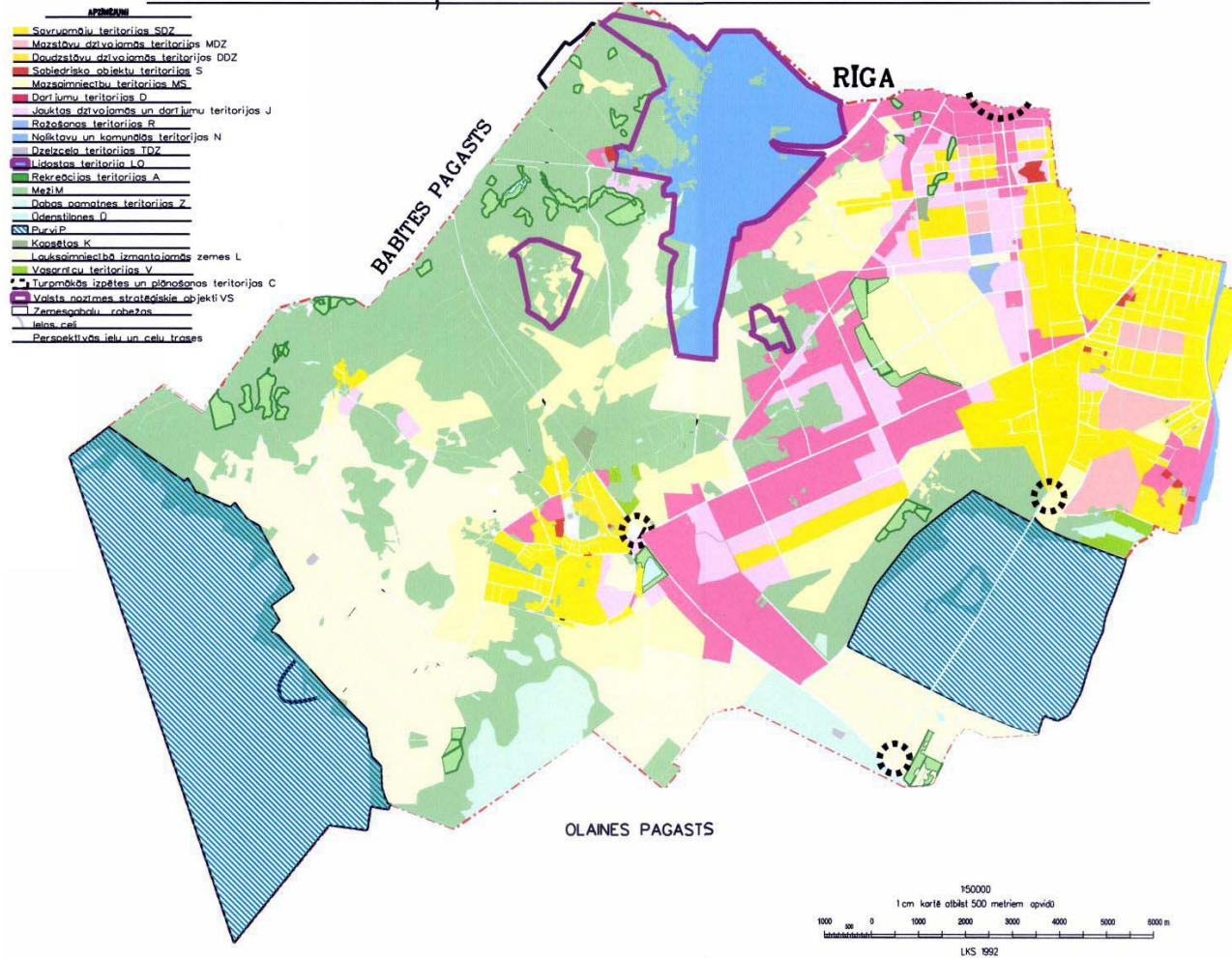


Figure 8. Marupe spatial plan

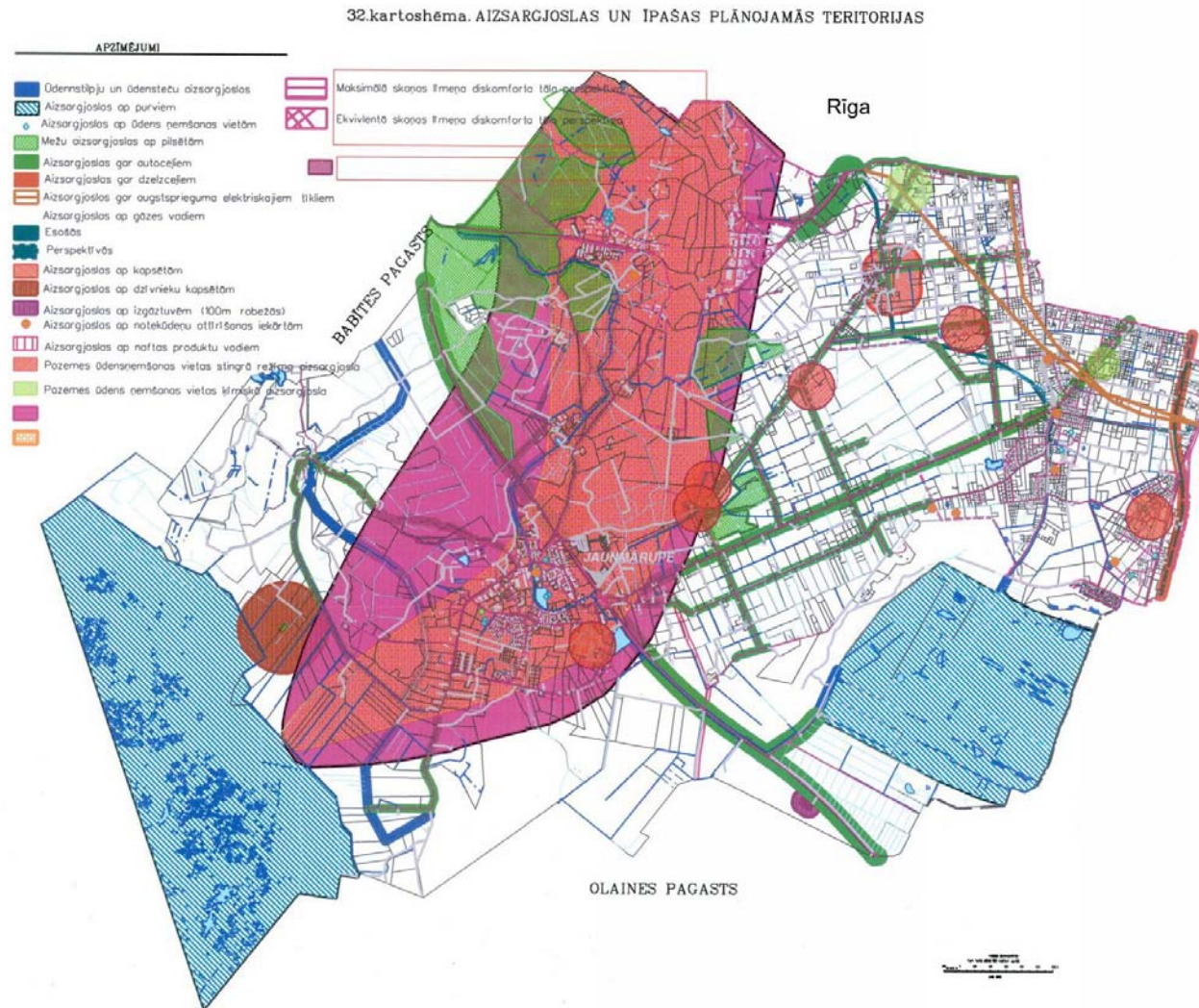


Figure 9. Noise contours at Marupe spatial plan

The building authority of Marupe municipality recognises that the noise contours affecting such a large part of its territory also affect the value of the land. However, in order to ensure the quality of life and health of the population, it has forbidden urban development within the areas covered by the noise contours.

A Detailed Plan has been prepared by the airport operator for the commercial development of an area within the airport boundaries. The plan has been sent to Marupe municipality for adoption.

COUNTRY CONTACTS

- **Ministry of Transport – Aviation Department**

Arnis Muiznieks, Director. Chairman of the Supervisory Board of Riga International Airport

- **Civil Aviation Administration**

Valdemars Piesis, Head of Airports Standards and Security Division

Raivo Bisenieks, Airports Inspector

Mara Dame, ATM Division

- **Riga International Airport**

Arnis Kalniskans, Director of Facilitation and Development. Member of the Board

Guntars Sprogis, Chief of Purchases and Contracts

- **Marupe Municipality**

Chairman of the building authority

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”⁸)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

⁸ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

Rajons

Districts

Pagasts

rural municipalities

Novads

amalgamated town and rural municipalities

Pilsēta

Towns

Saeima

Parliament

REFERENCES

- European Union: http://europa.eu.int/index_en.htm
- Council of Europe: www.coe.int
- EUROSTAT. <http://epp.eurostat.cec.eu.int>
- European Directives
 - Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31985L0337:EN:HTML>
 - Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>
 - Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports (Text with EEA relevance)
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML>
 - Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Latvian laws:
 - Constitution
 - Law on Aviation
 - Spatial Planning Law
 - Construction Law
 - Regional Development Law
 - Law on local governments
 - Regulations regarding the National Spatial Plan
 - General Construction Regulations

- Regulations on Territorial Local Government Spatial Planning
- Law on EIA
- Law on Environmental Protection
- Law on Pollution
- Procedures for strategic environmental impact assessment
- Procedures for environmental noise assessment noise
- State Administration Structure Law



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

LITHUANIA



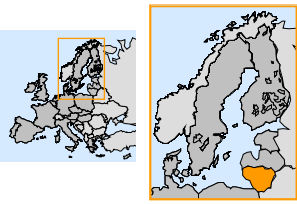
This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

The European Commission does not guarantee the accuracy of the data included in this publication, nor does it accept responsibility for any use made thereof.

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- 6.4. Integration with spatial planning
 - 6.5. Integration with development, construction or operation controls
 - 7. Case study- Vilnius airport
- Country contacts
- Glossary
- References

LITHUANIA		Location Map												
Population	3.6 mill. (55.3 inhabitant per sq. Km)													
Airports network	Lithuania has 4 public international airports, managed directly or by public enterprise of the Ministry of Transport and Communications													
<p>Spatial planning system</p> <p>Spatial planning system is hierarchical from local level to national level</p> <ul style="list-style-type: none"> • Institutions <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">National level:</td> <td>Ministry of the Environment. Responsible of spatial planning policies and the “Comprehensive Plan for the Republic of Lithuania”</td> </tr> <tr> <td>Regional level:</td> <td>County administration</td> </tr> <tr> <td>Local level:</td> <td>Municipal councils</td> </tr> </table> • Instruments <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">Strategic plans</td> <td>Comprehensive Plan of the territory of the Republic of Lithuania Comprehensive County Plans</td> </tr> <tr> <td>Framework plans</td> <td>Comprehensive Municipal Plans</td> </tr> <tr> <td>Regulatory plans</td> <td>Special plans Detailed plans</td> </tr> </table> • Process: The planning process is coordinated thanks to the hierarchical planning system. Detailed plans, prepared by private citizens or entities, are approved by the municipal council after checking their coherence with national and county planning policies. Citizen participation is coordinated according to legislation in force 			National level:	Ministry of the Environment. Responsible of spatial planning policies and the “Comprehensive Plan for the Republic of Lithuania”	Regional level:	County administration	Local level:	Municipal councils	Strategic plans	Comprehensive Plan of the territory of the Republic of Lithuania Comprehensive County Plans	Framework plans	Comprehensive Municipal Plans	Regulatory plans	Special plans Detailed plans
National level:	Ministry of the Environment. Responsible of spatial planning policies and the “Comprehensive Plan for the Republic of Lithuania”													
Regional level:	County administration													
Local level:	Municipal councils													
Strategic plans	Comprehensive Plan of the territory of the Republic of Lithuania Comprehensive County Plans													
Framework plans	Comprehensive Municipal Plans													
Regulatory plans	Special plans Detailed plans													
<p>Regulation and permits</p> <p>All construction, demolition or reconstruction activities require a building permit, usually granted by the municipal administration. All airports projects are submitted to the Ministry of Environment and require an EIA, usually handled at county level. In addition, airports need a permit for the use of natural resources, which is reviewed every 5 years</p>														
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: Civil Aviation Authority must approve all airport developments. Airport master plans are only technical internal documents • Spatial impact: Lithuanian legislation defines “Protected zones” in the vicinity of the airports and “Sanitary zones” based on noise contours where developments must be submitted to the CAA • Construction: Airport construction requires building permits as well as environmental permits and CAA authorisation • Operation: Airport operation must be authorized by the CAA and an airport certificate is required according to ICAO provisions 														
<p>Airport noise and air quality</p> <p>“Sanitary Protection Zones” are defined for the purposes of health protection in the vicinity of airports, taking into account noise nuisances, air quality, soil pollution and electromagnetic radiation. In these zones, land uses, constructions and activity permits are under the County Health Department and CAA supervision</p>														

1. SUMMARY

SPATIAL PLANNING SYSTEM

The “Comprehensive Plan for the Republic of Lithuania” adopted by the National Parliament is a strategic plan with little detail, which provides the basis for local planning.

All municipalities are required to adopt a “Comprehensive Municipal Plan”. These plans include not only existing major infrastructures such as airports, but also projects for new ones and areas where land uses or constructions are limited or subject to special regulations, as is the case with areas affected by noise or airport-related height restrictions.

Comprehensive plans are implemented by Special plans or Detailed plans. The former can be adopted in order to undertake the creation of large infrastructures, encompassing usually more than one municipality, or to establish special land use regulations.

REGULATIONS AND PERMITS

Construction permits

All construction, demolition or reconstruction activities require a building permit issued by the local administration.

There are no exceptions for infrastructures or civilian public projects.

Environmental permits

The EIA system follows EU legislation closely, although it also requires a preliminary evaluation for a very large number of projects. Evaluation is also required for plans and programmes although there is still no practical experience in this respect.

Most environmental authorizations, except those related to water and sanitation, are integrated into the “permit for the use of natural resources” required for all potentially contaminating activities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There are no national airport plans but the Ministry of Transport and Communications commissioned a study on the “Business strategy of civil aviation in the liberalized market” in which the capacity of current airports is analysed, putting forward a proposal for a new airport .

- Airport

There are no statutory plans for airport construction or development, but the Aviation Act requires civil aerodrome sites to be included in spatial planning documents.

In Vilnius, the airport operator has a Development Program 2002 – 2012, where investments are listed and quantified. This is only a technical and budgetary internal document, not subject to participation or coordination. There is also a scheme for future development which includes the construction of a new runway and contemplates projected protection zones and noise contours. This document would have to be adopted as a spatial plan (either a Detailed Plan or a Special Plan).

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Safeguarded areas are defined in accordance with the requirements of the ICAO and must be integrated into spatial plans. All developments within these areas must be submitted to the CAA for approval before a building permit may be issued. Navigation facilities are also protected by circular safeguarded areas.

These limitations are also recorded in the land registry.

- Noise Impact

Noise impact is taken into consideration by establishing a “Sanitary Zone” based on noise contours where development is regulated in order to prevent unsuitable land uses. Building permit applications in this zone must be cleared with the CAA before they can be issued.

- Risk prevention

There are no provisions for risk prevention in the vicinity of airports.

- Land reserve for future construction

Land reserves for all major infrastructures can be established in spatial plans.

Construction

All airport construction, including any construction within the airport, must obtain a building permit.

All airport related construction projects must be approved by the CAA.

Operation

Environmental permits (water, waste, air, etc.): Airports are subject to the same legislation and requirements as any other activity and must obtain the required environmental permits for activities not covered by an EIA.

Airport operations must be authorized by the CAA.

Airport certification is required in accordance with ICAO provisions.

AIRPORT NOISE AND AIR QUALITY

Noise

Noise protection in the vicinity of airports is implemented by means of the establishment of “Sanitary Protection Zones” where 4 sub-zones are delimited according to noise levels. These zones can be established by means of a “Special Plan” or integrated into the Comprehensive Municipal Plan.

All applications for building or activity permits within the sanitary protection zone are sent to the County Health Department which must approve the project and can establish specific requirements in each case. All permits within the areas affected by noise must also be cleared with the Civil Aviation Authority.

There are no noise abatement plans for existing buildings.

Air quality

Air quality is also taken into account for the establishment of sanitary protection zones, but in the case of Vilnius airport the main factor has been noise, since there are no air pollution problems arising from airport operations.

2. CONTEXT

Lithuania is the southern-most Baltic State. The Lithuanian landscape is glacially flat, except for hills in the western uplands and eastern highlands no higher than 300 m. The terrain is marked by numerous lakes and swamps, and a mixed forest zone covers 30% of the country

Settled perhaps as early as 1500 B.C., the area was unified in the 13th century and became one of the largest states of medieval Europe. Lithuania merged with Poland in 1569 but was absorbed into Russia by three partitions of Poland (1772, 1793, and 1795). The independent country of Lithuania existed from 1918 to 1940, when it became a constituent republic of the USSR. Occupied by Germany from 1941 to 1944, it reverted to Soviet rule after World War II and was known as the Lithuanian Soviet Socialist Republic before achieving independence in 1991. In 2004, Lithuania became one of the 15 new members of the European Union.

Lithuania is divided into 10 counties (*Apskritis*): Alytaus, Kauno, Klaipėdos, Marijampolės, Panevėžio, Šiaurės, Tauragės, Telsių, Utenos, and Vilniaus.



Figure 1. Map of Lithuania

In 2003 Lithuania had the highest economic growth ratio among all European Union candidates, reaching 8.8% in third quarter. In 2004, GDP growth rate of 7% reflects impressive economic development in Lithuania, although current GDP per capita reaches 10,700 ¹ (48% of EU average). Lithuania has gained membership of the World Trade Organization and joined the European Union

¹ GDP per capita in PPS (Purchasing Power Standards) at current market prices. 2004
Source: EUROSTAT

on 1 May 2004. Accession to EU reduced previously high unemployment, to 10,9% in 2004. Lithuania has almost completed privatisation of the large state-owned utilities. The *litas* is the national currency, although Lithuania is expected to switch to euro in 2006.

Characteristic	Description
Population	3,445,900
Latitude / Longitude	56° 00' N, 24° 00' E
Land area	65,200 sq Km
Coastline	99 Km
Capital City	Vilnius (0.5 million)
GDP per capita (PPS at market prices)	10,700
GDP real growth rate	7 %
Inflation rate	1.1 %
Unemployment rate	10.9 %

Table 1. Lithuania; Main facts and figures ²

2.1. Population and statistics

The population of Lithuania is over 3.5 million with an average density of 55.3 inhabitants per sq Km, which is about half the European average density.

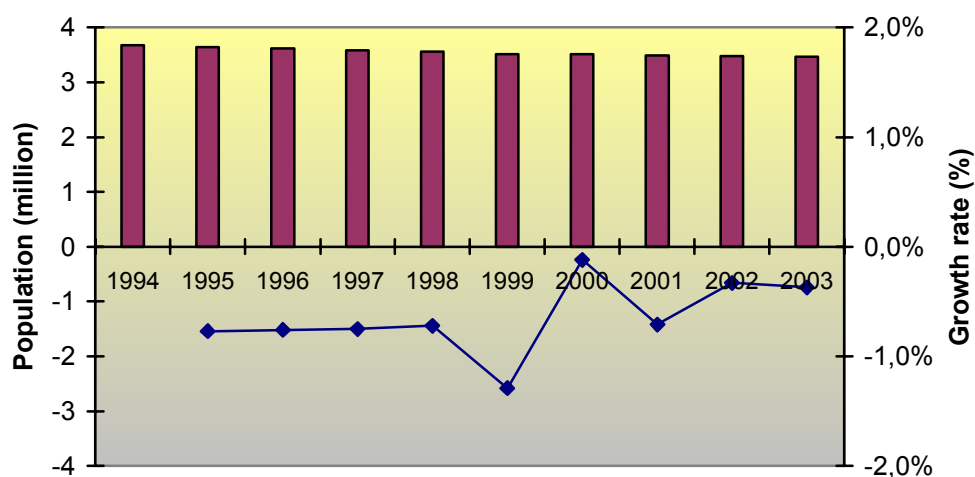


Figure 2. Lithuanian population evolution

² Source: EUROSTAT

Population evolution in Lithuania decreased during the last year. The main reason for this fall in population is emigration to the EU – 15, with a net migration of –0.6 people per 1,000 inhabitants.

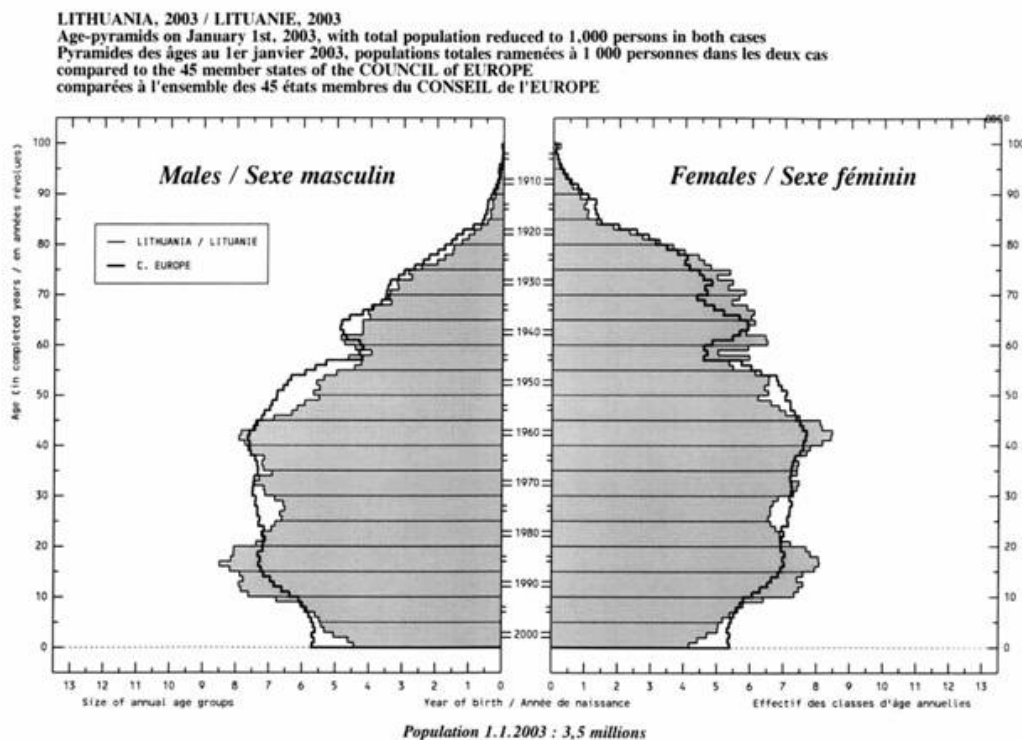
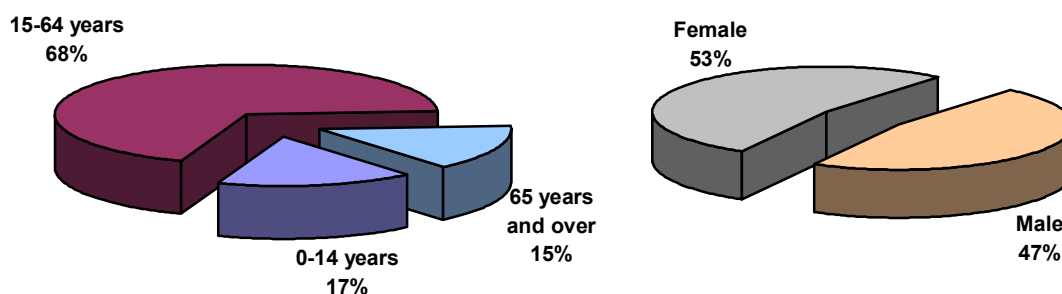


Figure 3. Age-pyramids (2003)³

The figure above shows the low birthrate in Lithuania, one of the lowest in Europe with 8.49 births/1,000 population. Currently, the median age in Lithuania is 37.4.



Figures 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Lithuania is a parliamentary democracy. Under the Constitution adopted in 1992 the head of state is the President, elected directly for a five-year term, who also functions as commander-in-chief, overseeing foreign and security policy. The President, on the approval of the Parliament, also appoints the Prime Minister and on the latter's nomination the rest of the Cabinet, as well as a number of other top civil servants and the judges for all courts, including the Constitutional Court (*Konstitucinis Teismas*). Lithuania has a unicameral parliament (*Seimas*), whose 141 members are elected to four-year terms.

With regard to the spatial planning system, the power is hierarchical from local level to national level. The Ministry of the Environment has to define the spatial planning guidelines and policies and, at the same time, is the main body responsible for environmental issues. At local level, Municipalities are fully responsible for local planning, taking into account the State and Regional policies.

Additionally, airports need the approval of the Ministry of Transport to define their development plans, as well as the CAA authorisation and certification to begin their operations.

2.3. Main airports

There are only 4 international airports and 8 general aviation aerodromes with paved runways.

The national airport network is owned by the Republic and managed through the Ministry of Transport and Communication.

In the case of the most important airport of Lithuania, Vilnius International Airport, a state enterprise, was created to operate it.

The Civil Aviation Authority of Lithuania conducted several studies requested by the Ministry of Transport and Communication:

- Development of Vilnius airport. Construction of a new terminal and a new runway. Due to the level of traffic and the current runway orientation, there could be future problems with noise pollution over Vilnius city. The new runway angle could alleviate this potential problem
- Building a new terminal for Kaunas airport
- Construction of a new airport. This study ties in directly with the Transport and Communications Ministry policy announcement of June 2004

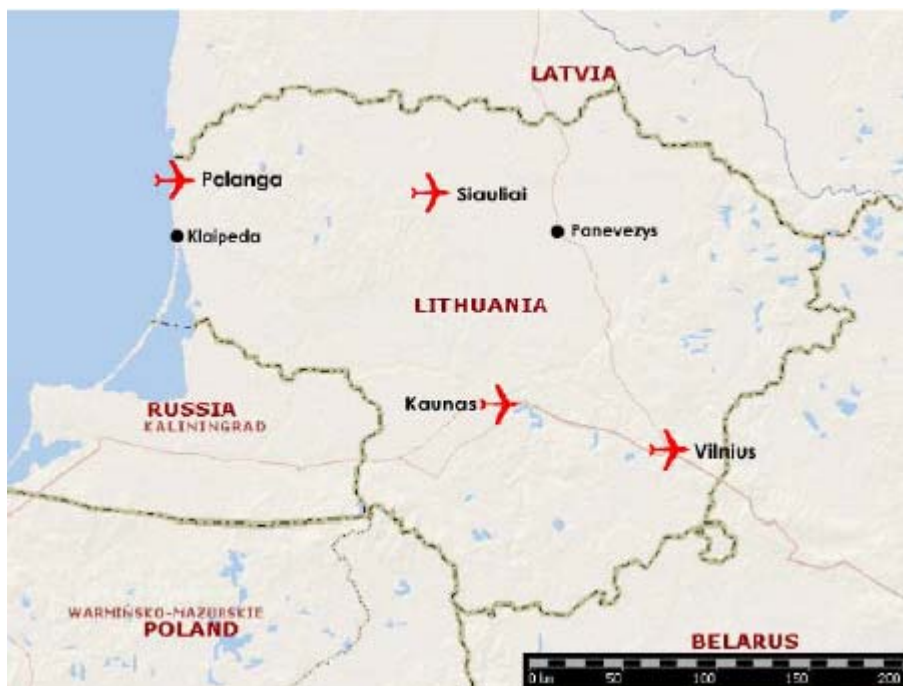


Figure 6. Lithuanian airport network

Airport	Passengers/year	Cargo (Tons)
Vilnius	994,161	5,183
Palanga	81,802	63
Kaunas	27,000	-
Siauliai	300	-

Table 2. International Lithuanian airport data (2004) ⁴

⁴ Source: ATI (www.rati.com)

3. SPATIAL PLANNING SYSTEM

3.1. Institutions

3.1.1. National

The Ministry of the Environment is responsible for preparing spatial planning policies and for the preparation of the “Comprehensive Plan for the Republic of Lithuania”.

3.1.2. Regional

At the sub-national level the counties (*apskritis*) operate as deconcentrated offices of the central Government. There are currently 10 counties and they are responsible for the preparation of comprehensive county plans and overseeing the planning activities of the local authorities.

3.1.3. Local and area-wide

There are no metropolitan or area-wide administrations in Lithuania.

Municipalities are fully responsible for local planning. They prepare and adopt both framework and detailed plans and implement state policies in many fields.

3.2. Instruments

Spatial planning is governed by the Law on Territorial Planning, No I–1120 of 12 December 1995, as amended by Law No IX–1962 of 15 January 2004, which sets up a hierarchical system in which the highest level is occupied by the National Plan. This Plan is further developed by county comprehensive plans which in turn must serve as a basis for municipal plans.

The law includes three kinds of plans:

- Comprehensive plans
- Special plans
- Detailed plans

3.2.1. Strategic plans or policy documents

The National Plan, or “Comprehensive Plan of the territory of the Republic of Lithuania”, is a strategic plan which provides the basis for all other plans, and must be observed both by county and local plans.

The Plan is prepared by the Ministry of Environment and adopted by the National Parliament. Once the plan is approved it becomes binding on both public and private persons although, due to the very general nature of its contents, it has little direct effect on land uses or property rights.

The current National Plan was adopted in 2001.

The “Comprehensive County Plans” are prepared by the county administrations (under the Ministry of Environment) and approved by Central Government.

3.2.2. *Local (framework) plans*

“Comprehensive Municipal Plans”, or “Official Plans” must be prepared and adopted by each Municipality after consultation with County and State administrations. They may cover the whole or part of the municipal territory and concern general land uses, main public infrastructures and facilities, green areas, etc. Since they are prepared at a scale of 1:10.000 their regulatory content is also quite considerable.

All Municipalities are required, since 2004, to have a Comprehensive Plan by 2007.

These plans include not only existing major infrastructures such as airports, but also projects for new ones and areas where land uses or constructions are limited or subject to special regulations, as is the case with areas affected by noise or airport-related height restrictions.

This is clearly the case of the Vilnius Comprehensive Plan of 1996, which is now under revision. The Plan included not only the land currently occupied by the airport, but established a reserve for a new runway, together with the necessary provisions in order to take into account current and forecasted noise contours as well as obstacle limitation surfaces. These land use restrictions did not give rise to any compensation.

Municipal Comprehensive Plans are binding on both government and private citizens or entities.

3.2.3. *Regulatory (detailed) plans*

Comprehensive plans are implemented by Special plans or Detailed plans. The former can be adopted in order to undertake the creation of large infrastructures, encompassing usually more than one municipality, or to establish special land use regulations. Special plans could be used to establish a new airport or secure the land for the expansion of a new one, as well as to approve specific noise regulations around this type of infrastructures, but they have not been used for such purposes yet.

Detailed plan preparation can be compulsory when the Comprehensive plan specifically delimits an area for such purpose, and also when certain actions are to be undertaken, such as construction, forestry, mining or land plot redistribution.

Detailed plans are binding and give property owners the right to undertake development and serve as the legal basis for the preparation of construction projects.

These plans can be prepared by private citizens or entities and must be approved by the Municipal Council. The scope of a detailed plan can be very limited, since it is often a necessary requirement to develop a small area or even to undertake several activities in a single plot.

Until 2004 Detailed plans were often used as a means to modify Comprehensive plans in a piecemeal fashion. After the revision of the Law on Territorial Planning in January 2004, such modifications have to follow the same procedures required for the adoption of the Comprehensive plan and the two kinds of plans must be clearly separated.

3.3. Process

3.3.1. Inter-government consultation

All planning instruments are subject to extensive coordination, both within and between the levels of Government. The fact that lower level plans must conform to higher level comprehensive plans also provides good grounds for coordination.

National and county planning instruments are circulated among all the Ministries concerned, which can present their opinions in writing. Municipalities are also formally consulted.

Municipal and detailed plans must be submitted to the county administration. All the departments concerned are consulted and may oppose the plan if it differs from national or county policies or plans.

3.3.2. Policy Integration

If an airport plan (either detailed or special) or an airport development is included in the national or county planning instruments, the comprehensive municipal plan will have to include such provisions in its preliminary version. If there is no pre-existing document stating airport policy, then the Municipality may be required to include airport development in the Comprehensive Plan when the draft is sent to the county for supervision and coordination purposes.

The case of Vilnius shows that, in practice, projected airport development is integrated into Municipal planning instruments.

3.3.3. *Citizen participation*

According to the Territorial Planning Law, all spatial planning instruments are subject to public participation. The procedure was further regulated by Government Decision No. 1079 of 18 August 1996, which adopted the Regulations on Discussing Territorial Planning Projects with the Public.

Public participation requirements are very similar regardless of the level of planning. In the case of national instruments the process must be advertised in national media, and in the case of Municipal plans publication in the local press will suffice. The duration of the participation process varies from a minimum of 2 months in the case of national, county or municipal plans to 1 month in the case of a Detailed plan. Detailed plans also require that all property owners who are directly affected should be notified individually.

The participation process is organized in a formal way and requires some sort of publicity in the media. This is often done through advertisements in the press, but can also involve radio and TV. All natural and legal persons are entitled to submit their opinions and objections in writing, and the planning administration has to consider them and decide whether or not to integrate them into the plan. Although there is no need to reply to each objection personally, anyone making an objection has a right of appeal to the supervising institution (i.e.: counties in the case of Municipal plans).

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. Activities subject to development control

According to the Law on Construction, N. I-1240, of 19 March 1996, as amended by Law N. IX-583 of 8 November 2001, all construction, demolition or reconstruction activities require a building permit.

4.1.2. Exceptions or exemptions

Only constructions in relation to national defence are treated in a specific way. Other public infrastructures are dealt with in the same way as private undertakings.

4.1.3. Institutions involved: inter-government relations

Construction permits are usually granted by the municipal administration. In the case of projects which affect more than one municipality or are undertaken by the municipal administration, the permit shall be issued by the county.

Construction applications are examined by the municipal Standing Commission on Construction in order to determine whether the project is in accordance with spatial planning and technical regulations. All approved projects must be sent to the county administration for supervision purposes.

4.1.4. Relationship with planning

Construction permits must be in accordance with spatial planning. There are no procedures for granting exceptions or variations. If the municipality considers that a non-compliant project should be developed it must first alter the Comprehensive or Detailed Plan.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Environmental Impact Assessment in Lithuania is regulated under the Law on Assessing Environmental Impact of Planned Economic Activities, N. VIII-1636 of 18 April 2000, complemented by several regulations, among which the Order of the Minister of the Environment N. 263, of 30 June 2000, on the Approval of the Methodological Guidelines on the Screening of Proposed Economic Activities and the Order of the Minister of the Environment N. 262, of 30 June 2000, on the Approval of the Regulations on Preparation of the Environmental Assessment Program.

Lithuanian legislation in this field closely follows the provisions of Directive 85/337/EEC⁵ (the “EIA” Directive), although it stresses the importance of preliminary studies and requires a screening procedure for all projects in Annex II as well as for any other project on account of its nature, size or the characteristics of the location.

Airports with runways whose basic length is over 2,100 m are included in Annex I (compulsory EIA in all cases). All other aerodromes, as well as airport modifications, are included in Annex II, and are subject to screening in order to decide whether a full EIA procedure must be conducted. In practice, this means that all projects within the airport are submitted to the Ministry of the Environment for screening and may be required to undergo a full Environmental Impact Assessment.

Directive 2001/42/EC⁶ (the “SEA” Directive) has been transposed into Lithuanian law by means of the Governmental Decision of the Republic of Lithuania of 18 August 2004, No. 967, on the approval of the order of assessment of the effects of certain plans and programmes on the environment, complemented by Order of the Minister of Environment of the Republic of Lithuania of 27 August 2004, No. D1-456, concerning approval of the screening for the strategic assessment of the effects of plans and programmes on the environment. There is still no experience with the implementation of this legislation.

Most environmental assessment procedures are now handled at county level. Only projects with trans-border, trans-regional or severe impacts are directly dealt with by the Ministry of the Environment.

4.2.2. *Other environmental controls*

Airports have to obtain environmental permits required by air quality, water, sanitation and waste legislation. Some of these permits are integrated under a “permit for the use of natural resources” as provided for in article 19 of the Environmental Protection Law and regulated by the Order of the Minister of the Environment on the Approval of Procedure for the Granting of Permits to the Utilisation of Resources and for Determining Limitations on the Utilisation of Natural Resources and Permitted Levels of Environmental Pollution, of 1999.

The permit is issued by the Ministry of the Environment and must be reviewed every 5 years.

⁵ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁶ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

No permit is required for the operation of the airport as such, since this activity is considered to be covered by the Environmental Impact Assessment of the construction project.

4.2.3. Institutions involved

Environmental permits are issued by the Ministry of Environment, usually through the county offices. Aviation authorities are not consulted in the procedures for these permits.

4.2.4. Integration with other permits

Environmental and planning permits have to be obtained separately, but the “Permit to the Utilisation of Resources” covers all the permits required for air, noise, and waste in one single document. Water and sewage permits must be obtained separately.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

All airport development must be approved by the Civil Aviation Administration (CAA); planning and environmental administrations are involved when other authorisations are required. All major airport development decisions are taken at the Ministry of Transport.

5.1.2. Instruments

There are no statutory plans for airport construction or development. Article 37 of the Law on Aviation, N. VIII-2066, of 17 October 2000, requires civil aerodrome sites to be included in spatial planning documents.

In the case of Vilnius, the airport operator has a Development Program 2002 – 2012, where investments are listed and quantified. This is only an internal technical and budgetary document, not subject to participation or coordination. There is also a scheme for future development which includes the construction of a new runway and contemplates projected protection zones and noise contours. This document would have to be adopted as a spatial plan (either Detailed Plan or Special Plan) and would require a modification of the current Comprehensive Plan, if it differs from what is now contemplated in the municipal planning instrument.

5.1.3. Process

Airport development is planned by means of spatial plans which are subject to public participation and adopted according to the provisions of the legislation on territorial planning.

5.2. Spatial impact

The spatial impact of the airports is fully taken into account by integrating projected development, together with obstacle limitation and noise, into territorial planning instruments. The safeguards are thus built into the ordinary spatial planning system and require no compensation to owners.

5.2.1. Implementation of ICAO Annex 14 requirements

The ICAO Annex 14 requirements have been integrated into Lithuanian legislation and all development within the so called “protected zone” in the vicinity of the airports must be submitted to the CAA for approval before a building permit may be issued. Navigation facilities are also protected by establishing a protection radius of 1.5 km. In the first 1,000 m no construction is

allowed and in the remaining 500 m all construction works require prior approval by the CAA.

Airport protection zones are integrated into spatial plans and are clearly marked on the planning maps as well as in the construction regulations. These limitations are also recorded in the land registry to facilitate access to this information to anyone interested in a particular parcel of land in the area.

5.2.2. Noise Impact

Noise impact is taken into consideration by establishing a “Sanitary Zone”⁷ based on noise contours where development is regulated in order to prevent unsuitable land uses. Building permit applications in this zone must be cleared with the CAA before they can be issued.

5.2.3. Risk prevention

No risk prevention areas are provided for in Lithuanian legislation.

5.2.4. Land reserve for future construction

The two main airports in Lithuania, Vilnius and Kaunas, own land for future expansion, 300 ha. in the case of Vilnius and 500 ha. in the case of Kaunas. Land reserves for all major infrastructures can be established in spatial plans. Although the Law on Territorial Planning includes some references to compensation, the fact is that in practice these kinds of land reserves are not subject to compensation as long as they allow the continuous use of the land until the time it is expropriated or bought for airport purposes.

5.3. Airport construction

5.3.1. Permits and authorisations required for airport construction or development

- a) Building permit: All airport construction, including any construction within the airport, is subject to the general rules of the Law on Construction and therefore, must obtain the prior building permit.
- b) Environmental permits (water, waste, air, etc.): Airports are subject to the same legislation and requirements as any other activity and therefore, must obtain environmental permits as described above.
- c) Other permits: All airport-related construction projects must be approved by the Ministry of Transport. The CAA has to verify compliance with the requirements contained in the national regulations on airport design, construction and operations.

⁷ See below

5.3.2. Institutions and processes involved

Building permits are processed by Municipal administrations, although both regional and national administrations shall also be consulted. Environmental permits may be issued directly by the Ministry of the Environment or the county offices depending on the project.

Each administration is supervised by the level immediately above, i.e., municipalities are under county supervision and counties are supervised by the National administration.

Building permits go through a specific commission where all the departments concerned are represented. Environmental permits require a coordinated approach by all the administrations and departments concerned, since the law requires formal consultations in all cases.

5.3.3. Integration with planning and environmental controls

Environmental controls lie mainly with the county offices, although Municipalities also have some responsibilities in this respect. Planning documents and construction projects are all subject to inter-administrative consultation but are not integrated within one single procedure.

5.4. Airport operation

5.4.1. Operating permit

Airport operations must be authorized by the CAA.

Airports are required to comply with the Law on Aviation and the detailed requirements and procedures set out in the different regulations.

5.4.2. Airport certification

The CAA must issue an airport certificate for the airport in accordance with the ICAO provisions which have been transposed into national legislation.

6. AIRPORT NOISE AND AIR QUALITY

Public health protection in the vicinity of airports is implemented by establishing “Sanitary Protection Zones” (sanitary zones) in which noise, air quality, soil pollution and electromagnetic radiation are taken into consideration in order to regulate land uses and construction or activity permits. These sanitary zones are contemplated by article 56 of the Law on the Health System, N. I-552, of 19 July 1994, which provides that:

“Prevention and limitation of danger and harm to health shall be implemented ... by establishing:

4) sanitary protection zones;”

This provision has been integrated into a number of laws that apply to different sectors such as roads, nuclear facilities, water, etc., including article 10 of the Law on Aviation, which states:

“1. Erection of and reconstruction of structures and industrial activities in the aerodrome protection and sanitary zones shall be permitted in accordance with the procedure established by the Government of the Republic of Lithuania.

2. The boundaries of the territory of the sanitary zones shall be established taking into consideration the level of noise, electromagnetic energy, pollution of air, soil and water.”

Sanitary protection zones for noise purposes are established in accordance with Government Decision No. 1036 of 2 July 2002, which sets out the technical criteria and standards.

6.1. Legislation

Lithuania has transposed Directive 2002/49/EC⁸ (the “noise” Directive) through the Law on Noise Management, N. IX-2499, of 26 October 2004. Besides the abovementioned Decision No. 1036, the noise standards for residential and working environments were established in the “Hygiene Standards HN 33-1:2003”, Order N. V-520, of 3 September 2003.

A number of regulations have been adopted regarding noise from other sources in accordance with EU legislation. However, the obligations established by both

⁸ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

the “noise” Directive and Directive 2002/30/EC⁹ (the “noise-related operating restrictions” Directive) only apply to airports which have more than 50,000 operations/year, and Vilnius airport, with 30,000 operations, is still below this level.

The Law on the Protection of Air, N. VIII-1392, of 4 November 1999 establishes the basic rules and has been developed by a number of regulations regarding different pollution sources or pollutants.

Air quality is also taken into account for the establishment of sanitary protection zones, but in the case of Vilnius airport, for example, the main factor has been noise, since there are no air pollution problems arising from airport operations. The county operates a network of 4 monitoring stations in the city and has taken occasional readings at the airport, evidencing that the main contributor to air pollution is road traffic, not air transport.

6.2. Institutions

The national level adopts basic laws and sets the standards to be met in these matters, but implementation is left mostly to the counties. All applications for construction or activity permits within sanitary protection zones require the consent of the county health department.

6.3. Instruments

a) Planning:

There are no noise abatement plans for existing buildings, and until now there have been no complaints regarding airport noise. The lack of citizen complaints is due to the fact that the number of operations is not very large (less than 30,000 per year) and that the airport is closed at night, during the hours between 23:00 and 06:00.

b) Land use restrictions:

The Sanitary Protection Zones for airports includes the delimitation of 4 sub-zones according to noise levels. Sub-zones A and B are those with least noise exposure and are not subject to any restrictions. In sub-zone C residential buildings as well as other buildings such as schools and hospitals are required to meet special sound insulation requirements and in zone D no residential, educational or medical services buildings are allowed.

⁹ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

In Vilnius, where the noise contours were estimated by computer modelling in the year 2000, sub-zone C covers a large urban area and sub-zone D encompasses the airport grounds and a small area where there are no residential buildings.

c) Compensation:

No compensation is paid for land use restrictions or for special insulation requirements.

6.4. Integration with spatial planning

In some cases sanitary protection zones are delimited by means of a Special Plan, since the Law on Territorial Planning specifically states that this may be one of the purposes of this type of spatial plan. Nevertheless, this has not been the case in Vilnius, and the zone has been integrated into the comprehensive plan.

6.5. Integration with development, construction or operation controls

All applications for building or activity permits within the sanitary protection zone are sent by the Municipality to the County Health Department which has to approve the project and can establish specific requirements in each case to ensure that legal standards are achieved. In the case of the airport, all permits within the areas affected by noise must also be cleared with the Civil Aviation Authority.

The conditions for airport operation are set out in the decision that finalizes the Environmental Impact Assessment. Compliance is controlled by the Ministry of the Environment.

7. CASE STUDY- VILNIUS AIRPORT

Vilnius airport is the central airport in Lithuania. This international airport is located 5 Km from Vilnius city and covers around 320 ha. It has a runway (02/20) 2,500 m long, which allows the operation of 4E aircrafts, and currently the airport is only open during the day time (Operating hours 06:00-23:00).

The Civil Aviation Authority of Lithuania has conducted several studies to develop Vilnius airport, such as the construction of a new terminal and a new runway.

At present, noise does not appear to be a problem for Vilnius airport probably due to the fact that the number of operations is not yet very high and that people are not yet subject to the sleep disturbance caused by night flights. The current configuration of the runway, may pose some problems in the future as traffic increases, since aircraft must fly over extensive areas of the city.

In order to accommodate the expected growth in traffic and obviate the noise problems that might otherwise ensue, a number of studies and proposals have been examined for future airport development. One such proposal was put forward jointly by the Municipalities of Vilnius and Kaunas and is a good example of the proactive approach that local authorities can take when dealing with this kind of issues.

After Vilnius, the second-largest city in Lithuania is Kaunas, which has an international airport located at some distance from the centre in an area where it could grow without posing many environmental problems. However, Vilnius airport, as mentioned above, is much closer to the city and may find it harder to develop without intensifying the number of flights over populated areas. There are other technical and political issues which may make it difficult to find a solution for the expansion of this airport.

The Municipalities of these two cities decided to approach the issue in a cooperative way and commissioned a study on airport alternatives. They came up with a proposal that was based on operating both airports as a single system, linked by a high-speed rail connection that would put both infrastructures within half an hour's distance. Part of the growth would be directed to Kaunas and Vilnius would be improved and enlarged but only in a way that would not create conflicts with the city.

The proposal has not yet been accepted by the Ministry of Transport but, nevertheless, it is a worthy effort in the management of airport-city relationships.

The Municipality will integrate whatever solution is finally adopted into the Comprehensive Plan, either directly after the revision which is now taking place, or by adopting a Detailed or a Special plan. Finally, the spatial planning maps

will include the area for the projected airport development and the areas which it is considered will be affected by noise and safeguard measures, similar to the current Plan, which was adopted in 1996.

COUNTRY CONTACTS

- **Vilnius International Airport**

Jurgita Sinkeviciute, Environmental Protection

- **Vilnius Municipality**

Ms. Rūta Matonienė, Head of Investment Division

Linas Sinkevicius, Deputy Director of Urban Development Department

- **Civil Aviation Administration (CAA)**

Mr. Saulius Paulauskas, Aerodrom Unit Chief Specialist

Ms. Danutė Šlepikiene, Aerodrom Unit Chief Specialist

Mr. Nerijus Stukėnas

- **Ministry of the Environment**

Vitalijus Auglys, Head of Environmental Impact Assessment Division

- **Vilnius Public Health Centre**

Asta Razmiene, Division of Public Health Safety

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁰)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁰ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

Apskritis

Counties

Konstitucinis Teismas

Constitutional Court

Seimas

Parliament

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- Council of Europe: www.coe.int
- EUROSTAT. <http://epp.eurostat.cec.eu.int>
- Civil Aviation Administration: <http://www.caa.lt/en.php>
- European Directives
 - Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31985L0337:EN:HTML>
 - Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML>
 - Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports (Text with EEA relevance)
<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML>
 - Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Lithuanian laws:
 - Law on Territorial Planning
 - Law on Construction
 - Law on Aviation
 - Law on the Health System
 - Environmental legislation



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Country Report

LUXEMBOURG

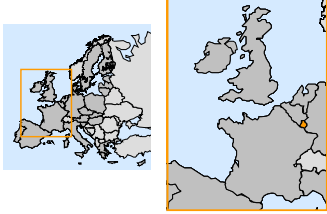


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LUXEMBOURG		Location Map													
Population	0.47 mill. (180 inhabitant per sq. Km)														
Airports network	There is one main airport, Luxembourg airport, handling 1.5 mill. Pax., which is managed and operated by Luxembourg Airport Administration, although the new terminal construction and operation have been contracted out to lux-Airport S.A.														
Spatial planning system															
Decentralized spatial planning system with good coordination between the different levels of government and environmental and trade organizations. National planning instruments are binding on municipalities.															
<ul style="list-style-type: none"> • Institutions <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">National level:</td> <td>The Ministry of the Interior (and Spatial Planning) is responsible for preparing drafts of national plans and for coordinating the participation of the other central bodies. National plans are adopted by the Council of Ministers.</td> </tr> <tr> <td>Regional level:</td> <td>No regional authorities in Luxembourg. Six planning regions established by the Government to prepare regional plans integrating national and local interests.</td> </tr> <tr> <td>Local level:</td> <td>Municipalities have full planning powers to draft and implement plans and grant building permits.</td> </tr> </table> • Instruments <table border="0" style="width: 100%;"> <tr> <td style="width: 20%;">Strategic plans</td> <td>“Spatial Planning Program”, “Sector Director Plans”, “Regional Director Plans”</td> </tr> <tr> <td>Framework plans</td> <td>“Land Use Plans – POS”, “General Spatial Plans – PAG”</td> </tr> <tr> <td>Regulatory plans</td> <td>“Particular Spatial Plans - PAP”</td> </tr> </table> • Process: National plans are subject to citizen participation and review by two consulting bodies, where the municipalities and environmental organizations are represented before adoption by the Council of Ministers. Local Plans are submitted for consultation to a Spatial Planning Commission established by the Government. 				National level:	The Ministry of the Interior (and Spatial Planning) is responsible for preparing drafts of national plans and for coordinating the participation of the other central bodies. National plans are adopted by the Council of Ministers.	Regional level:	No regional authorities in Luxembourg. Six planning regions established by the Government to prepare regional plans integrating national and local interests.	Local level:	Municipalities have full planning powers to draft and implement plans and grant building permits.	Strategic plans	“Spatial Planning Program”, “Sector Director Plans”, “Regional Director Plans”	Framework plans	“Land Use Plans – POS”, “General Spatial Plans – PAG”	Regulatory plans	“Particular Spatial Plans - PAP”
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Airport planning															
<ul style="list-style-type: none"> • Policy and planning: Airport developments are defined through ordinary spatial planning instruments, such as POS. • Spatial impact: POS for the airport area contains obstacle limitation surfaces and noise zones. • Construction: Subject to ordinary building and environmental permits requirements. • Operation: Operating permits integrated in environmental approvals. 															
Airport noise and air quality															
<ul style="list-style-type: none"> • Noise: Lack of legislation on airport noise. Directive 2002 /49 not yet transposed. Municipal ordinances. • Air quality: No specific legislation for air pollution caused by air traffic 															

1. SUMMARY

SPATIAL PLANNING SYSTEM

The current “Spatial Planning Program” (*Programme Directeur d’Aménagement du Territoire*) was adopted in 2003 and includes some very general goals regarding air transport. A Sector Plan (*Plans Directeur Sectoriels*) is being drafted for transportation and one Regional Director Plan (*Plan Directeur Régional*) out of 6 is now being drafted.

National strategies can be implemented with “Land Use Plans” (*Plans d’Occupation du Sol, POS*), prepared and adopted by the national Government. This is the case of the Luxembourg Airport where a POS is now pending final approval. Once adopted the POS will be binding on all parties, including local planning authorities.

All municipalities are required to adopt a “General Spatial Plan” (*Plan d’Aménagement Général, PAG*) covering the entire municipality to define general land use in new development areas, land reservations for public facilities and infrastructures as well as free spaces. PAGs are approved by the Ministry of the Interior and are binding on all parties. These plans regulate land use outside the airport perimeter and include Noise Zones where some land uses are restricted.

Specific areas within a municipality can be developed with “Particular Spatial Plans” (*Plan d’Aménagement Particulier PAP*) which is the instrument used until now to regulate land use in and around the airport.

REGULATIONS AND PERMITS

Construction permits

All construction or demolition activities require a building permit issued by the municipality. There are no general exceptions or specific exemptions.

Environmental permits

Airport projects are subject to Environmental Impact Assessment in the terms prescribed by EU legislation. The regulation of environmental impact assessment is integrated within the legislation on environmental permits in general which includes all necessary authorizations within a unified procedure.

Airports are considered “classified establishments” and must obtain an environmental permit for operation.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The national “Sector Plan” on transportation has not been finalized yet. The country has only one airport for which specific planning is already in place.

- Airport

The airport and surrounding area are included in a specific land use plan (*Plan d’Occupation du Sol, POS*) where long term development is contemplated. The Plan provides detailed regulation of land use in some areas within the airport perimeter and sets more general criteria for the areas outside the airport. Further detailed plans may be prepared for specific parts of the airport.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The POS for the airport and surrounding area includes a map indicating the obstacle limitation surfaces and prohibits any construction which involves such surfaces unless an aeronautical study demonstrates that there are no risks involved. All constructions within the perimeter of the area affected by obstacle limitation surfaces must be approved by the Airport Administration.

- Noise Impact

The POS area is based on a prior delimitation of forecasted noise contours, and includes all the area affected by aircraft noise above a certain level. Land use is regulated in the airport plan in order to take noise into consideration and these provisions become binding for local plans, which can only define more stringent land use restrictions.

- Risk prevention

Third party risk is not considered.

- Land reservation for future construction

The POS area includes the land reserved for future airport development, as well as reservations for major rail and highway links.

Construction

Construction and operation of the airport and airport facilities are subject to ordinary building and environmental permit requirements and may be the object of an Environmental Impact Assessment depending on the nature and characteristics of each project.

Operation

The only operating permit required is the environmental permit.

There is no airport certification legislation.

AIRPORT NOISE AND AIR QUALITY

There is no specific legislation on airport noise.

There are no plans regarding noise or air quality, but the spatial plan for the airport and its surroundings is based on projected noise contours in order to make land use compatible with noise nuisance.

There are no noise abatement plans and no mitigation measures have been taken into account.

Operating restrictions impose some limits on night flights.

2. CONTEXT

The Grand Duchy of Luxembourg is a small landlocked state in the north-west of the continental European Union, bordering France, Germany and Belgium.

Founded in 963, Luxembourg became a grand duchy and an independent state under the Netherlands in 1815, although full independence was attained in 1867. In 1957, Luxembourg became one of the six founding countries of the European Economic Community (later the European Union) and in 1999 it joined the euro currency area. Official languages are Luxembourgish, German and French.

Administratively, Luxembourg is divided into three districts (Diekirch, Grevenmacher and Luxembourg), which are subdivided into 12 cantons.

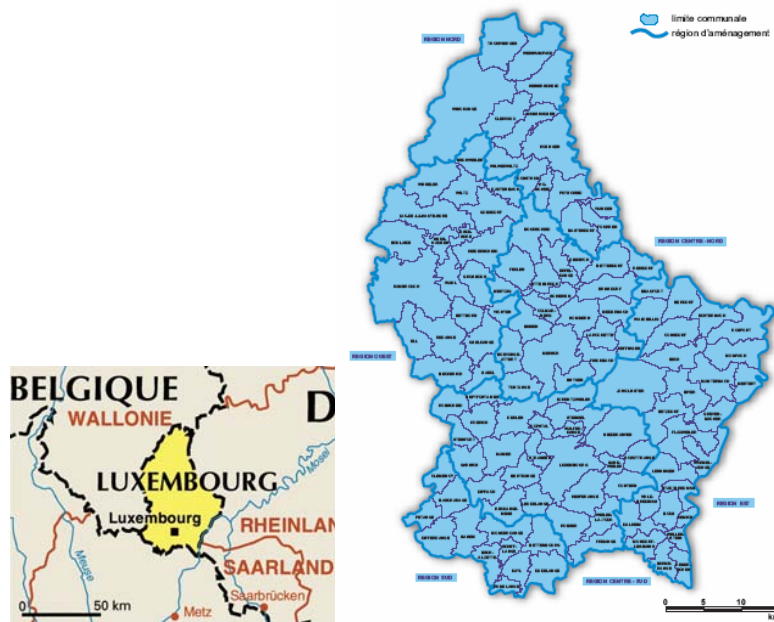


Figure 1. Map of Luxembourg

Luxembourg is the EU Member State with the highest GDP per capita, 49,700¹. The country is an increasingly important centre for high-technology industries, as well as a hub for banking and financial services. Tourism is also important, and Luxembourg derives great economic benefits as a centre for many European Union functions, including the European Investment Bank, the European Commission, the Publication Office and the European Court of Justice.

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices 2004
Source: EUROSTAT

Characteristic	Description
Population	451,600
Latitude / Longitude	49°45' N, 6°10' E
Land area	2,586 sq Km
Coastline	0 Km
Capital City	Luxembourg
GDP per capita (PPS at market prices)	49,700
GDP real growth rate	4.5 %
Inflation rate	3.2 %
Unemployment rate	4.8 %

Table 1. Luxembourg: main facts and figures (2004)²

2.1. Population and statistics

Luxembourg is the second smallest country of the European Union in terms of population, after Malta, but with an average density of 180 inhabitants per sq Km which exceeds the European average (EU-15 density: 115 inhabitants per sq Km).

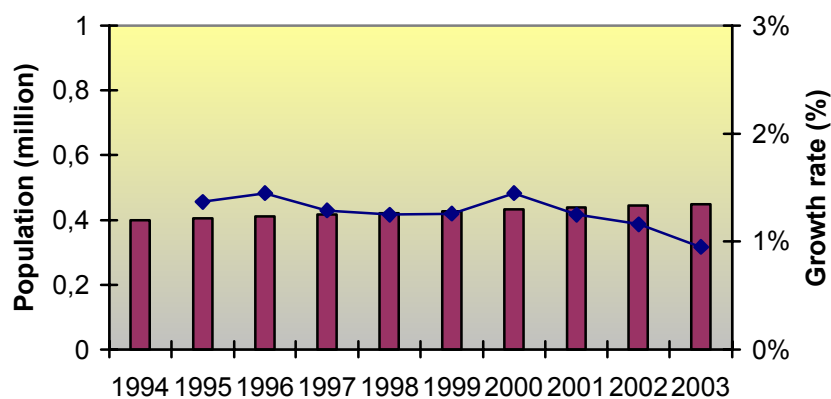


Figure 2. Luxembourg population evolution

In recent years, the population trend in Luxembourg has been positive with growth rates of over 1%.

² Source: EUROSTAT

The Luxembourg median age is 38.51 years. The current birth rate is 12.06 births/1,000 population (2004 est).

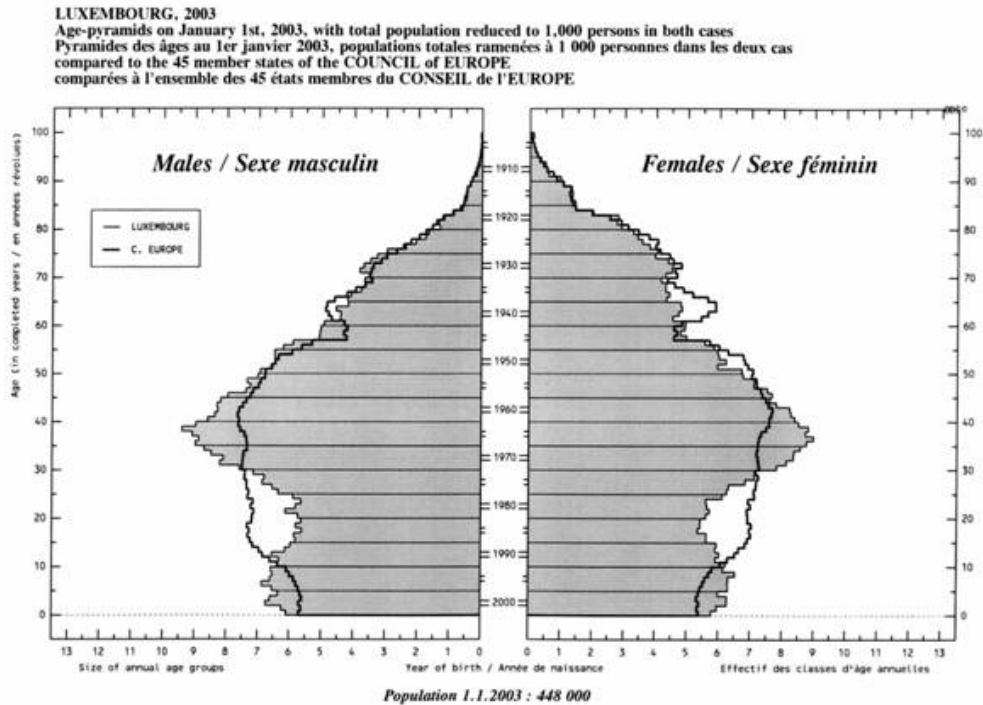
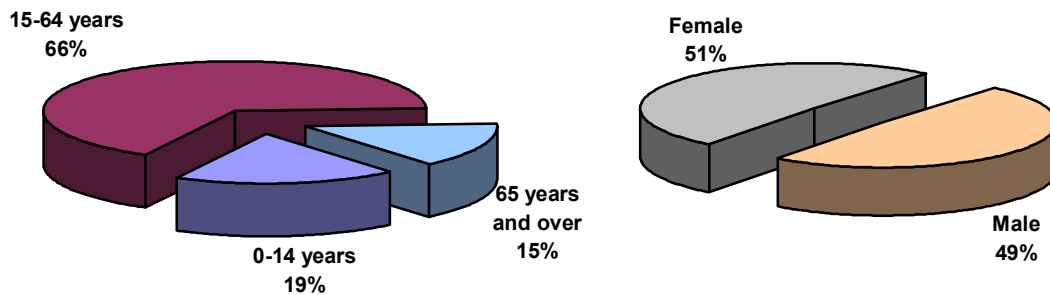


Figure 3. Luxembourg age-pyramids (2003)³



Figures 4 and 5. Luxembourg population split (2004 est.)

2.2. Government structure and powers

The Grand Duchy is a constitutional monarchy governed under the revised constitution of 1868. It has a unicameral legislature, the chamber of deputies. The appointed advisory council has some of the powers of an upper house.

³ Source: Council of Europe

Luxembourg's Grand-Duc is the titular head of state; the head of government is the prime minister, who is assisted by a Council of Ministers.

With regard to spatial planning, the Ministry of the Interior and Spatial Planning is the central body responsible for drafting the national plans and coordinating the rest of the ministries and committees. Municipalities have full planning powers to prepare local plans and issue building permits.

In the environmental field, the regulations are established at national level and the Ministries of the Environment and of Labour are the central bodies responsible for granting certain environmental permits. Municipalities have also certain regulatory powers and are responsible for granting the other environmental permits.

With regard to aviation and airports, the Ministry of Transport is responsible for the management and operation of the airport in accordance with the national regulations.

2.3. Main airports

The Airport Authority (*Administration de l'Aéroport*), under the Ministry of Transport, manages and operates Luxembourg airport (1.5 mill. Pax, 2004), and ensures the smooth flow of air traffic in the airspace under Luxembourg jurisdiction.

Within the frame of the development and the operation of Luxembourg Airport, the Government has made Lux-Airport (*Société de l'aéroport de Luxembourg S.A.*) responsible for the building and operation of new terminals and facilities.

Lux-Airport is the owner of the "new airport", which comprises the new terminal A (to be operational at the end of 2006) and the new Terminal B (operational since May 2004). The existing terminal will be linked to Terminal B.

Airport	Passengers	Cargo (Tons)
Luxembourg	1,521,806	712,503

Table 2. Airport traffic (2004)



Figure 6. Luxembourg airport

3. SPATIAL PLANNING SYSTEM

The spatial planning system in Luxembourg is configured as a hierarchy of plans covering the national, regional and local levels. The current Law on Spatial Planning was adopted on 21 May 1999 (*Loi de 21 mai 1999 concernant l'aménagement du territoire*).

3.1. Institutions

3.1.1. National

At national level spatial plans are drafted by the Ministry of the Interior and Spatial Planning in cooperation with any other Ministry that may be affected when the plan deals with a specific subject matter, i.e. in the case of the airport.

The Minister is assisted by two consulting bodies, the High Council for Spatial Planning (*Conseil Supérieur de l'Aménagement du Territoire*), constituted by representatives of local authorities, trade, environmental and professional organizations. There is also an Interministerial Committee for Spatial Planning (*Comité Interministériel de l'Aménagement du territoire*) where all concerned ministries are represented for the purposes of coordination. Both organizations must be consulted before any national spatial planning instrument can be adopted. Local plans are reviewed by a Spatial Planning Commission (*Commission d'aménagement*) which must issue its opinion on all draft municipal plans. The Commission consists of six members mostly from public bodies and must include the following, besides the president:

- 1 jurist
- 1 architect qualified in spatial planning or a spatial planner
- 1 Engineer, qualified in traffic management
- 1 person who is specially qualified due to his/her competences or functions in the field of spatial planning
- 1 person specially qualified due to his/her competences or functions

The president is appointed by the Grand-Duc and the rest of the members by the Minister of the Interior. National planning instruments are adopted by the Council of Ministers.

3.1.2. Regional

There are no regional authorities in Luxembourg. The 1999 Spatial Planning Act includes the possibility to designate regional areas for planning purposes and the current "Spatial Planning Program" (*Programme Directeur*)

d'Aménagement du Territoire) established six planning regions. When drafting regional planning instruments the Ministry can establish cooperation organizations together with the municipalities.

3.1.3. Local and area wide

There are no metropolitan authorities in Luxembourg. Municipalities have full planning powers to prepare their own local plans and issue building permits.

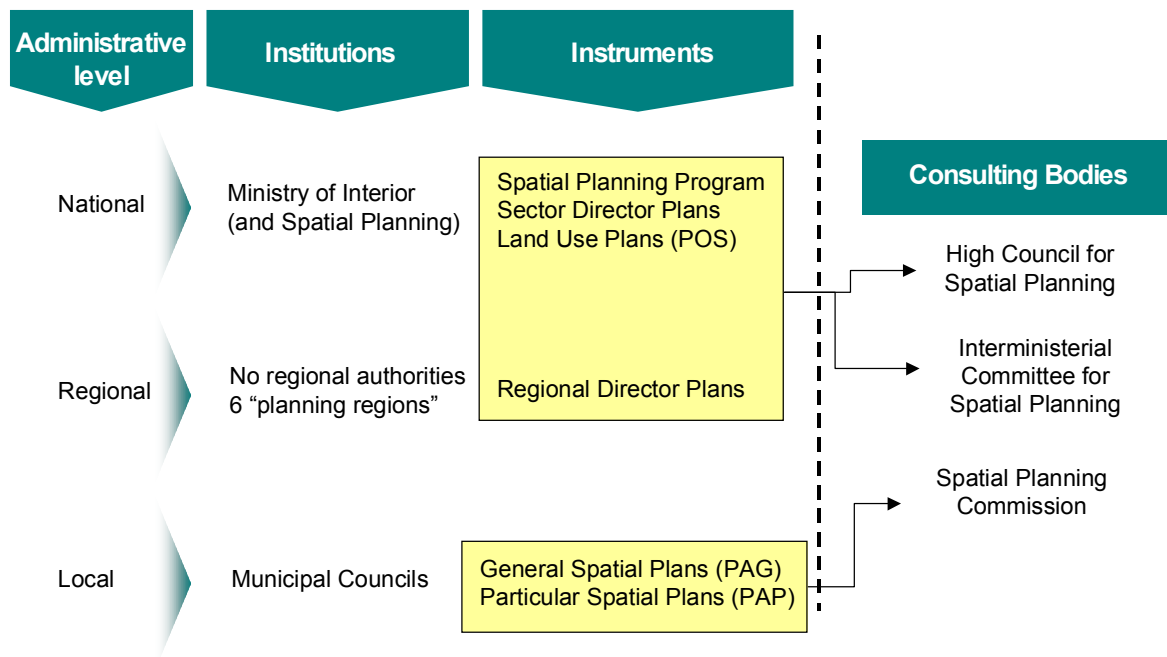


Figure 7. Institutions involved in Spatial Planning in Luxembourg

3.2. Instruments

3.2.1. Strategic plans or policy documents

Strategic planning takes place at national level by means of the "Spatial Planning Program" (*Programme Directeur d'Aménagement du Territoire*) and the "Sector Plans" (*Plans Directeurs Sectoriels*).

The current Spatial Planning Program was presented in 1999 and adopted in 2003. It constitutes a synthesis of the programs of the Ministries. With respect to transport, it includes the following objectives and measures:

"Adapting the costs of transport"

To internalise the external costs of transportation within the framework of liberalization of the sector:

.....

- *to reduce the nuisances derived from aviation,*

- *to limit night flights to the necessary minimum,*
- *to support kerosene taxing at the European level,*
- *to promote the use of the best available technology in order to reduce the noise and other nuisances linked to aviation.”⁴*

The Spatial Planning Program is prepared by the Ministry of the Interior and Spatial Planning assisted by the Inter-ministerial Committee for Spatial Planning, and is adopted by the Council of Ministers after consultation with the Municipalities and the High Council for Spatial Planning.

The contents of the Spatial Planning Program must orient the decisions of Government and of the local authorities, but is not binding on third parties.

The strategies set forth in the Spatial Planning Program are further developed by means of Sector Director Plans and Regional Director Plans (*Plan Directeur Régional*). Sector Director Plans are prepared by the competent Ministry together with the Ministry of the Interior and Spatial Planning. Two of such plans have already been prepared, but the Sector Director Plan on Transportation is still under preparation.

Regional Director Plans are to be prepared for each of the six planning regions established in the Spatial Planning Program in order to integrate national and local spatial planning. These plans are prepared by joint work-groups with representatives from the State and the local authorities and are adopted by the Council of Ministers after consultation with the local authorities, the public, and the two consulting bodies, the High Council for Spatial Planning and the Inter-ministerial Committee for Spatial Planning. These plans become binding once they are adopted by the national Government and prevail over local plans whenever they are in contradiction.

There is one Regional Director Plan for the “South” region being drafted at the moment.

3.2.2. *Local (framework) plans*

National strategic planning instruments can be implemented by means of “Land Use Plans” (*Plans d’Occupation du Sol*, POS), prepared and adopted by the national Government. These plans can cover whatever area is necessary for their purposes, and may include parts of one or several municipalities.

Land Use Plans (POS) are prepared by the Ministry of the Interior and Spatial Planning and must be subject to a public enquiry in all affected Municipalities. They are adopted by the Council of Ministers after consulting with the

⁴ Translated by the author

Municipalities, the High Council for Spatial Planning and the Interministerial Committee for Spatial Planning.

Once adopted as a by-law these plans are legally binding on all parties and must be observed both by the public and the private sectors. Their binding effects on land use actually begin when the draft plan is first published, since no land use or activity may be allowed after such date which is not in agreement with the proposed plan. This interim protection lasts until the plan is finally adopted or for a maximum period of four years.

One such POS has been prepared for the Luxembourg airport and is now pending final adoption by the Council of Ministers. It is described below in 5.1.2 in the section on airport planning instruments.

At municipal level, all municipalities in Luxembourg are required to adopt a “General Spatial Plan” (*Plan d’Aménagement Général*, PAG) in accordance with the Law of 19 July 2004, on municipal planning and urban development (*Loi du 19 juillet 2004 concernant l’aménagement communal et le développement urbain*), which has replaced the old Law of 12 June 1937, on the spatial planning of cities and other important agglomerations, (*Loi du 12 juin 1937 concernant l’aménagement des villes et autres agglomérations importantes*) under which current municipal plans were prepared. The 2004 Law has been implemented by a series of Regulations, among which are the Regulations of 25 October 2004 on the contents of the municipal General Spatial Plan (*Règlement grand-ducal du 25 octobre 2004 concernant le contenu du plan d’aménagement général*).

The PAG covers the entire municipality and defines general land use in new development areas, land reservation for public facilities and infrastructures and free spaces. The 2004 Regulations set out in detail the type of zones to be included, maximum floor/area ratios and the types of land use which may be accepted for each kind of zone.

The PAG is prepared by the municipality and submitted to the Spatial Planning Commission in draft form. The plan is then provisionally adopted by the municipal assembly and is subject to a process involving public participation. Finally, the plan is adopted in its definitive form by the municipal assembly and approved by the Minister of the Interior. Once they are approved, PAGs have regulatory status and become binding for both public and private parties.

As regards airports, the Regulations of 25 October 2004, on the contents of PAGs, include an article dealing specifically with Luxembourg Airport. This Article 26 states that:

“The Luxembourg airport comprises all the airport related infrastructures and facilities. The airport perimeter is reserved to:

- *airport operation as well as the activities of airport operators, air transport operators and general aviation.*
- *activities of enterprises which need to be located close to or with direct links to the airport. Some sectors may allow the establishment of industries which must be located near the airport but do not require a direct link.*
- *airport support offices and infrastructures,*
- *activities making use of current or future multimodal infrastructures.*

Facilities for the production of power, heating or air conditioning may be located in all sectors within the airport perimeter.

Within a 300 m band at each side of the runway axis no construction will be allowed above the runway level, with the exception of air navigation facilities.⁵

Article 54 of the Regulations deals with “Noise Zones” and establishes that such zones can entail land use restrictions which will be defined by the competent authority and integrated into the written part of the PAG.

3.2.3. *Regulatory (detailed) plans*

Detailed plans, called “Particular Spatial Plans” (*Plan d’Aménagement Particulier* PAP), are adopted for the implementation of the PAG in specific areas. These plans must include the delimitation of existing and resulting land plots, establishing the floor/area ratios to be applied for each lot or group of lots, as well as building alignments, maximum heights and overall dimensions, and, in general all detailed regulations on fences, plants, free spaces, etc. PAPs are also required to include the delimitation of public lands, including streets, roads, green areas, etc.

Particular Spatial Plans can be drafted either by the municipality or by any person, public or private, and are adopted by the municipal councils after consulting with the Minister of the Interior. Once adopted PAPs are of a regulatory nature and are binding on all parties.

The Luxembourg airport area is currently covered by a “*Plan d’Aménagement Partiel*” adopted in 1986 under the Law of 12 June 1937, and modified in 1990 and 1992. This Plan has been revised in depth in order to include new areas required for airport related operations and to take into account the noise impact

⁵ Translated by the author.

of current and projected operations. This revision has been completed and the new plan will shortly be adopted as a POS.⁶

3.3. Process

3.3.1. Inter-government consultation

The Spatial Planning Program is drafted by the Ministry of the Interior and Spatial Planning in collaboration with the Inter-Ministerial Committee for Spatial Planning, where all relevant Ministries are represented, and must be adopted by the Council of Ministers. Other spatial planning instruments, such as like the POS for the airport area, are drafted by the Ministry of the Interior together with the Ministry responsible for the specific area, in the case of airports, the Ministry of Transport, and are submitted to the Inter-Ministerial Committee for Spatial Planning before being adopted by the Council of Ministers. These procedures ensure a high degree of horizontal coordination, since not only are the plans drafted with the collaboration of all the departments concerned, but must finally be adopted by the Government as a collective body.

For the purposes of vertical coordination, all plans are subject to consultation with other levels of government. National planning instruments are sent to the municipalities in order to hear their opinion and local plans must be approved or vetted by central government before they can become binding. The participation of the consultative bodies, the High Council for Spatial Planning, the Inter-Ministerial Committee for Spatial Planning and Spatial Planning Commission, also ensures horizontal and vertical coordination.

All consultation processes are based on the presentation of written opinions or objections that must be considered while adopting the plan. In the case of local plans the opinion of the Central Government becomes binding insofar as the plan must be approved by the Minister of the Interior.

3.3.2. Policy integration

Spatial planning and airport planning are perfectly integrated since airports are planned by means of spatial planning instruments which are drafted and adopted by the Government and become binding on local planners.

Airport policy is necessarily integrated into local plans, not only because airport plans are placed higher in the hierarchy of planning instruments, but also because the Regulations of 2004 defining the contents of such plans include some direct provisions on this matter and establishes that airport facilities and noise zones must be represented in land use plans.

⁶ See below in 4. Airport Planning and Construction

3.3.3. *Citizen participation*

Strategic planning instruments, i.e. the Spatial Planning Program, Sector Plans and Regional Director Plans, are not submitted to a process involving public participation but local governments are consulted and they are submitted to Parliament.

Plans which have more regulatory contents, i.e. Land Use Plans (POS), General Spatial Plans (PAG) and Particular Spatial Plans (PAP) are all subjected to the public before they can be adopted and citizens can submit written objections which must be considered during the process.

The system appears to be based on the premise that spatial plans must be submitted to citizen participation when they are detailed enough to have a direct effect on their property but not when they set national or regional goals and define projects in general terms.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

All construction or demolition activities require a building permit issued by the municipality.

4.1.2. *Exceptions or exemptions*

There are no general exceptions or specific exemptions to the obligation to obtain a building permit.

4.1.3. *Institutions involved: inter-government relations*

Building permits are issued by the municipalities, there are no special provisions for cases where the developer is a branch of the national government.

4.1.4. *Relationship with planning*

All building permits must be in accordance with spatial planning and must be granted if the application complies with all legal requirements.

4.2. Environmental permits

4.2.1. *Environmental Impact Assessment*

Airport projects are subject to Environmental Impact Assessment in the terms prescribed by Directive 85/337/EEC⁷ (the “EIA” Directive). The current legislation on this subject is included in the Law of 10 June 1999 on “classified establishments” (*Loi du 10 juin 1999 relative aux établissements classés*), as modified by the Law of 19 November 2003. The lists of projects and the specific procedures for EIA are governed by the Regulations of 7 March 2003 on the evaluation of certain public and private projects on the environment (*Règlement grand-ducal du 7 mars 2003 concernant l'évaluation des incidences de certains projets publics et privés sur l'environnement*).

This Law (as amended) transposes the following EU Directives:

- the “EIA” Directive, as amended by Directive 97/11/EC⁸,

⁷ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁸ Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment

- the “SEVESO II” Directive⁹, and
- the “IPPC” Directive¹⁰.

The regulation of environmental impact assessments is integrated into the legislation on environmental permits in general, in such way that EIAs are integrated into other environmental procedures and into the specific rules set out for the implementation of the “SEVESO II” Directive as amended by Directive 2003/105/EC¹¹.

Directive 2001/42/EC¹² (the “SEA” Directive) has not yet been transposed.

4.2.2. *Other environmental controls*

Airports are included in the list (“nomenclature”) of “classified establishments” adopted by the Law of 10 June 1999, under “Class 1” and must obtain an environmental permit for operation. The law does not make distinctions regarding the requirements that public infrastructures, or airports in particular, must comply with, and, thus, they are subject to the same environmental permits as any other activity.

The airport also needs specific permits for water discharge and waste management, but the procedures are integrated into the general environmental permit.

⁹ Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances

¹⁰ Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

¹¹ Directive 2003/105/EC of the European Parliament and of the Council of 16 December 2003 amending Council Directive 96/82/EC on the control of major-accident hazards involving dangerous substances

¹² Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

4.2.3. *Institutions involved*

Environmental permits for Class 1 activities are issued by the Ministries of the Environment and of Employment, after consultation with local authorities.

4.2.4. *Integration with other permits*

The Law of 10 June 1999 extended the IPPC (Integrated Pollution Prevention and Control) concept beyond the requisites of the EU “IPPC” Directive and includes provisions to integrate environmental permitting procedures in such a way that the documentation is filed only before one authority even if separate permits are to be issued by other departments.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

There is no general legislation concerning airport planning or construction. The construction and modification of Luxembourg Airport has been the subject of successive laws since 1937 (*Loi du 19 mars 1937*). The current airport is based on the enlargement authorized in 1972 (*Loi du 11 juillet 1972 ayant pour objet la construction d'une nouvelle aérogare avec dépendances à l'aéroport de Luxembourg*), and the last enlargement was included in a 2002 law (*Loi du 26 juillet 2002 sur la police et sur l'exploitation de l'aéroport de Luxembourg ainsi que sur la construction d'une nouvelle aérogare.*)

5.1.1. Institutions

Airport plans and projects are approved by the national Government. Plans are subject to consultation with local authorities and the above mentioned consulting bodies.

5.1.2. Instruments

The 1972 expansion was based on a "General Plan" ("*Plan d'Aménagement Général*" PAG) adopted in 1968. As stated above, in 1986 the government adopted a "Partial Plan" under the legislation then in force (*Loi du 12 juin 1937 concernant l'aménagement des villes et autres agglomérations importantes*), which is still valid but will soon be superseded by a new "*Plan d'Occupation de Sols*" (POS) which has already been drafted and submitted to public enquiry and is only awaiting the final adoption resolution.

This succession of plans shows that airport planning is conducted via ordinary spatial planning instruments. The airport is, therefore, considered as any other activity or infrastructure, which can be developed according to ordinary land use plans.

The 1986 Partial Plan will be replaced by a new "Plan d'Occupation du Sol" (POS) which has already been drafted and submitted to the procedures established in the 1999 Spatial Planning Act and is only pending the final decision of the Council of Ministers to render it legally binding. The Plan covers not only the airport itself, but also the surrounding area where future development is to take place and where noise nuisances are more important. According to the Plan's presentation report, the objectives are:

1. To reserve the space needed for the development of the airport and its economic activity.
2. To establish reservations for the main transportation networks.

3. To manage land use around the airport by adopting the adequate planning measures in order to prevent urban development in areas subject to high noise levels.

In order to achieve these goals, the POS divides the airport itself into 11 sectors in which the airport Operator will be required in some cases to prepare a detailed plan (*Plan d'Aménagement Particulier PAP*). This Plan prevents any development in areas intended for future airport development or transportation infrastructures, and freezes urban development by requiring that any extension of the zones designed for residential use in the current local plans be approved by the Council of Ministers. Construction in areas currently zoned for residential use is not prohibited, even if it falls within the boundaries of the Plan and may be exposed to relatively high levels of noise.

The Plan defines land use zones not only inside the airport, but also in the surrounding area, setting rules that will have to be observed by local plans. It also includes the location of air navigation facilities and the definition of servitudes established to protect such facilities.

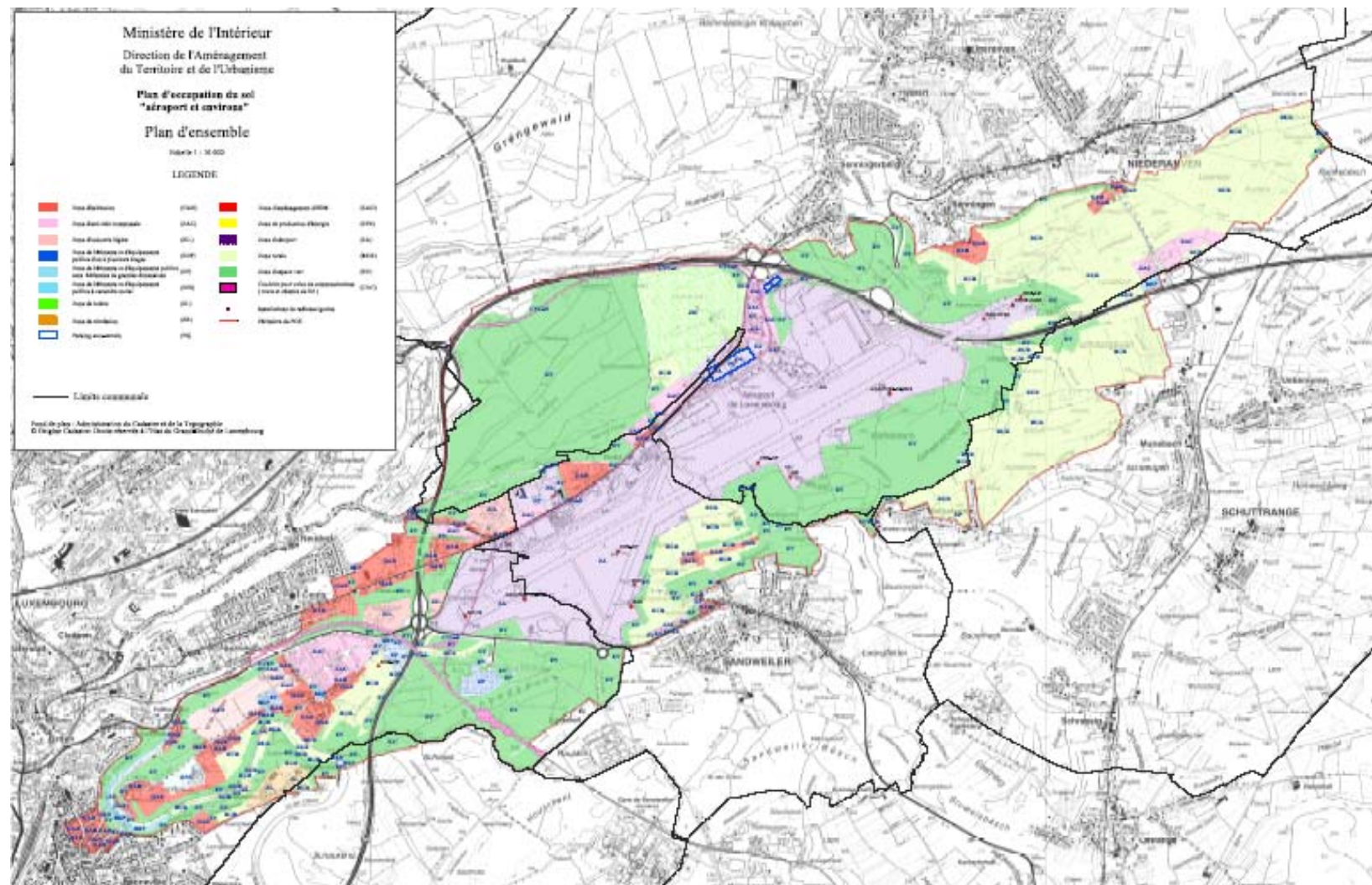


Figure 8: Land uses within and around the airport defined by POS “Aéroport et Environs” Source: POS Aéroport et Environs. Plan d’Ensemble

Chapter VI of the Plan regulations deals with obstacle limitation surfaces, which are also represented in a separate map included with the POS. All building permits within the perimeter of the obstacle limitation surfaces must obtain the prior assent of the Airport Administration.

The POS is binding on all parties and modifies any part of the existing municipal plans which is not in conformity with the airport plan. Future local plans can adopt more restrictive measures but cannot change in any other way the zoning and regulations established in the airport plan.

5.1.3. *Process:*

The procedures for establishing the POS are defined in articles 12 and 13 of the 1999 Spatial Planning Law. The procedure begins with the Government's decision to prepare a POS, and the municipalities are notified, indicating the general purpose of the plan, the area to be included and the type of servitudes or restrictions that are envisaged.

The Minister of the Interior and Spatial Planning receives the municipal opinions and prepares a draft plan which is then sent to the municipalities and announced in the media in order to allow all citizens to submit their written opinions or objections to the municipalities. The law also requires that at least one public hearing be held, and attended by municipalities and the Ministry. In the case of this POS two meetings were held in different municipalities during July 2003. At the end of the participation process, municipal governments transmit the comments received, together with their own opinions on the plan and on the comments received to the Minister of the Interior and Spatial Planning.

The Minister of the Interior and Spatial Planning transmits the dossier, together with the Ministry's own opinion, to the Minister of Transport who requests the opinion of the Inter-Ministerial Committee for Spatial Planning (*Comité Interministériel de l'Aménagement du territoire*) prior to sending the proposal to the Council of Ministers. The plan is to be finally adopted as a Grand Duchy regulation and published in the official gazette .

5.2. **Spatial impact**

5.2.1. *Implementation of ICAO Annex 14 requirements*

The POS for the airport and surrounding area includes a map indicating the obstacle limitation surfaces and prohibits any construction that penetrates such surfaces unless an aeronautical study evidences that there are no risks involved. All constructions within the perimeter of the area affected by obstacle limitation surfaces must be approved by the Airport Administration.

The Plan also includes the definition of “air navigation servitudes”, established for the purpose of safeguarding the operation of air navigation facilities and prohibits any incompatible construction.

5.2.2. Noise Impact

The POS area is based on a prior delimitation of forecasted noise contours, and includes all the area affected by aircraft noise above a certain level. Land use is regulated in the airport plan in order to take noise into consideration and these provisions become binding on local plans, which can only define more stringent land use restrictions.

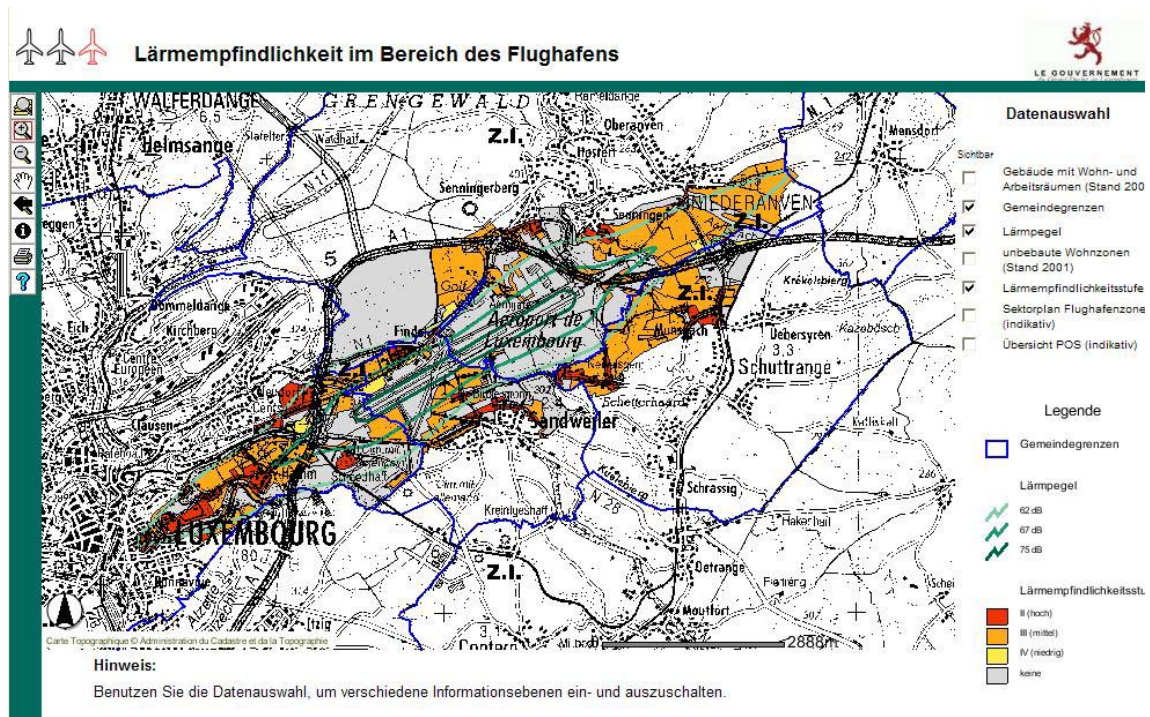


Figure 9: Noise contours at POS “Aéroport et Environs”

Source: <http://findel.pos.lu>

5.2.3. Risk prevention

Third party risk is not considered.

5.2.4. Land reserve for future construction

The POS area includes the land reserved for future airport development, as well as reserves for major rail and highway infrastructures. Land use limitations arising from the POS, regardless of their purpose, are not usually subject to compensation.

5.3. Airport construction

Airport construction is undertaken directly by the Government or by the airport operator under contract. The “Law of 26 July 2002 on the control and operation of Luxembourg Airport and the construction of a new terminal” (*Loi du 26 juillet 2002 sur la police et sur l'exploitation de l'aéroport de Luxembourg ainsi que sur la construction d'une nouvelle aérogare*) provided that the construction and operation of the airport would be contracted out to an airport operator. The contract was approved by Regulation of 14 April 2003 (*Règlement grand-ducal du 14 avril 2003 portant approbation du contrat sur le développement, la mise en valeur et l'exploitation de l'Aéroport de Luxembourg, signé le 15 janvier 2003 entre l'Etat du Grand-Duché de Luxembourg et arrêtant le relevé des propriétés domaniales formant l'enceinte de l'Aéroport de Luxembourg*).

5.3.1. Permits and authorizations required for airport construction or development

Construction and operation of the airport and airport facilities are subject to ordinary building and environmental permit requirements and may be the subject of an Environmental Impact Assessment depending on the nature and characteristics of each project.

5.3.2. Institutions and processes involved

The expansion of the airport has been approved by law and is supervised by the Ministry of Transport. Building permits are issued by municipalities and environmental permits are issued either by the municipalities or by the Ministry, depending on the activity.

5.3.3. Integration with planning and environmental controls

All airport construction is contemplated in the POS or in the detailed land use plan that the airport operator shall prepare for some parts of the airport. Since the entire project is subject to EIA, it is the final Environmental Impact Statement that will determine the details of how environmental controls are to be conducted.

5.4. Airport operation

5.4.1. Operating permit

The only operating permit required is the environmental permit issued under the above mentioned Law of 10 June 1999.

5.4.2. Airport certification

There is no airport certification legislation.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

The basic regulation of noise is contained in the Law of 21 June 1976, on the fight against noise (*Loi du 21 juin 1976 relative à la lutte contre le bruit*), as modified in 1992 and 1993. Several regulations have been adopted dealing with specific noise sources, including subsonic aircraft, but there is no specific legislation on airport noise.

Both Directive 2002/49/EC¹³ (the “noise” Directive) and Directive 2002/30/EC¹⁴ (the “noise-related operating restrictions” Directive) have not yet been transposed.

Air quality was the subject of the Law of 21 June 1976 on the fight against atmospheric pollution (*Loi du 21 juin 1976 relative à la lutte contre la pollution de l'atmosphère*), amended in 1992, 1993, and 1998. Many regulations have been issued with regard to this matter but none of them addresses the issue of air pollution emitted at airport sites.

6.2. Institutions

Legislation is established at the national level but municipalities can, and do, adopt their own municipal noise ordinances.

6.3. Instruments

a) Planning:

There are no plans regarding noise or air quality, but the spatial plan for the airport and its surroundings is based on projected noise contours in order to make land use compatible with noise nuisance.

There are no noise abatement plans and no mitigation measures have been contemplated.

b) Land use restrictions:

Land use around the airport is regulated on the basis of noise and may prohibit residential development in some areas. These restrictions do not give rise to any compensation rights, as they are included in spatial plans

¹³ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

¹⁴ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

and the general rule is that land use restrictions arising from spatial plans are not subject to compensation.

The noise contours used for the POS are not part of the plan, but are made public with all the documents related to the plan.

6.4. Integration with spatial planning

Noise has been used as a basis to determine land use in the spatial plan for the airport and its surroundings. This plan, which is adopted by the Council of Ministers is binding on public and private parties and must be observed by subsequent local plans.

Air quality is not considered in land use planning around the airport.

6.5. Integration with development, construction or operation controls

Noise has been taken as a basis for the spatial plan of the airport and its surroundings and is an important element in the Environmental Impact Assessment required for the authorization of the project.

In 1998 the operation of the airport was regulated taking noise, among other criteria, into account. Regulation of 24 May 1998 (*Règlement grand-ducal du 24 mai 1998 fixant les conditions d'exploitation technique et opérationnelle de l'aéroport de Luxembourg*), defines technical and operational regulations for Luxembourg airport and limits operational hours to the period between 07:00h and 22:00h for aircraft not conforming to Chapter 3 of Annex 16 of the ICAO Convention, and 06:00h to 22:00h for domestic flights. Article 13 of the Regulation sets out some exceptions, e.g.. flights for humanitarian or sanitary purposes, emergencies, delayed flights, etc. Article 17 restricts engine tests to the period between 07:00h and 21:00h Monday to Friday and 08:00 to 22:00 on Saturdays.

The airport operates a noise monitoring system with 5 fixed stations whose data can be integrated into the RADAR system, the Flight Plan Processing System and the GPS clock system for purposes of correlation with specific flights. Below is the map showing the sites of the monitoring stations in blue:



Figure 10. Noise monitoring stations around Luxembourg Airport

Source: http://www.aeroport.public.lu/en/environnement/bruit_avions/station_mesurage.html

The airport publishes noise reports on its web page daily and hourly. (http://www.aeroport.public.lu/en/environnement/bruit_avions/rapports.html).

Since there is no legislation on airport noise, the contours used for the 1986 Plan and the POS were established on the basis of the criteria proposed by the consulting firm that undertook the job, which were the criteria then in force according to German legislation.

There are no special provisions regarding aircraft or airport related air pollution, although the “Spatial Planning Program” of 2003 included among the measures to be undertaken by Government the support for a kerosene tax in Europe, which may be justified on environmental grounds.

7. CASE STUDY – LUXEMBOURG AIRPORT

Every comment and description included in the whole report refers to Luxembourg Findel airport, the only main aerodrome in this country.

Findel started as a sports airfield in the 1930's and started operating as an airport in 1946. By 1954 the main runway had been lengthened to 2,830 m and in 1968 the first "Plan Général d'Aménagement" (PAG) for the airport was adopted, and following this a new terminal was built that began operations in 1975.

As has already been mentioned, land use for Luxembourg airport and the surrounding areas is currently regulated by a Particular Spatial Plan (Plan d'Aménagement Partial PAP "Aéroport et Environs") adopted in 1986. That plan was developed in accordance with the Law of 1937, amended in 1992. It contained noise contours.

Once the new Spatial Planning Act came into force in 1999, new instruments could be used to protect the airport operation and restrict urban developments in areas affected by noise. Growth of both passenger and freight traffic during those years required new infrastructures, including a new terminal.

Due to the lack of national legislation on airport noise, noise contours were updated in 2002 using German legislation as guidance (the contours were developed by a German University) on the basis of the traffic forecasted for the year 2012.

Three noise zones were defined and compared with those established by the 1986 PAP. The new noise zones were, in general, smaller than the previous ones. Anyway, it was still necessary to ensure the restrictions to urban developments in those areas which would be subject to high noise levels in the future.

Finally, a Land Use Plan (Plan d'Occupation du Sol, POS "Aéroport et Environs") was prepared by the Ministry of the Interior (in particular, the Directorate of Spatial Planning) and sent to the affected municipalities in June 2003.

Those affected municipalities were included in the noise zone affected by noise levels higher than 62 dB (A) Leq. They were Betzdorf, Hesperange, Luxembourg, Niederanven, Sandweiler and Schuttrange.

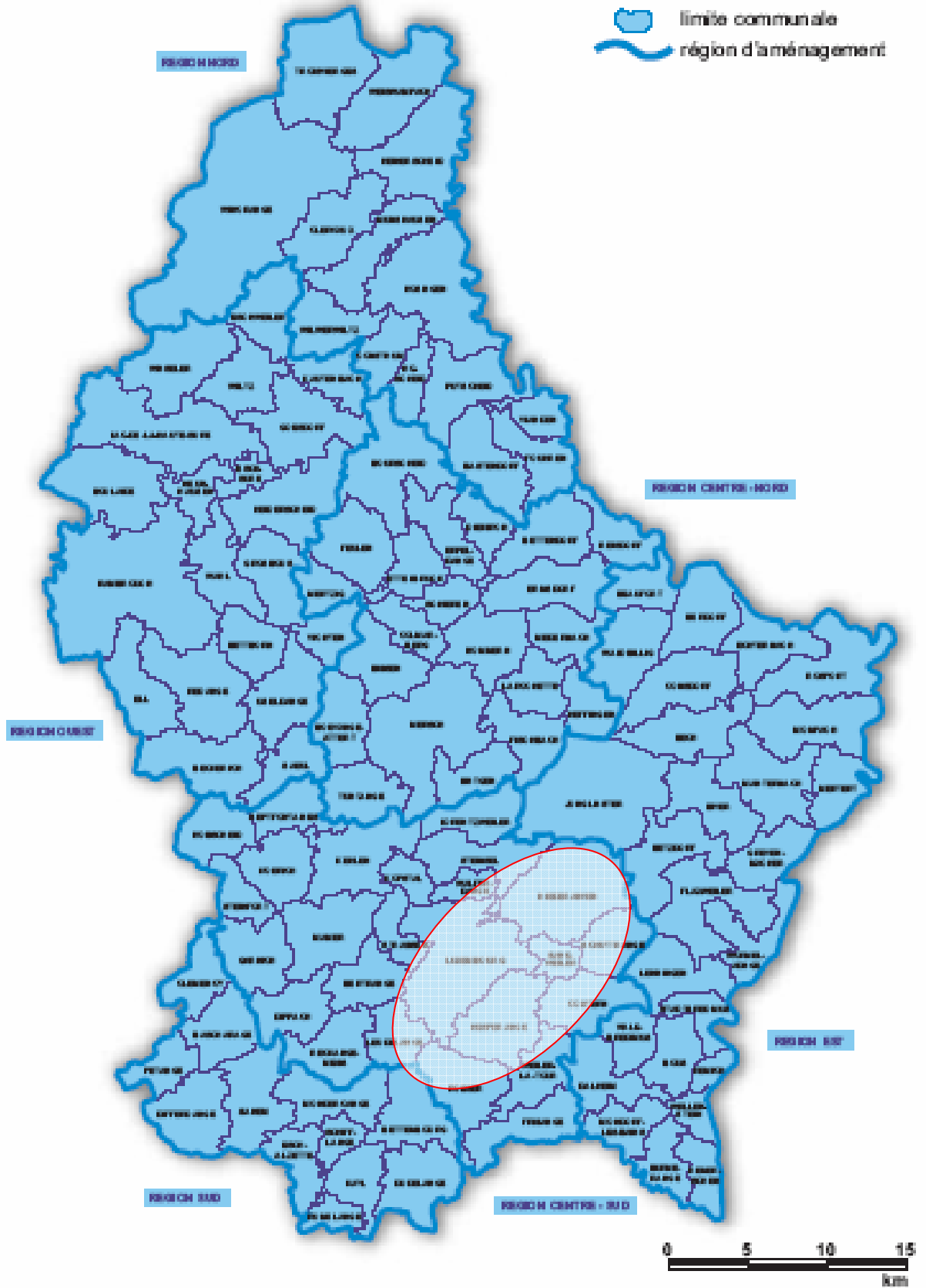


Figure 11. Planning regions and municipalities in Luxembourg

Two conference/information meetings were held and citizens had forty-five days to send comments in writing through their mayors, who had another forty-five days to submit a report to the Ministry.

These reports were reviewed by the Inter-Ministerial Committee for Spatial Planning and the High Council for Spatial Planning. Their advice was used by the Ministry of the Interior to prepare a final version of the Plan, taking into account the comments received.

It was finally sent to the Government, which is still considering its adoption by the Council of Ministers.

As mentioned above in 5.1.2 the purpose of the POS is :

1. To reserve the space needed for the development of the airport and its economic activity.
2. To establish reservations for the main transportation networks.
3. To manage land use around the airport by adopting the adequate planning measures in order to prevent urban development in areas subject to high noise levels.

The Plan defines zones already declared as urban areas or to be developed in the future, zones to be left as open space and “superimposed zones” (*zones superposées*), where highway or rail corridors as well as underground parking facilities are to be constructed. For each type of zone the Plan defines the acceptable or prohibited uses.

Areas which are already urbanized or will be developed in the future are divided into different zones according to land use: residential, municipal activities, light industry, small public buildings, large public buildings, public facilities for social purposes, recreation, energy production, future development and airport. The way these zones have been defined results in a practical “development freeze” within the 62 dB perimeter. Such a “freeze” allows limited development in areas that have are now of an urban nature or were already designated for urban development, but prevents any future development without the Government’s consent.

The airport zone is subdivided into 11 different sectors: general aviation, movement area, maintenance, apron, communications, passenger terminals, freight, administration, water management and a reservation for future development. These sectors are represented at a scale of 1:5 000, while the areas outside the airport appear on a less detailed scale of 1:10 000.

Open areas are divided into a “rural zone” and a “green area zone”.

The Plan also includes the location of radio navigation facilities and the definition of the “air navigation servitudes” (*servitudes de navigation aérienne*) established in order to protect such facilities.

Chapter VI of the Plan deals with obstacle limitation surfaces and sets building restrictions in order to protect them against any construction or installation that might endanger air traffic safety.

COUNTRY CONTACTS

- **Ministry of the Interior and Spatial Planning**

Mike Wagner, Political Advisor

- **Lux-Airport**

Boris Zikes, General Administration

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁵)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁵ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Conseil Supérieur de l'Aménagement du Territoire</i>	High Council for Spatial Planning
<i>Comité Interministériel de l'Aménagement du territoire</i>	Inter-ministerial Committee for Spatial Planning
<i>Comission d'aménagement</i>	Spatial Planning Commission
<i>Programme Directeur d'Aménagement du Territoire</i>	Spatial Planning Program
<i>Plans Directeurs Sectoriels</i>	Sector Plans
<i>Plan Directeur Régional</i>	Regional Director Plan
<i>Plans d'Occupation du Sol, POS</i>	Land Use Plans
<i>Plan d'Aménagement Général, PAG</i>	General Spatial Plan
<i>Plan d'Aménagement Particulier PAP</i>	Particular Spatial Plan
<i>Zones superposes</i>	Superimposed Zones
<i>Servitudes de navigation aérienne</i>	Air Navigation servitudes

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http://lux-airport.lu/About/About_e.htm
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<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:31996L0061:EN:HTML>
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 - Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment
<http://europa.eu.int/comm/environment/eia/full-legal-text/9711.htm>
 - Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
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http://europa.eu.int/eur-lex/pri/en/oj/dat/2003/l_345/l_34520031231en00970105.pdf

- Luxembourg legislation

<http://www.legilux.public.lu/>

- Loi concernant l'aménagement du territoire
- Loi concernant l'aménagement communal et le développement urbain
- Loi sur la police et sur l'exploitation de l'aéroport de Luxembourg ainsi que sur la construction d'une nouvelle aérogare
- Règlement grand-ducal concernant l'évaluation des incidences de certains projets publics et privés sur l'environnement
- Règlement grand-ducal concernant le contenu du plan d'aménagement general
- Règlement grand-ducal fixant les conditions d'exploitation technique et opérationnelle de l'aéroport de Luxembourg
- Règlement grand-ducal portant approbation du contrat sur le développement, la mise en valeur et l'exploitation de l'Aéroport de Luxembourg



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

MALTA

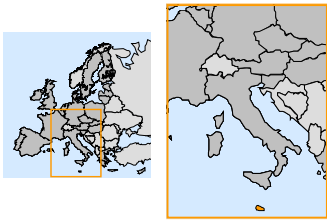


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MALTA		Location Map													
Population	0.4 mill. (1,261 inhabitant per sq. Km)														
Airports network	There is only one airport (Luqa International Airport) on the Malta Island, owned and managed by Malta International Airport plc., and a heliport on the island of Gozo.														
Spatial planning system															
<p>Highly centralised spatial planning system coordinated by the Malta Environment and Planning Authority, an independent agency under the umbrella of the Ministry for Rural Affairs and the Environment.</p> <ul style="list-style-type: none"> • Institutions <table border="0"> <tr> <td>National level:</td> <td>MEPA - Malta Environment and Planning Authority</td> </tr> <tr> <td>Regional level:</td> <td>No administrative regional level in Malta</td> </tr> <tr> <td>Local level:</td> <td>Local councils</td> </tr> </table> • Instruments <table border="0"> <tr> <td>Strategic plans</td> <td>Structure Plan. Subject plans</td> </tr> <tr> <td>Framework plans</td> <td>Local plans</td> </tr> <tr> <td>Regulatory plans</td> <td>Action plans. Development briefs</td> </tr> </table> • Process: All spatial planning instruments are prepared by MEPA and approved by the Government. MEPA is responsible for ensuring inter-government and public consultation. 				National level:	MEPA - Malta Environment and Planning Authority	Regional level:	No administrative regional level in Malta	Local level:	Local councils	Strategic plans	Structure Plan. Subject plans	Framework plans	Local plans	Regulatory plans	Action plans. Development briefs
National level:	MEPA - Malta Environment and Planning Authority														
Regional level:	No administrative regional level in Malta														
Local level:	Local councils														
Strategic plans	Structure Plan. Subject plans														
Framework plans	Local plans														
Regulatory plans	Action plans. Development briefs														
Regulation and permits															
<p>All construction activities require a development permission from MEPA (three Development Control Committees). Priority is given to national importance projects.</p>															
Airport planning															
<ul style="list-style-type: none"> • Policy and planning: No statutory airport development plans. Airport planning must take place through the general spatial planning instruments. • Spatial impact: Safeguard maps submitted to MEPA for consideration when preparing spatial plans. No noise contours yet prepared. Public Safety Zones. • Construction: General development permission from MEPA is required. Approval of the development by the Department of Civil Aviation is also requested. • Operation: Aerodrome operators licensed by DCA. Airport certification. 															
Airport noise and air quality															
<ul style="list-style-type: none"> • Noise: No noise levels defined by legislation. No noise contours. No land restrictions, but noise levels are considered by MEPA on a case by case basis when analysing applications for development permissions. • Air quality: Not considered 															

1. SUMMARY

SPATIAL PLANNING SYSTEM

Spatial planning is highly centralized, in the hands of the Environment and Planning Authority (MEPA), responsible for both spatial planning and environmental protection.

The “Structure Plan” presents a 20-year strategy for the development of the Maltese Islands, including a section on aviation policy. The Structure Plan can be implemented with “Subject Plans” focusing on one subject, such as transport, or a geographical area.

The country is divided into 7 planning areas for which MEPA prepares “Local Plans” in order to regulate land use within their territories. The Local Plan for the area where the airport is located regulates land uses around the airport and reserves land for future development. It also calls for the adoption of an airport master plan to regulate land uses within the airport boundaries.

“Action Plans” and “Development Briefs”, are the instruments used to implement Local Plans in areas where public projects or private development is to take place.

REGULATIONS AND PERMITS

Construction permits

All development activities require a “development permission” issued by MEPA.

Some exceptions exist but only for minor developments.

Environmental permits

EIA is regulated in line with EU legislation, although the regulations for the evaluation of plans and programs have not yet been completed.

The environmental assessment is fully integrated into the development permission process, as a previous approval to be obtained before the permission is granted.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The Structure Plan includes a section on Aviation with four strategies: identification of a development area for aircraft maintenance; the need for a comprehensive plan for the use of land, including future forecasts; the establishment of safety zones, noise contours and flight paths; and a study for the introduction of fixed-wing services to Gozo.

- Airport

There are no statutory airport development plans, and airport planning takes place through the general spatial planning instruments. Technical plans are prepared as an expression of the airport's requests to be included in spatial plans.

The airport operator has been preparing policy documents on the relationship with the surrounding area and on future infrastructural needs, in response to the requirements of the Structure Plan. These documents and a continuous relationship with the planning authority have allowed the Local Plan for the South Malta planning area to take into consideration airport development.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The airport operator prepares obstacle limitation maps for safeguarded areas to be taken into consideration in spatial planning and in issuing building permits.

Prior to issuing a building permit within these areas, MEPA consults with the operator.

- Noise Impact

Noise contours have not yet been prepared for Luqa airport.

- Risk prevention

Third-party risks are considered in Malta, although they are not officially defined by any regulation.

Public Safety Zones are defined by the Department of Civil Aviation in an internal document, and are considered by MEPA when preparing or reviewing any development plan. New developments are not permitted within those areas.

- Land reserve for future construction

Land for future airport developments is reserved by the general spatial planning instruments.

Construction

Construction activities within the airport require a development permit from MEPA.

Airport development must be approved by the Department of Civil Aviation.

Operation

Airports need a license issued by the Ministry of Competitiveness and Communications. The airport has been certified according to ICAO's requirements.

An environmental permit for waste management will be required in the future.

AIRPORT NOISE AND AIR QUALITY

There is no specific legislation on airport noise or air pollution in Malta.

There are no land use restrictions on the basis of noise or air pollution. These matters are considered on a case-by-case basis when analysing applications for development permissions.

Noise

Both the "noise" Directive 2002/49/EC and the "noise-related operating restrictions" Directive 2002/30/EC have been transposed.

Noise contours will be prepared in the future, but noise maps are not required since the airport does not reach the dimensions set by EU legislation.

Air quality

National emission ceilings and air quality standards are applied in the airport.

2. CONTEXT

Malta is an island country in the Mediterranean Sea south of Sicily, comprising the island of Malta and two smaller islands (Gozo and Comino). Occupied successively by Phoenicians, Greeks, Carthaginians, Romans, Saracens, and Normans, Malta was granted to the Knights Hospitalers in 1530 and passed to France in 1798 and Great Britain in 1800. The country became independent in 1964 and a republic in 1974, but has remained part of the British Commonwealth. Malta became an EU member in May of 2004.

Malta has no administrative divisions, and is administered directly from Valletta, although Local Councils carry out administrative orders.

Since 1993, Malta has been subdivided into 68 local councils or localities (54 in Malta, the main land; 14 in Gozo, the sister island). These form the basic structure of local government, and there are no intermediate levels between them and the national level.

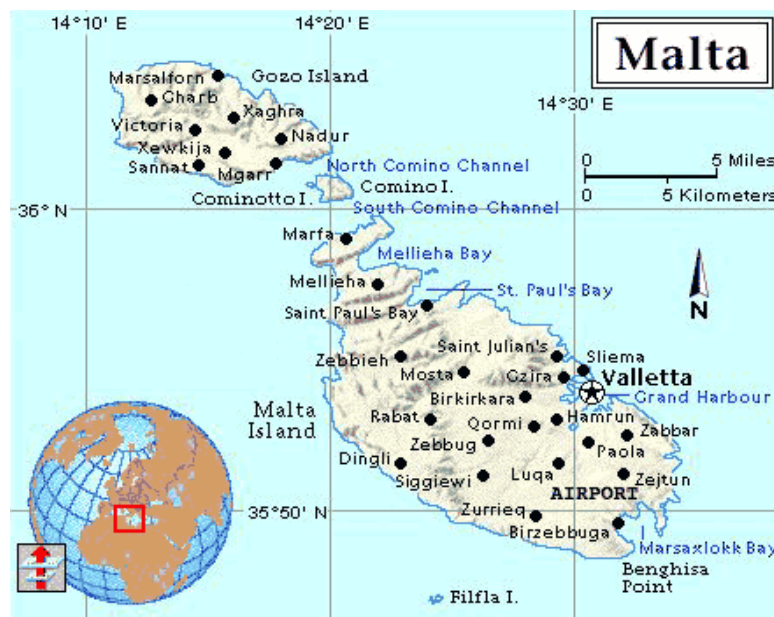


Figure 1. Map of Malta

Malta's GDP per capita is 71% of the European Union average (22.400¹), and its currency is the Maltese Lira.

Malta produces only about 20% of its food needs, has limited freshwater supplies, and has no domestic energy sources. The economy is dependent on foreign trade (serving as a freight transshipment point) and tourism.

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	399,900
Latitude / Longitude	35°50' N, 14°35' E
Land area	316 sq Km
Coastline	196.8 Km (Not including Gozo island)
Capital City	Valleta
GDP per capita (PPS at market prices)	15,800
GDP real growth rate	0.4 %
Inflation rate	2.7 %
Unemployment rate	7.6 %

Table 1. Malta: main facts and figures (2004)²

2.1. Population and statistics

Malta, with a land area of 316 sq. Km and a population of 399,900 inhabitant, has the highest population density of the European Union, with more than 1,260 inhabitant per sq. Km.

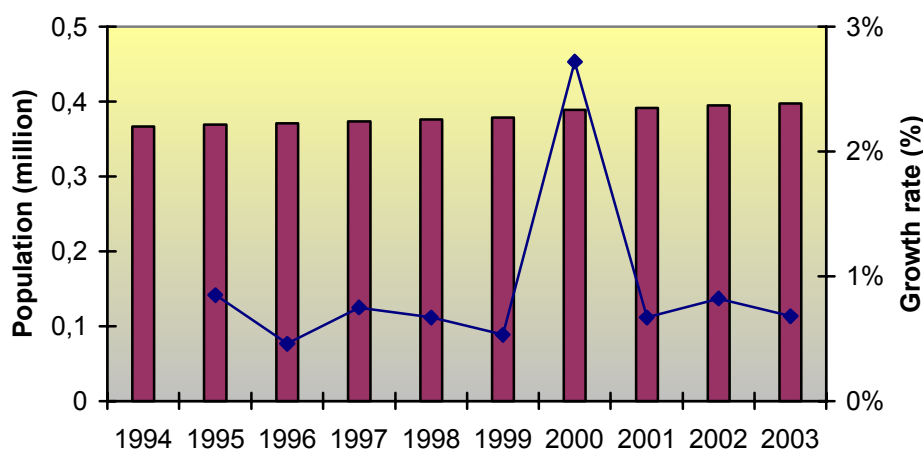


Figure 2. Maltese population evolution

Malta median age is 38.36 years; the birth rate is 10.17 births/1,000 population (2004 est). In 2003 17.6% of the population were aged 0-14, 68.8% were aged

² Sources: EUROSTAT

15-64 and 13.6% were over 65 – the proportion aged over 65 is projected to increase significantly over the next few decades with potentially serious impacts on the labour force.

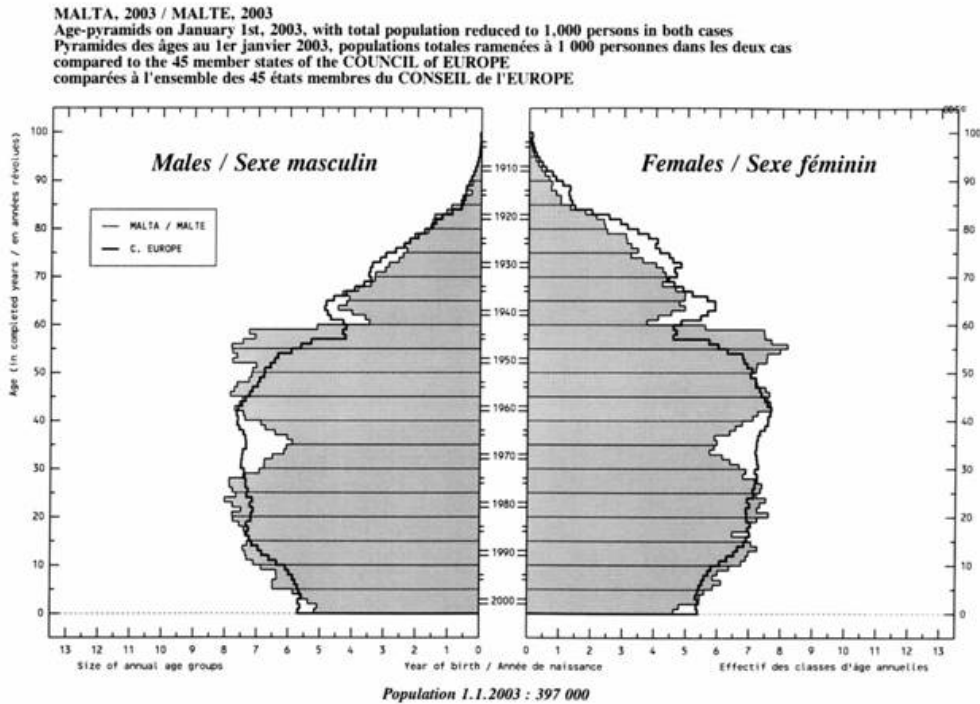
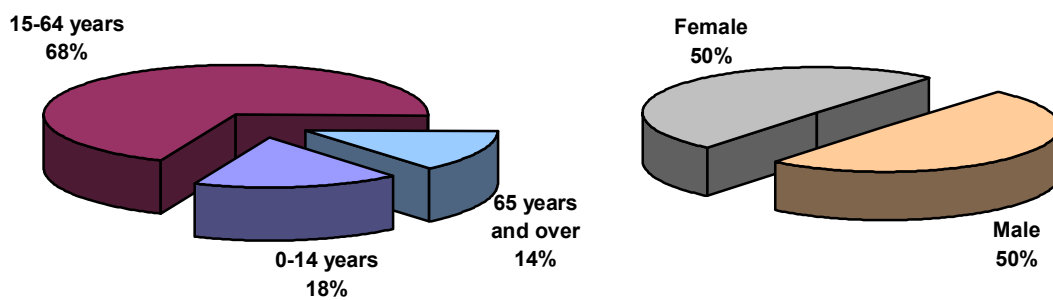


Figure 3. Maltese age-pyramids (2003)³



Figures 4 and 5. Maltese population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

The President is elected by the Maltese Parliament, who appoints as Prime Minister the leader of the party with a majority of seats in the unicameral House of Representatives, known in Maltese as *Kamra tar-Rappreżentanti*. This body consists of between 65 and 69 members elected on the basis of proportional representation. Acting upon recommendation of the prime minister, the President appoints the individual ministers to head each of the government departments. This cabinet is selected from among the members of the House of Representatives. Elections must be held at least every 5 years.

Local Government was established in 1993 following the approval of the Maltese Parliament, on 30 June 1993, of the Local Councils Act, 1993 (Act No. XV of 1993). This law made it possible for Local Councils to be set up. Furthermore, it now serves as a regulatory mechanism for operation the Councils.

The Department of Civil Aviation, which forms part of the Ministry for Competitiveness and Communications, functions as a regulator of all aviation activities in Malta and ensures that such activities are carried out in compliance with the international standards which Malta has adopted.

The Ministry for Rural Affairs and the Environment is responsible for spatial planning and environment protection, but most of the executive powers in both areas have been transferred to the Malta Environment and Planning Authority.

2.3. Main airports

There is only one airport on the Malta Island (Luqa Airport) and a heliport on the Gozo Island.

“Malta International Airport plc” (MIA) was registered as a company on 16 May 1991 and commenced operations on 1 January 1992. Initially, MIA managed and operated the air terminal but later became responsible for the entire airport. From 1 January 1989 until 1992, these activities had been carried out by the Government's Air Terminal Department and before that by the Government's Department of Civil Aviation (DCA).

In July 2002, the Government of Malta signed an agreement with the Malta Mediterranean Link Consortium Ltd (MML) for the sale of 40% of Malta International Airport plc. The Government of Malta sold a further 20% of its shares in MIA by means of an Initial Public Offering in November 2002. It has now decided to offer 13,530,000 Ordinary 'A' Shares for sale on the Malta Stock Exchange, and has also announced that completion of this transaction is envisaged before end of 2005.



Figure 6. Malta International Airport

The following table shows the air traffic in 2004:

Passengers	Aircraft operations	Cargo (Tm)
2,813,972	32,477	17,103

Table 2. Malta Int. Airport traffic 2004⁴

⁴ Source: MIA plc

3. SPATIAL PLANNING SYSTEM

The spatial planning system in Malta is regulated by the Development Planning Act of 1992, as amended several times (most recently in 2002). The main purpose of the Act is *“to make provision for the planning and management of development, for the establishment of an authority with powers to that effect and for matters connected therewith or ancillary thereto”*.

This Act sets up a highly centralised system, coordinated by the Malta Environment and Planning Authority, which was established by this law, and with powers over environment protection since the last amendment on 2002.

3.1. Institutions

3.1.1. National

The Malta Environment and Planning Authority (MEPA) is the central agency, established by the Development Planning Act, responsible for land-use and environment protection.

According to the Act, the functions of this authority are the promotion of proper planning and sustainable development of the country, the control of development and the preparation of the “development plans”, and planning policies.

MEPA is an independent agency, subject only to the provisions of the Development Planning Act, although it remains under the umbrella of the Ministry for Rural Affairs and the Environment and the Prime Minister, who appoints its chairman, committees and members.

MEPA is ultimately responsible for the use of land and the environment. However, in cases where there are other more specialised bodies, responsibility is shared. MEPA is responsible for the use of land, while the other bodies are responsible for their operation or standards.

3.1.2. Regional

There is no regional administrative level in Malta. In terms of planning, Malta is divided into 7 planning areas: Grand Harbour, North Harbours, North West, Central, South, Marsaxlokk and Gozo&Comino. Development plans for these areas are prepared by MEPA.

3.1.3. Local and area wide

In terms of local government, Malta is divided into 68 local councils (54 in Malta and 14 in Gozo). These do not have planning powers. Different types of development plans for these areas are prepared by MEPA.

3.2. Instruments

Spatial planning instruments (development plans) are defined by the Development Planning Act, which clearly differentiates between the structure plan and other subsidiary plans.

Development plans are drafted by MEPA in consultation with other relevant bodies in each case.

3.2.1. *Strategic plans or policy documents*

Structure Plan

The main strategic planning instrument in Malta is the “Structure Plan”, a policy document comprising a 20-year strategy for the development of the Maltese Islands.

The Structure Plan should deal with topics such as settlement pattern, built environment, housing, social & community facilities, commerce & industry, agriculture, horticulture & fisheries, minerals, tourism & recreation, transport, conservation and public utilities.

MEPA is responsible for preparing, implementing, monitoring and revising the Plan as often as necessary (but not within the first 5 years). A proposal must be submitted to the Government, which is responsible for approving the structure plan and submitting it to the Parliament for its final approval.

The current Structure Plan was developed in 1990, in accordance with the previous Building Permits Act of 1988, and covers a period of 20 years, until 2010. In accordance with the Development Planning Act (1992), MEPA was bound to prepare the first structure plan not later than one year from its coming into force. However, the same Act also established that where a Structure Plan had been prepared under the Building Permits Act of 1988, MEPA should adopt such a Plan as if prepared under the provisions of the new Act. The Structure Plan came into force on 29 July 1992.

This includes a section on Aviation in the Transport chapter, with the following four policies or strategies:

- AVN1: identification of a development area for aircraft maintenance.
- AVN2: the need for a comprehensive plan for the use of land, including future forecasts.
- AVN3: the establishing of safety zones, noise contours and flight paths.
- AVN4: a study for the introduction of fixed-wing services to Gozo.

This Structure Plan of 1990 no longer caters efficiently for the changes that have taken place in Malta during the last decade. The Maltese Islands need a new Structure Plan that will not only take full account of the current situation, but also cater for the future.

A Structure Plan Review is currently in progress. A draft plan has already been subject to public consultation and approved by the MEPA Board.

Subject Plans

The first type of "subsidiary plan" defined by the Development Planning Act is the "Subject Plan". A subject plan deals with a policy or matter contained in the structure plan but requiring more detailed specifications for its implementation.

A subject plan may relate to the whole territory of the country, as might be the case in respect of environmental protection or specific activities such as transport, or may relate to a particularly large area within one of the seven planning areas.

MEPA is responsible for preparing and reviewing subject plans. A proposal must be submitted to the Government, which is responsible for approving the subject plan.

A subject plan may be reviewed as often as necessary, but not within 2 years of its approval unless it is required by a Structure Plan Review.

3.2.2. Local (framework) plans

Local Plans

A "Local Plan" is prepared for each of the seven planning areas, when pressures for urban development already exists or is anticipated or where special factors cannot be taken into account solely on the basis of the structure plan.

As the current structure plan includes a wide dispersal development activity, every planning area now requires a local plan to define in detail those development proposals. The seven planning areas have a local plan either already completed or in final stages of completion.

MEPA is again responsible for the preparation and review of local plans. These should be reviewed as often as necessary, but never within 2 years of its approval, unless required by a Structure Plan Review.

A proposal must be submitted to the Government, which is responsible for approving the local plan.

Luqa airport is located in South Malta planning area. The draft South Malta Local Plan (SMLP), currently at the Public Consultation stage, recognises the needs of Luqa international airport and requires the airport company to produce a Master Plan, indicating the various developments and uses proposed in the area (draft policy SMLU07)

It also identifies the possible need of a taxiway at the airport and proposes a policy (SMIA07) in this respect. The draft policy primarily safeguards areas of land where a taxiway may be provided.

3.2.3. *Regulatory (detailed) plans*

Action Plans

An action plan is prepared for part of a planning area where particular attention should be paid to managing the rate of development or where a department or agency of the government intends to carry out developments in its own land or on land to be acquired by agreement or by compulsory purchase.

An action plan is similar in character to a local plan, and may even form part of a local plan, but deals with smaller areas and is particularly appropriate where the public sector intends to positively intervene in the development process. In addition to the information required in a local plan, an action plan shall also show the land which already is in public ownership and the land which is intended to be brought into public ownership.

MEPA is again responsible for preparation and review of action plans. They should be reviewed as often as necessary, but never within 2 years of its approval, unless it required by a Structure Plan Review.

A proposal must be submitted to the Government, who is responsible for approving the action plan.

Development Briefs

A development brief sets out all the planning requirements, limitations, opportunities and targets which must be met in developing a specific site and prescribes all matters affecting the form, content and design of the development.

Guidelines on the development of the site should include land uses and site layout, building form, heights and design, any building and landscape features to be retained, access, parking and circulation requirements, landscaping and nature conservation aspects, services and infrastructure and any other information which may be relevant to the site and to the purpose of the development brief.

MEPA is also responsible for the preparation and review of development briefs. A proposal must be submitted to the Government, which is responsible for approving the development brief.

3.3. Process

3.3.1. Inter-government consultation

During the formulation of the plan or its review, different entities with an interest in part or all the subject area will be formally consulted. In the case of airports, the DCA and MIA are formally invited to express their needs relevant to the life of the plan (20 years for the Structure Plan and 10 years, in general, for the subsidiary plans).

Where possible or appropriate, the needs of the consultees will be adopted in the relevant policies, subject to the provisions of the Development Planning Act or other higher level plans already in force.

Once a draft plan is prepared, MEPA shall send it to all relevant bodies and publish it to be subject to public consultation, providing adequate opportunities for individuals and organisations to make representations. MEPA shall invite representations on the plan to be submitted within a specified period of not less than six weeks. MEPA shall only continue with the process after taking into consideration all the representations submitted.

After approval by the MEPA Board, the plan is published together with a statement of the representations it has received and the responses to those representations. This documentation shall be referred, together with a planning position statement with detailed technical explanations justifying the proposals, to the Minister for Rural Affairs and the Environment for his approval.

If the Minister does not agree with the proposed plan, he shall prepare a planning position statement, stating his proposed changes or his reactions to the MEPA's proposal, and shall refer back the plan. If MEPA does not agree with the Minister, it shall draw up a planning position statement and shall refer it back to the Minister. The Minister shall then issue a final planning position statement. MEPA shall amend the subsidiary plan in accordance with the Minister's final planning position statement and submit the same for the Minister's final approval.

Upon Minister's approval (in some cases approval from the Cabinet is necessary), MEPA shall publish the final plan together with its planning position statement (and those of the Minister, together with the advice of the Appeals Board on the disagreements between MEPA and the Minister, if any), and together with all the statements, responses, documentation and studies prepared or received during the whole procedure.

Structure plans require final approval from the Parliament.

3.3.2. *Policy Integration*

Once the Minister or the Parliament approves a plan, it becomes legally binding and no policy or strategy shall be adopted against its dispositions.

When a draft plan, or part of it, goes beyond its scope or, in case of subsidiary plans, is in conflict with the structure plan, the matter should be referred to the Appeals Board, whose decision will be binding.

3.3.3. *Citizen participation*

During the preparation or review of a development plan, MEPA shall make known to the public the matters it intends to take into consideration and shall provide adequate opportunities for individuals and organisations to make representations and comments.

Media advertising, including publication of the draft plan on the internet, and local public meetings shall take place. Even ad-hoc one-to-one meetings are possible in some cases.

Aviation policies and airport development proposals are subject to public consultation as the rest of the plans where they are contained (usually, the structure plan or local plans).

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

All development activities, as defined by the Development Planning Act, require a “development permission”.

4.1.2. *Exceptions or exemptions*

No specific exemptions are defined, but some minor developments are classified as “permitted developments” and only require the developer to notify MEPA. In those cases, MEPA previously publish a Development Notification Order, authorising developments carried out according to the development plans or other planning policies.

4.1.3. *Institutions involved: inter-government relations*

MEPA is responsible for granting development permissions. A Development Control Division under the Planning Directorate is in charge of revising the documentation included in the application for the permission. An advertisement is published to ensure public consultation and possibility to submit objections. Relevant bodies in each case are also consulted, such as the DCA and MIA in case of developments close to the airport.

On the proposal of MEPA officers, either one for the three Development Control Committees or the MEPA Board, for small or large projects respectively, will be responsible for granting the permission on the basis of all the information received.

The building permit is essentially the development permission, but since this sets conditions regarding third parties, other bodies may be required to give their consent, such as local councils/ADT (when the construction requires cranes to block the road) or other entities such as Water, Electricity or Drainage utility providers. However, these entities should not be giving permits, unless the development is covered by a permission from MEPA.

A permission is required whoever the developer is, including the State and its agencies. Priority is given to “national importance projects”, such as the airport, although the process will never last for less than the legal minimum period stated by the Development Planning Act. Whether a specific project is to be considered as of national importance is decided by MEPA on the basis of the application.

4.1.4. *Relationship with planning*

Construction has to take place in accordance with the approved plans for the area, so no development permission shall be granted if it is not in accordance with a plan.

Permissions may also include conditions imposed by MEPA on the basis of the development plans or other planning policies approved for the area, such as maximum height and building volumes or a requirement to complete the construction within a specific period of time.

Those conditions may also include a requirement to carry out the development in stages. MEPA shall define those stages in the permission and, following the completion of each stage, the applicant shall request MEPA to carry out an inspection of the works. Only if works have been carried out according to the development permission and approved plans, MEPA shall authorise the applicant to carry out the next stage of the development.

4.2. **Environmental permits**

4.2.1. *Environmental Impact Assessment*

The Environmental Impact Assessment requirements are regulated in Malta by the Act XX of 2001 on Environmental Protection and later Environmental Impact Assessment Regulations, which transpose the Council Directive 85/337/EEC⁵ (the “EIA” Directive) as amended by the Council Directive 97/11/EC⁶. In some areas, these local Regulations are more rigorous and stringent than the “EIA” Directive.

There is a list of categories of developments requiring an environmental assessment before a development permission is granted, and MEPA is also entitled to require an EIA for any other activity not included in the list. The Development Control Division (under the Planning Directorate) is responsible for providing the Resources Management Division (under the Environment Directorate) with all the documentation received from an applicant for a development permission which may require an EIA, in order to decide the scope and terms of reference of the assessment.

⁵ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁶ Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment

Procedures are at hand to transpose the Directive 2001/42/EC⁷ (the “SEA” Directive). In fact, some articles of the Environment Protection Act already refer to Strategic Environmental Assessment, but they are not yet in force.

The proponent of the plan shall be responsible to undertake a SEA for its plan, should the plan fall under the scope of the SEA Regulations. An environmental assessment on the proposed plan, presented as an environmental report, is to be carried out by the proponent too. This environmental report will be assessed by MEPA and subject to public consultation.

4.2.2. Other environmental controls

The EIA process shall identify the areas where environmental permitting is required. It is envisaged that some form of waste management permit will be required, depending on the scale of the waste management operation on the airport site, as well as an emissions permit.

The adoption of Environmental Management Systems is encouraged.

4.2.3. Institutions involved

The Ministry for Rural Affairs and the Environment is the central body responsible for Environment Protection in Malta, but most of the executive powers are given to MEPA. It is responsible for issuing positive, including conditions if necessary, or negative reports on the basis of the EIA process.

4.2.4. Integration with other permits

The environmental assessment is fully integrated into the development permission process, as a previous approval to be obtained before the permission is granted.

No development permission should be granted to any activity requiring an EIA until there is a positive report from MEPA.

Compliance with this requirement is guaranteed as both authorities fall within the responsibilities of a single organisation, but the Environment Protection Act still states the right to appeal before the Planning Appeals Board against any permission granted without an environmental approval or against any condition imposed by such approval.

⁷ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

The participants in airport planning and development in Malta are the Malta International Airport Public Limited Company (MIA), the Department of Civil Aviation (DCA) of the Government of Malta (under the Ministry for Competitiveness and Communications) and the Malta Environment and Planning Authority (MEPA).

Other institutions and authorities and the citizens will be participating in this process during the consultations for the development plans where airport development are considered.

5.1.2. Instruments

There are no statutory airport development plans as such in Malta. Airport planning takes place through the general spatial planning instruments: the development plans, mainly the structure plan and the local plan for the South Malta planning area, where the airport is located.

Nevertheless, thanks to the good coordination between the airport company (MIA) and the only planning authority in Malta (MEPA), any internal study carried out by the airport is sent to MEPA for its consideration.

That was the case of the “Framework Policy for Planning and Management of Development in the Vicinity of Luqa Airport and Aviation Facilities”, a policy document prepared by MIA in 2003 to set out its strategy for a good relationship with the surrounding areas, in order to ensure the safety of the air operations at the airport and avoid disturbance to the citizens living in those areas. This will also be the case of the “capacity vs. demand” study currently under development to analyse the future infrastructure needs at the airport till 2020. As soon as it is approved by MIA, the study will be sent to DCA and MEPA to ensure it is considered in any plan revision or permitting process.

Both documents are prepared by MIA in response to the requirements of the policies on aviation included in the current Structure Plan 1990:

“With respect to the future of Luqa airport, there are two main concerns within the context of the Structure Plan. First, how all future airport operations can be accommodated in an effective fashion, together with related land requirements, and second, how safety and environmental impact outside the airport boundaries can best be regulated.

...

POLICY AVN 2: *The Department of Civil Aviation will produce a comprehensive plan illustrating the proposed use of land sufficient for all forecast needs in the long term, including consideration of Luqa Airport as a transit (hub) airport for international flights, and other commercial and leisure aviation.*

POLICY AVN 3: *The Department of Civil Aviation will establish:*

1. *Public Safety Zones for both ends of airport runways*
2. *A general safeguarding zone including absolute building height restrictions aimed at preventing development outside the airport boundary which could be hazardous to airport and aircraft operations*
3. *A map illustrating forecast noise contours in order that the Planning Authority can evolve policies for the control of development within affected areas*
4. *Aircraft flight paths which minimise noise nuisance*

...”

The Local Plan for the South Malta planning area, where the airport is located, took airport plans into consideration. The first draft, prepared in 2002, included an airport master plan showing future land-uses within the airport grounds.



Figure 7. Luqa Airport included in South Malta Local Plan

The recent final draft, subject to public consultation on April 2005, also includes several maps and a specific paragraph dedicated to Luqa Airport, reserving land for a future taxiway:

“SMIA 07 Area Reserved For Airport Taxiway Route

MEPA safeguards land, as indicated in the Luqa Airport Environs Policy Map LU 4, for the future provision of a taxiway, as required by the Malta International Airport. However, MEPA will expect any future application for a taxiway to be supported by relevant studies (including an analysis of options for its siting, development feasibility and an EIA of the proposal) and proposals for amelioration of any adverse effects emanating from its provision”

5.1.3. Process

“Malta International Airport plc” (MIA) is responsible for preparing airport development plans, following DCA requirements, and for submitting them to MEPA, as a communication of its needs, to be considered when developing any general spatial planning instrument – development plan.

Then, it will follow the same process as any other development plan, including public consultation, until its approval by the Minister for Rural Affairs and the Environment, the Cabinet, or the Parliament, depending on the type of plan.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

MIA is responsible for preparing obstacle limitation surfaces maps for Luqa Airport, in accordance with ICAO Annex 14 requirements, which are integrated into the Maltese legislation.

Currently, this map is included in the AIP, and it is sent to MEPA for its consideration when drawing up any development plan, particularly when preparing the local plan for South Malta planning area, where maximum heights for buildings are defined. It is also considered in the process of granting development permissions. Any application for permission within the areas around the airport is sent by MEPA to MIA for analysis and comments, which are taken into account in the final decision on the permit.

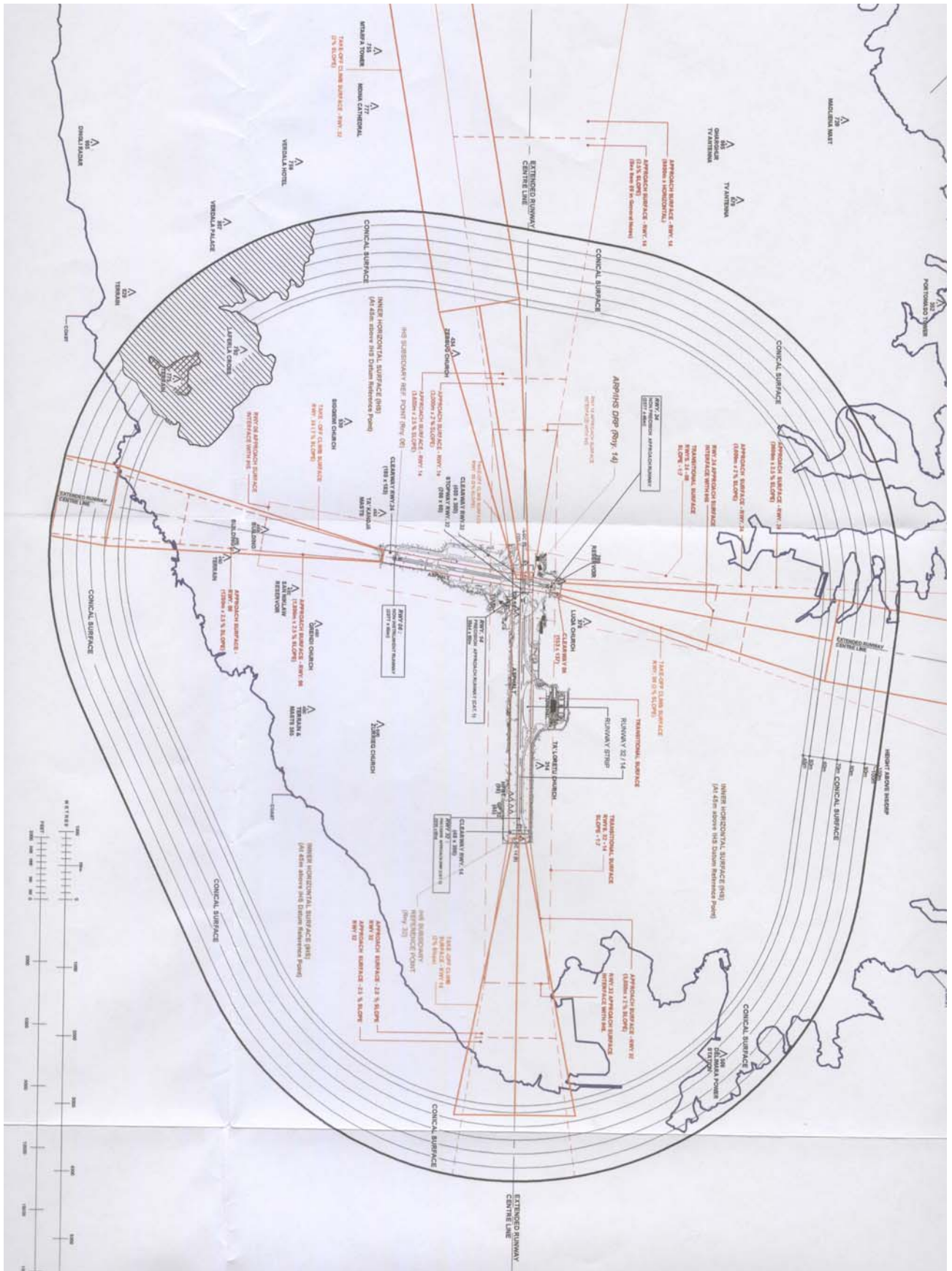


Figure 8. Obstacle limitation surfaces (AIP Malta)

The need to safeguard areas for airport operations are also considered in development plans in force, such as the Structure Plan 1992 and the South Malta Local Plan

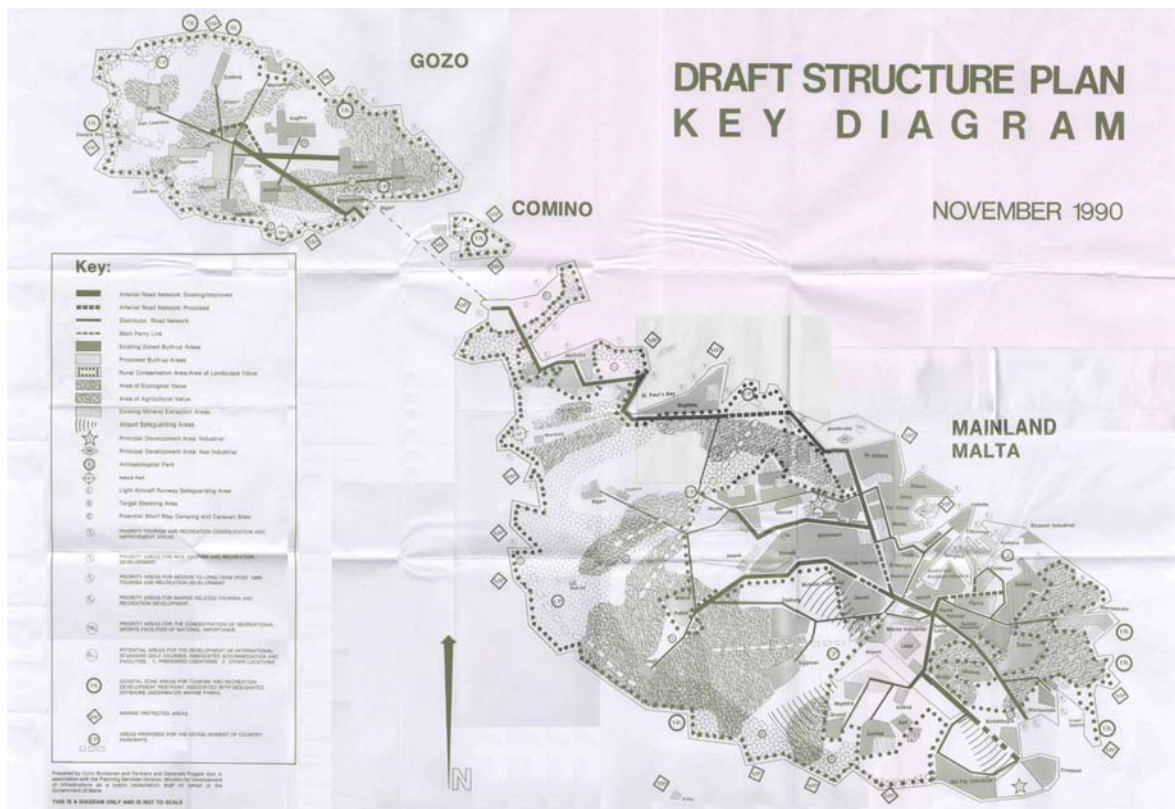
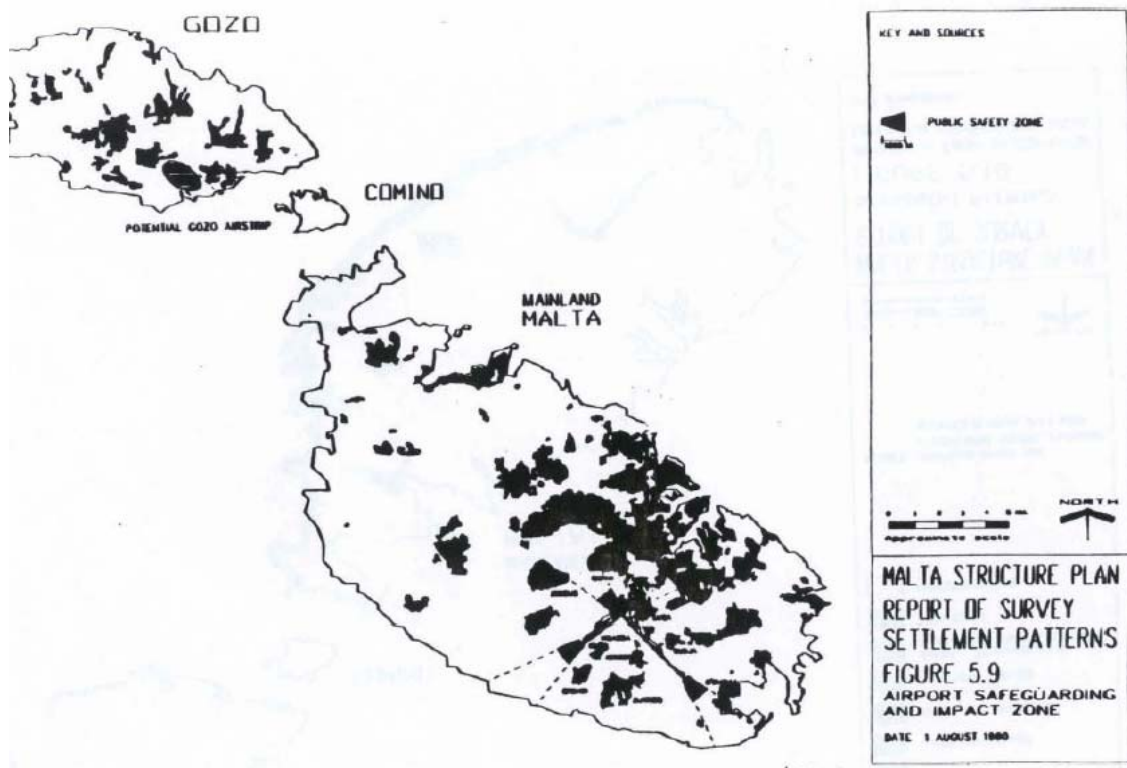


Figure 9. Structure Plan 1990. Airport safeguarding areas

5.2.2. Noise Impact

There are no noise contours for Luqa airport in the documents prepared by MIA nor at any development plan prepared by MEPA.

Noise impact has not been an important issue in Malta in the past, and it is not yet a real concern due to the lack of complaints and the low number of operations at the airport, still well below 50,000 operations/year. It is also considered as an unavoidable disturbance associated with the only airport on the island.

As early as 1992, the Structure Plan stated that noise contours should be prepared, but this has not been a priority till now. Recently, MIA has established an Environmental Committee within its organization, which will be responsible for preparing noise contours and for environment protection in general.

For the moment, only some measures, such as noise abatement procedures at the AIP, avoiding over-flying and forbidding engine tests during night periods, are being taken to avoid noise impacts on the surrounding areas of the airport.

However, if an EIA is ever requested for any airport expansion (such as the future taxiway), MEPA will include the calculation of noise impacts as a requirement on the terms of reference for the EIA, Some measurements will be required, and there is even a standard BS4142:97 on the location of monitoring stations.

5.2.3. Risk prevention

Third-party risks are considered in Malta, although they are not officially defined by any regulation.

Public Safety Zones are defined by the Department of Civil Aviation in an internal document, and are considered by MEPA when preparing or reviewing any development plan. New developments are not permitted within those areas.

Public Safety Zones were already considered at the Structure Plan in 1992. As is shown in the next figure, PSZ are defined with the same shape and size as the ICAO Annex 14 approach surface.

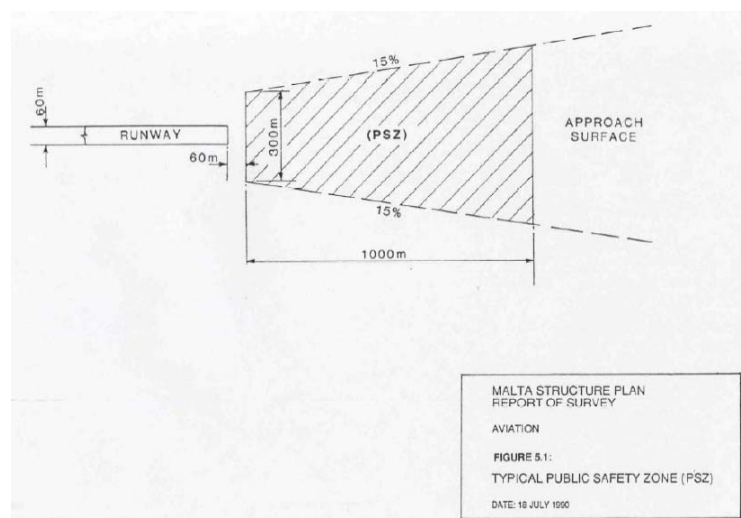


Figure 10. Public Safety Zones

5.2.4. *Land reserve for future construction*

Land for future airport developments is reserved by the general spatial planning instruments - development plans - prepared by MEPA, particularly the local plan for the South Malta planning area, where the airport is located.

The current draft of South Malta Local Plan, submitted for public consultation in April 2005, includes a reserve of land for the construction of a new taxiway at Luqa Airport, with two possible locations at both sides of the runway. The final decision will be taken on the basis of the analysis of alternatives required as part of the EIA prior to the development permission for the construction.

5.3. **Airport construction**

5.3.1. *Permits and authorizations required for airport construction or development*

- a) Building permit: Any construction activity at the airport requires a development permission from MEPA, unless it falls within the list of minor developments requiring only a notification to MEPA, according to the Development Planning Act.

The documentation submitted with the application for the permission will be subject to public consultation.

Depending on the type of development, the permission will be granted by one of the three Development Control Committees (small projects) or by the MEPA Board (for large or national importance projects).

- b) Environmental permits: A waste management permit will be required in the future to MIA, in accordance with the legislation on environmental permitting currently under development.
- c) Civil aviation: The Department of Civil Aviation shall approve any airport development in accordance with technical requirements.

5.3.2. *Institutions and processes involved*

- a) Authorization: The Department of Civil Aviation, under the Ministry for Competitiveness and Communications, would be responsible for authorizing any new airport initiative in Malta, although this is not likely to happen, as Luqa Airport has sufficient capacity to handle the demand for air transport in the Islands.
- b) Supervision: MEPA is responsible, according to the Development Planning Act, for issuing a certificate stating that any development has taken place in accordance with the plans and the conditions of the development permission.

5.3.3. Integration with planning and environmental controls

MEPA is responsible for monitoring all development operations to ensure that they are carried out in accordance with the Development Planning Act, the Structure Plan, or any other development plan in force.

The Environment Protection Act also empowers MEPA to supervise compliance with the procedures established by the Act, particularly the necessity of EIA before any development permission is granted.

5.4. Airport operation

5.4.1. Operating permit

Malta International Airport plc is certified as a competent aerodrome operator by the Department of Civil Aviation.

5.4.2. Airport certification

The Air Navigation Order of 1990 requires that the operator of an airport open for public transport must be licensed by the Minister for Competitiveness & Communications unless it is a Government airport. Malta International Airport plc has a licence, last issued in 2002, after the company was privatised, to operate Malta's only airport. This licence is valid for sixty five years.

In 2005 the Civil Aviation (Aerodrome Licensing) Regulations were brought into force to give effect to the recently published ICAO Annex 14 requirements for aerodrome certification. Under these Regulations Malta International Airport plc was required to submit an aerodrome manual in accordance with the specifications of ICAO Doc 9774. This manual was accepted by the Department of Civil Aviation in March 2005 when it also certified, following successful audits that were carried out in previous years on the company's operations, that the company met ICAO requirements. Periodic audits and inspections are carried out every year to ensure that the company remains competent as an aerodrome operator.

The company's Safety Management System is still under development by the company and the Department is pressing for its rapid establishment.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

There is no specific legislation on airport noise or air pollution in Malta. General rules on these areas are contained in the Environment Protection Act and related Regulations.

The Environment Protection Act of 2001 established the general framework for the environment protection. Previously, only the Act XVIII of 1967 on Clean Air dealt with these issues.

The “Assessment and Management of Environmental Noise Regulations” (Legal Notice 193 of 2004) and the “Civil Aviation (noise related operating restrictions at airports) Regulations” (Legal Notice 296 of 2005), have recently entered into force, amending the Environment Protection Act and the Civil Aviation Act, respectively.

These regulations transpose Directive 2002/49/EC⁸ (the “noise” Directive) and Directive 2002/30/EC⁹ (the “noise-related operating restrictions” Directive), respectively.

With regard to air quality, the “Limit values for nitrogen dioxide, sulphur dioxide and oxides of nitrogen, particulate matter and lead in Ambient Air (Amendment) Regulations” (Legal Notice 231 of 2004), the “Ozone in ambient air Regulations” (Legal Notice 11 of 2003) and the “National emissions ceilings for certain atmospheric pollutants (Amendment) Regulations” (Legal Notice 232 of 2004) have complemented the Environment Protection Act .

6.2. Institutions

The Ministry for Rural Affairs and the Environment is the central body responsible for environment protection in general, including noise and air pollution matters. However, most of the powers in these areas, including drafting regulations and monitoring their implementation are given to MEPA,.

The Ministry for Competitiveness and Communications, as the central body in charge of Transport, is responsible for the regulations on airport noise operating restrictions through the Department of Civil Aviation.

⁸ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

⁹ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

On the other hand, the Structure Plan requires certain activities on these areas to be carried out by the aerodrome operator, Malta international Airport plc.

6.3. Instruments

- a) Planning: No noise contours around airports have yet been calculated in Malta. The Structure Plan requested DCA (as aerodrome operator by that time) to prepare noise contours in order to consider them in development plans and permissions processes, but this has not been a priority up till now. The new Environmental Committee at MIA will be responsible for preparing the noise contours in the near future.

There are no noise maximum levels defined by Maltese legislation.

Noise mapping will become an issue in 2007, when the “noise” Directive will have to be implemented; however, Luqa Airport will probably not have reached the threshold of 50,000 operations/year by that time and so will not yet be required to prepare airport noise maps.

Noise and air quality would certainly be considered in any EIA conducted for an airport development, and at least some measurements would be required to show the situation before the construction and establish some conditions for the development.

- b) Land use restrictions: There are no land use restrictions on the basis of noise or air pollution in Malta. These matters are considered on a case-by-case basis when analysing applications for development permissions. Certain sound-proofing conditions can be required for new buildings.
- c) Compensation: There is no compensation scheme for noise or air pollution impacts defined in Malta.

6.4. Integration with spatial planning

Noise and air quality impacts around the airport are not yet considered in the development plans, at least not in form of land use restrictions or protection zones.

6.5. Integration with development, construction or operation controls

Potential noise impacts are considered on an individual basis by MEPA when analysing applications for development permissions.

Conditions as to the materials and insulation conditions of the building can be imposed in the development permission.

There is no permanent noise monitoring of the aircraft operations, although some measurements are taken with mobile stations for specific studies.

7. CASE STUDY – MALTA INTERNATIONAL AIRPORT

Every comment and description included in the whole report refers to Luqa airport, the only main aerodrome in this country.

The only significant development to be carried out at Luqa airport in the next few years will be the construction of a new parallel taxiway to provide RWY 32 with an independent access from the apron, without using the runway.

This taxiway was already considered in the Structure Plan in 1990, as shown in the next figure, taken from the documentation of the plan. However, this was not mentioned in the text of the plan nor in the four policies proposed regarding aviation.

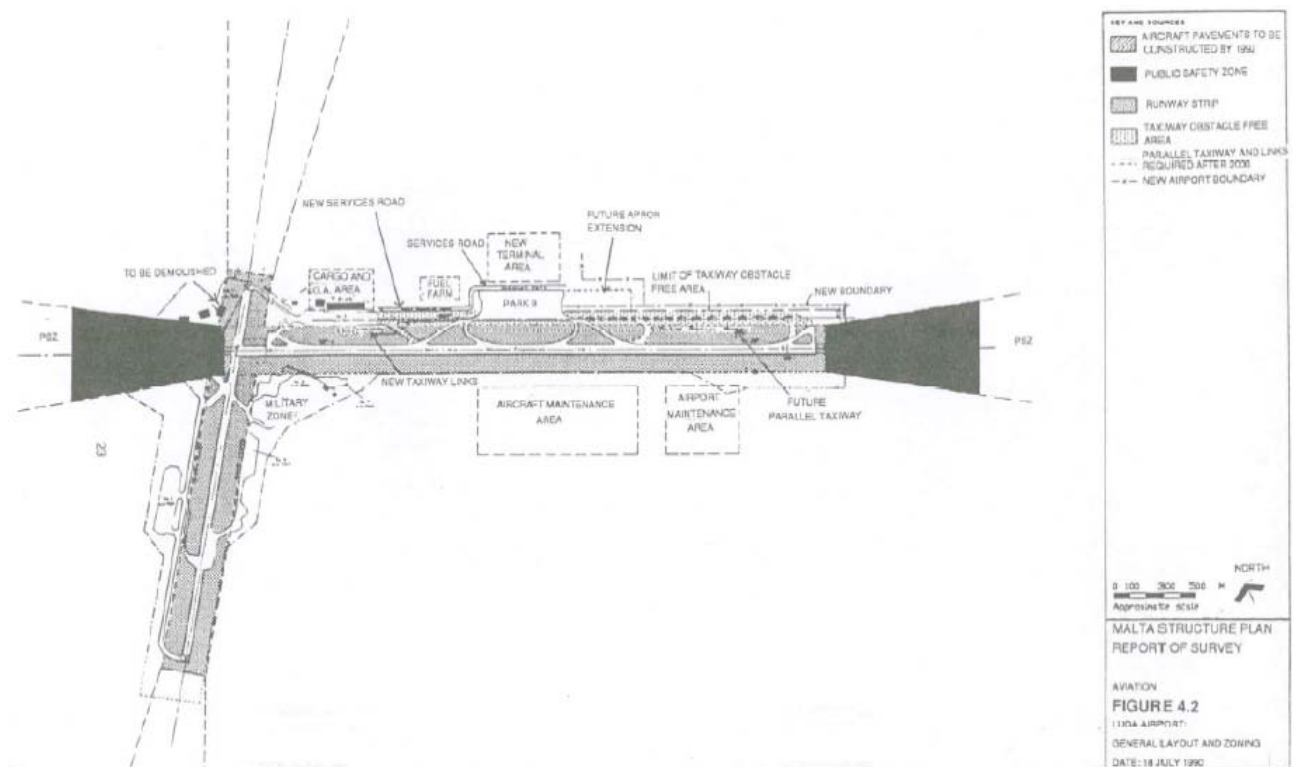


Figure 11: Structure Plan 1990. Future parallel taxiway included.

Public Safety Zones can also be seen in this map, lying within the shadow mapped by the approach surface, although only for the main runway.

The proposal for a South Malta Local Plan, still under development, also considered the airport and this particular development. The next figure shows the overall strategy map of this local plan, where the airport is considered as an important value for the region.

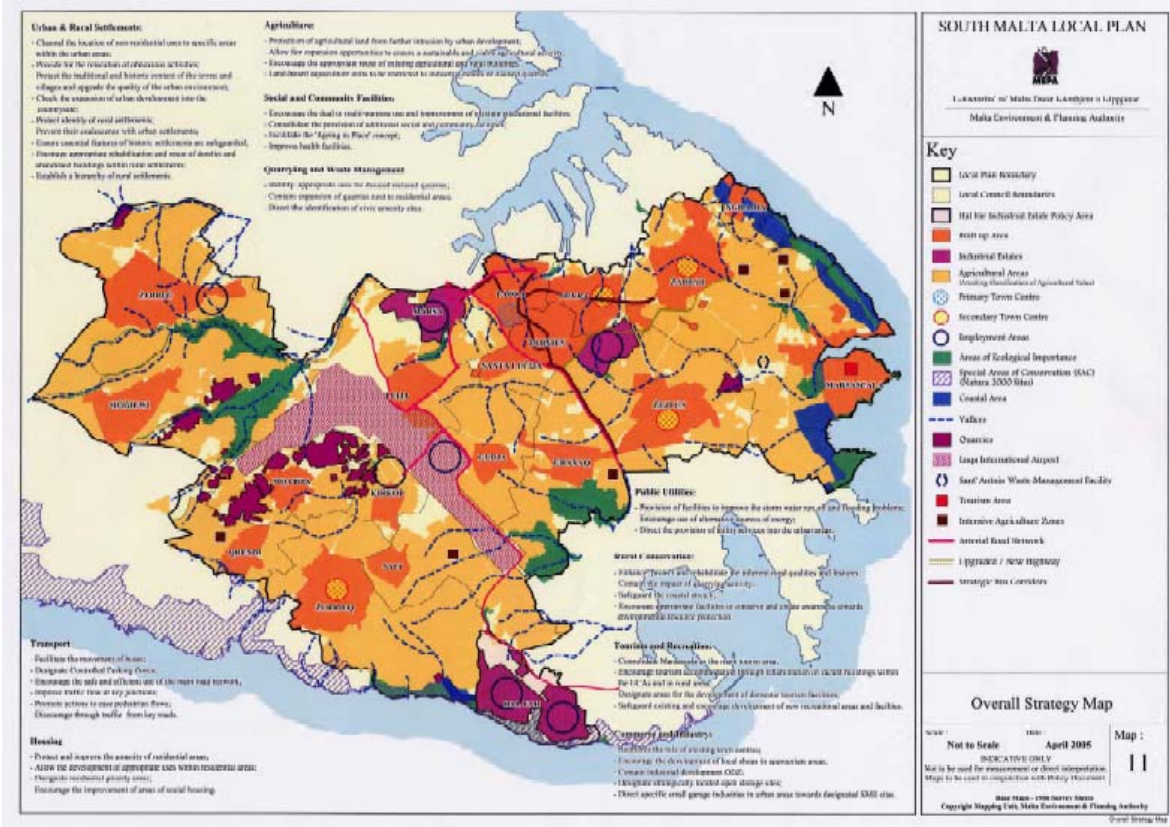


Figure 12. South Malta Local Plan

The draft local plan includes an Inter-Area policy referred to the construction of the taxiway at the airport:

“SMIA 07 Area Reserved For Airport Taxiway Route

MEPA safeguards land, as indicated in the Luqa Airport Environs Policy Map LU 4, for the future provision of a taxiway, as required by the Malta International Airport. However, MEPA will expect any future application for a taxiway to be supported by relevant studies (including an analysis of options for its siting, development feasibility and an EIA of the proposal) and proposals for amelioration of any adverse effects emanating from its provision.

There is a presumption that no form of development will be permitted in the areas indicated, that will prejudice the planning and development of the taxiway.

12.2.22 The Malta International Airport has indicated that the airport cannot function properly without a proper taxiway, particularly during peak periods when because of the lack of this taxiway delays a very frequent. The lack of the taxiway requires that aircrafts drive along the runway prior to taking-off thus no aircraft can land during this time since the runway is occupied. The same difficulty arises when aircraft land. The provision of a taxiway will increase the capacity of the runway to accommodate additional aircraft movements. Two potential areas have been indicated following discussions with MIA and these areas are being reserved. However, any future proposals for a taxiway will require carrying out the necessary studies, including a cost/benefit analysis, to identify the various options possible and an assessment of these options to determine the best option both from a functional and operational aspect as well as from an environmental and planning perspective”

The reserved areas are shown in the following Luqa Airport Environs Policy Maps LU 3&4, included in the plan.

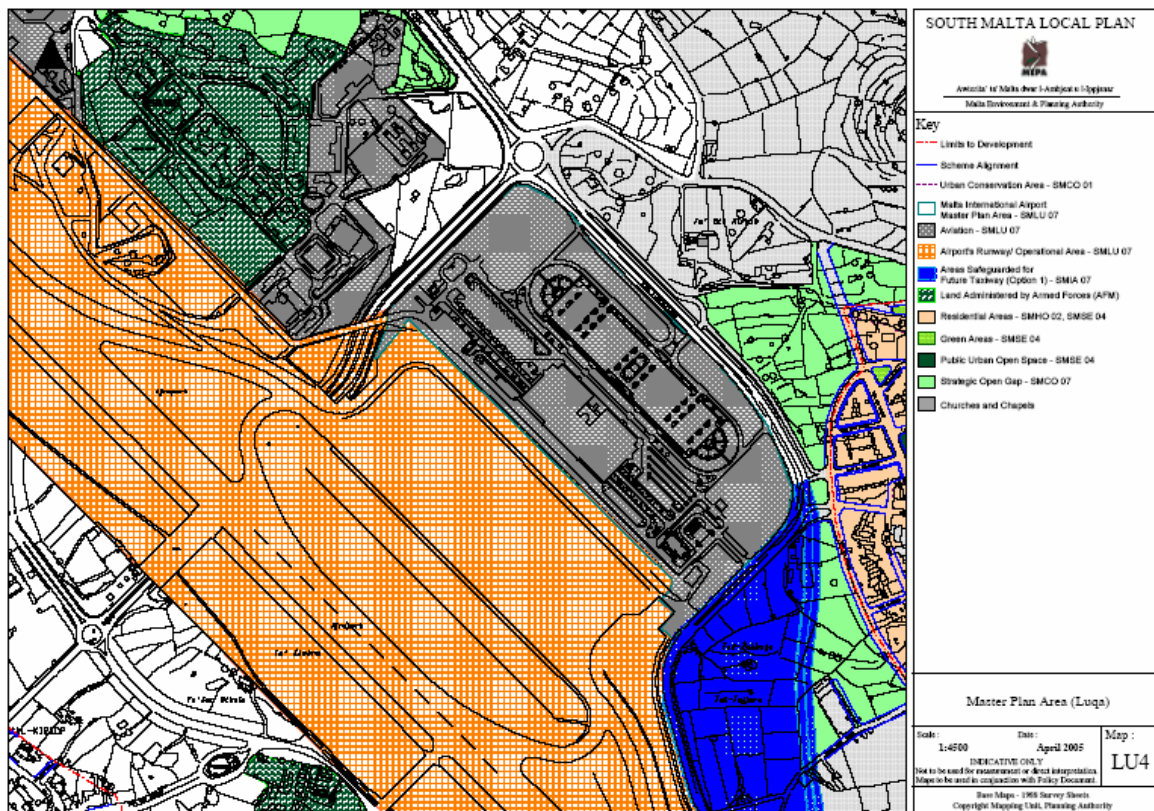


Figure 13. South Malta Local Plan. Reserved areas for future taxiway.

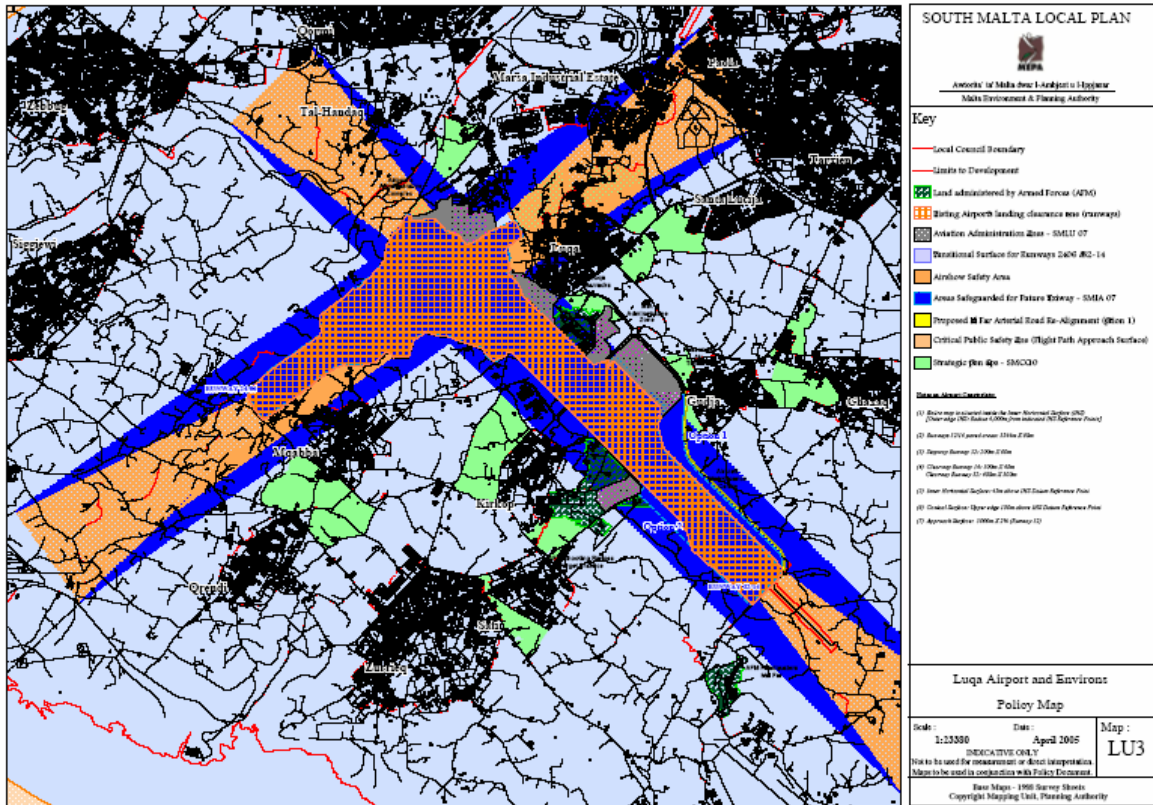


Figure 14. South Malta Local Plan. Reserved areas for future taxiway (2 options)

COUNTRY CONTACTS

- **DCA – Department of Civil Aviation**

Joseph Sultana, Director General

Anthony Gatt, Director of Safety Regulation and Air Transport

- **MIA - Malta International Airport plc**

Martin Dalmas, Technical Services (Airfield) Manager

- **MEPA – Malta Environment and Planning Authority**

Robert M. Callea, Planning Officer – Transport Planning Unit

Suzanne Gauci, Directorate of Environment

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁰)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁰ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Kamra tar-Rappreżentanti</i>	House of Representatives
---------------------------------	--------------------------

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- Malta International Airport: www.maltairport.com
- European Directives
 - Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
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<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML>
 - Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise
http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Maltese legislation:
 - Constitution
 - Civil Aviation Act
 - Civil Aviation (Security) Act
 - Airports and Civil Aviation (Security) Act

- Air Navigation Order
- Development Planning Act
- Environment Protection Act
- Clean Air Act



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

NETHERLANDS



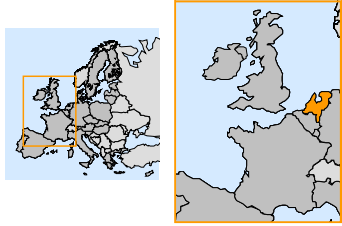
This study was produced by the Irish Aviation Authority, INECO and Aviasolutions for the Directorate-General for Energy and Transport of the European Commission and represents these organisations' views on Land-use planning and management. These views have not been adopted or in any way approved by the Commission and should not be relied upon as a statement of the Commission's or the Directorate-General's views.

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NETHERLANDS		Location Map												
Population	16.4 mill. (484 inhabitants per sq. Km)													
Airports network There are a big international airport -Amsterdam Schiphol with more than 49 mill. pax.- and several smaller regional airports. Schiphol and some of the regional airports are managed by Schiphol Group, which is owned by the State and the cities of Amsterdam and Rotterdam.														
Spatial planning system The spatial planning system involves all levels of government, aiming at consensus building. <ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National level:</td> <td>Ministry of Housing, Spatial Planning and the Environment – National Spatial Planning Commission</td> </tr> <tr> <td style="padding-left: 20px;">Regional level:</td> <td>Provinces – Provincial Spatial Planning Commission</td> </tr> <tr> <td style="padding-left: 20px;">Local level:</td> <td>Municipalities</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>Key planning decisions (<i>PKBs</i>) – National Spatial Strategy – Regional plans</td> </tr> <tr> <td style="padding-left: 20px;">Framework plans</td> <td>Structure plans</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans</td> <td>Local land use plans</td> </tr> </table> • Process: Higher level plans should not be considered as an imposition but rather as the result of a search for common grounds for agreement. In the Dutch system it can be said that what matters is not the form or contents of the planning instruments, but the process through which they are made and adopted. The goal is to promote as much consensus as possible. 			National level:	Ministry of Housing, Spatial Planning and the Environment – National Spatial Planning Commission	Regional level:	Provinces – Provincial Spatial Planning Commission	Local level:	Municipalities	Strategic plans	Key planning decisions (<i>PKBs</i>) – National Spatial Strategy – Regional plans	Framework plans	Structure plans	Regulatory plans	Local land use plans
National level:	Ministry of Housing, Spatial Planning and the Environment – National Spatial Planning Commission													
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Local level:	Municipalities													
Strategic plans	Key planning decisions (<i>PKBs</i>) – National Spatial Strategy – Regional plans													
Framework plans	Structure plans													
Regulatory plans	Local land use plans													
Regulation and permits A building permit granted by the municipality is required for every construction, even though it is considered of national importance														
Airport planning <ul style="list-style-type: none"> • Policy and planning: No statutory airport master plans; only internal technical documents prepared by the airport operators. In the case of Schiphol, planning has been done by means of a modification to the Aviation Act and two implementing Decrees. This procedure may be used again in the future for other airports. • Spatial impact: Safeguard maps, noise contours and risk prevention areas are included in one of the two implementing decrees for Schiphol, defining land use restrictions to be integrated into general spatial plans. • Construction: General building permit required from the municipality. • Operation: Airport license according to the Aviation Act. Airport certification. 														
Airport noise and air quality <ul style="list-style-type: none"> • Noise: Very strict maximum noise levels defined by legislation. Land use restrictions around Schiphol are defined by the implementing Decrees, although they do not give right to compensation. However, the Government has implemented an insulation programme. • Air quality: Air pollution monitoring around airports. 														

1. SUMMARY

SPATIAL PLANNING SYSTEM

National spatial policy can be adopted through a comprehensive document, the “National Spatial Strategy” (*Nota Ruimte*), or “key planning decisions” (*planologische kernbeslissing* (PKB)), addressing specific topics with spatial relevance. Schiphol airport, for example, has been considered in the National Spatial Strategy in broad terms, but has been regulated in detail with an amendment to the Aviation Act which was adopted following the specific procedures required for PKBs. Spatial policy may also be included within sector policy documents such as the “Mobility Policy Document” (*Nota Mobiliteit*) which not only sets out the policy on traffic and transport, but also develops in greater detail the National Spatial Strategy (*Nota Ruimte*). Key planning decisions are binding on all levels of government.

“Regional Plans” (*Streekplan*), adopted by the Provinces, include not only the airport perimeter, but also land which may be used for future expansion and areas subject to land use restrictions for security or environmental purposes.

Municipal “structure plans” (*Structuurplan*) do not regulate land uses in detail, but formulate strategies for future development. Detailed regulations are set out in the “local land use plans” (*bestemmingsplannen*), prepared for parts of the municipality outside the built-up area or where urban renewal is to take place.

In the case of airports these plans include a detailed regulation of land uses inside the airport grounds and reproduce in detail all land use and construction restrictions established for security or environmental purposes in the surrounding areas. Nevertheless, the plan in itself should not be considered as an “airport plan”, but rather a confirmation of what has already been decided in other documents with respect to the development of the airport.

REGULATIONS AND PERMITS

Construction permits

All building or construction activities are required to obtain a building permit issued by the municipal government.

There are no exemptions or general exceptions for public projects like airports, but Central and Provincial Governments can direct municipalities to revise local plans or grant exemptions when required in order to allow the implementation of a project of national or provincial interest. National projects approved following

the KPB procedure can not be refused the building permit, since the decision is binding on all Administrations.

Environmental permits

Environmental Impact Assessment has a long tradition in the Netherlands, including the evaluation of plans and programmes, although not always strictly in line with EU legislation. The legislation regulating Schiphol airport and the surrounding area was subject to formal EIA procedures.

All activities which may generate pollution of any sort must obtain an “Integral Environmental Permit” (*Geïntegreerde milieuvergunning*). These permits are issued by municipalities or in more important cases, like Schiphol airport, by the provinces.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

Both the “National Spatial Strategy” and the “Mobility Policy Document”, dealt with transportation needs and airport policy in specific chapters, defining what are known as the “mainports” (Schiphol Airport and the Port of Rotterdam) which play a central role in the economic development of the country. The “*Nota Mobiliteit*” devoted an entire chapter to aviation analyzing the situation and setting out the national policy on the subject, oriented towards the consolidation of Schiphol while maintaining compatibility with safety and the environment, and fostering the development of regional airports in order to promote accessibility and growth in the regions.

- Airport

There are no statutory airport plans, operators prepare their own internal documents as a basis for future proposals and discussions. Schiphol was regulated in detail by means of Decrees implementing the Aviation Act

Spatial impact

- Implementation of ICAO Annex 14 requirements

The Airport Zoning Decree Schiphol (LIB) regulates all building and land use restrictions arising from the implementation of Annex 14. The Decree is accompanied by a set of maps in which the construction limitations derived from the obstacle limitation surfaces are shown in detail. Building limitations are also applied in order to protect the operation of the ILS system and there are land

use restrictions aimed at preventing the location of activities that may attract birds and generate a bird-strike hazard.

These maps must be reproduced in spatial plans and are binding on planning authorities.

- Noise Impact

Noise impact is also contemplated in the LIB Decree and the corresponding maps. Provincial Structure Plans and Local Land Use Plans reproduce the contours of the areas where building restrictions apply due to noise. The area where no new housing is allowed is now being revised.

In addition to restrictions for future land uses, the implementation of noise protection areas has required the demolition of some buildings.

- Risk prevention

Risk prevention areas are delimited by establishing the contours within which the population would be subject to certain risk levels. The Airport Zoning Decree (LIB) also provides the criteria and delimits the areas where construction can not take place or land uses are regulated on account of risk. In some areas the limitations go as far as to require the demolition of existing buildings.

Individual Risk contours have been estimated for 10-5 and 10-6 probabilities. Group risk has also been estimated and spatial plans must take it into account in order to avoid large concentrations of people.

Schiphol also has a ceiling (total risk weight) on the maximum number of dwellings that may be subject to a risk level of 10-6.

Third-party risk contours are integrated into spatial planning.

- Land reserve for future construction

Legislation specific to Schiphol included some land for future expansion. Spatial plans have already designated some areas for possible airport development.

Construction

Construction within the airport requires a building permit issued by the Municipality, but infrastructure development in Schiphol is regulated specifically by the Aviation Act.

In Schiphol, some environmental permits, i.e. noise, are included in the Government decision to build the airport, and embodied in the result of the EIA process. Other permits, i.e. regarding water and waste, are required under the same conditions as any other economic activity.

Operation

Airports must be licensed by the aviation authority. Dutch law also requires certification according to ICAO.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise is specifically regulated in the Aviation Act and the implementation Decrees which set out the requirements for Schiphol Airport. The system in place for this airport combines noise abatement procedures and preferential runways, routes, operational restrictions and noise limits, a “Total Volume of Noise Load” for the entire airport, and individual limits for 35 points considered over a 24-hour period and 25 points for the night-time period (23:00-07:00h).

An extensive home insulation programme has been in place since 1984, financed by a noise surcharge levied by the airport.

Air quality

In Schiphol, the Aviation Act sets emission limit values for five different substances (CO, NO_x, VOC, SO₂ and PM₁₀) per weighted aircraft movement. These limits are not dependent on the number of movements but rather on the composition of the fleet. If emissions of one or more substances are calculated to exceed the legal limit, then the airport can be constrained to remain below an absolute limit based on the total emissions allowed in the previous year.

2. CONTEXT

Netherlands is a kingdom in northwest Europe on the North Sea. It is mostly flat and low-lying, with about 40 per cent of the land below sea level, most of it on polders protected by dykes.

Netherlands declared its independence in 1581 as the United Provinces; it became a major maritime and commercial power in the 17th century, gaining many overseas possessions. The kingdom of the Netherlands, proclaimed at the Congress of Vienna (1814–1815), included Belgium until 1830. The country was a founding member of NATO and the EC (now the EU), and participated in the introduction of the Economic and Monetary Union (EMU) in 1999.

Netherlands is divided into 12 provinces (*provincies*, singular - *provincie*); Drenthe, Flevoland, Friesland, Gelderland, Groningen, Limburg, Noord-Brabant, Noord-Holland, Overijssel, Utrecht, Zeeland, and Zuid-Holland.



Figure 1. Map of Netherlands

Netherlands's GDP per capita is 125% of the European Union average (22,400¹). Netherlands joined the Euro zone since its inception on 1 January 1999 and the Euro became the sole currency on 1 January 2002.

¹ GDP per capita in PPS (Purchasing Power Standards) at current market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	16,258,000
Latitude / Longitude	52°30' N, 5°45' E
Land area	33,883 sq Km
Coastline	451 Km
Capital City	Amsterdam The Hague is the seat of government
GDP per capita (PPS at market prices)	27,900
GDP real growth rate	1.7 %
Inflation rate	1.4 %
Unemployment rate	4.6 %

Table 1. Netherlands: main facts and figures (2004)²

2.1. Population and statistics

Currently, the Dutch population exceeds the 16 million threshold, with the highest population density of the European Union: 484 inhabitants per sq km.

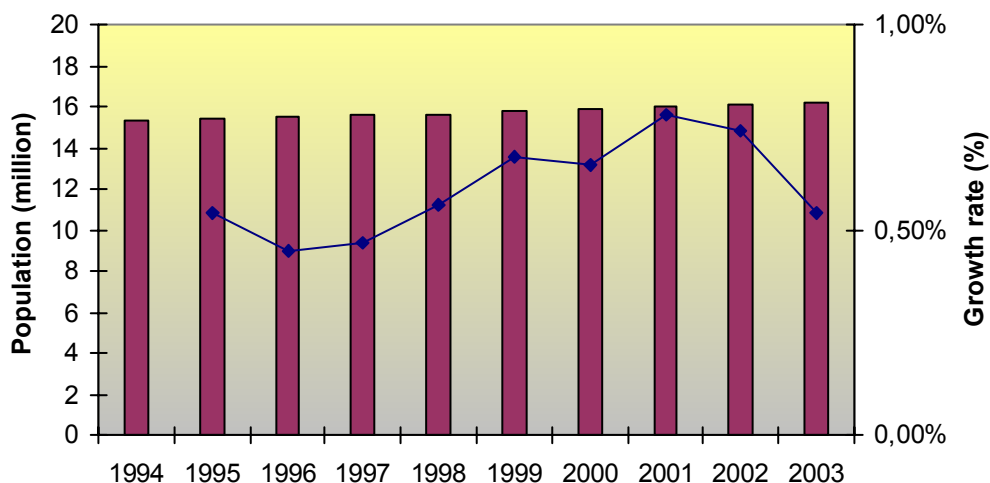


Figure 2. Population growth

² Source: EUROSTAT

During the last 10 years the population trend in Netherlands has increased slightly, with a growth rate of less than 1%.

The median age in the Netherlands is 39.04, with a birthrate of 11.14 births/1,000 population (2004 est).

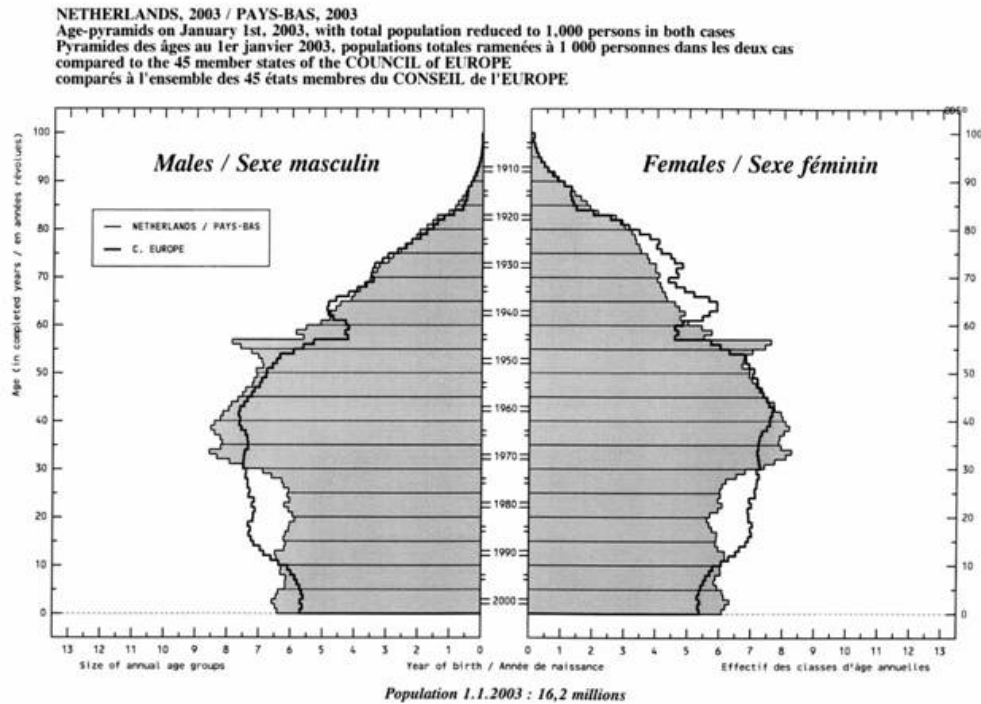
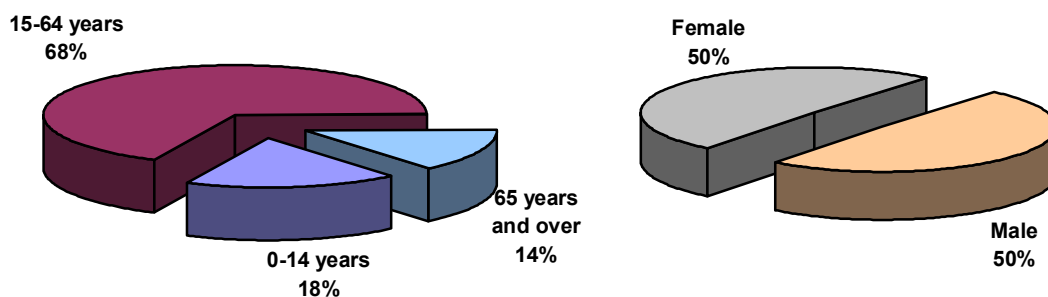


Figure 3. Age-pyramids (1.1.2003)³

The figure above shows that Dutch birthrate is higher than the European Union average and the age structure, with the bulk of the population between the age of 15 and 64 (68%).



Figures 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

The Netherlands is a constitutional monarchy. Executive power rests formally with the crown and in practice with the premier and the cabinet. Legislative power is vested in the bicameral *Staten-Generaal*. The deliberative upper, or first, chamber is elected by the 12 provincial estates, and the more powerful lower, or second, chamber is chosen by direct universal suffrage.

The Netherlands is divided into 12 administrative regions called provinces, which are, in turn, divided into municipalities (*gemeenten*), 467 altogether.

A Dutch province represents the administrative layer in between the national government and the local municipalities, having the responsibility for matters of subnational or regional importance. The government of each province consists of three major institutions: the *Provinciale Staten* which is the provincial parliament elected every four years, and whose members elect the *Gedeputeerde Staten*, a college responsible for most executive tasks, which is presided by the *Commissaris van de Koningin* or royal commissioner, appointed by the Crown.

2.3. Main airports

In the Netherlands, there is a major international airport, Amsterdam Airport-Schiphol, and several regional airports.

Schiphol airport is managed by the Schiphol Group. This group is an independent company, both financially and commercially, and has been an airport operator since 1958. The State of the Netherlands, the City of Amsterdam and the City of Rotterdam have shareholdings in the Schiphol Group.

Schiphol Group either owns or has a shareholding in several regional airports such as Rotterdam (100% - to specialize in business passengers), Lelystad (100% - very small airfield) and Eindhoven (51% - to focus on low cost market). The other important regional airport, Maastricht, is managed by Omniport (70%), a private UK company.



Figure 7. Dutch airport network

The following table shows the commercial passenger traffic and cargo of the 4 main Dutch airports during 2004:

Airport	Passengers	Cargo (Tons)
Amsterdam Schiphol	42,541,000	146,720
Rotterdam	1,197,000	-
Eindhoven	697,000	-
Maastricht Aachen	272,000	44,200
Total	44,707,000	

Table 2. Main Dutch airport data

3. SPATIAL PLANNING SYSTEM

The spatial planning system in the Netherlands stems from a long tradition starting in 1901 with the Housing Act (*Woningwet*). The current law is the “Spatial Planning Act” of 1965, (*Wet op de ruimtelijke ordening (WRO)*)⁴ which is still in force after 40 years, albeit with numerous changes.

The system is highly integrated and involves all levels of government, operating in a way that is heavily oriented towards consensus building. National planning provides the general framework, which is then developed in provincial plans and further detailed in municipal land use plans. The relationship among these types of instruments is hierarchical, but the process by which they are adopted seeks to elicit as much participation as possible, in such manner that higher level plans should not be considered as an imposition but rather as the result of a search for common grounds for agreement.

3.1. Institutions

3.1.1. National

Spatial planning is mainly the responsibility of the “Ministry for Housing, Spatial Planning and the Environment” (*Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (VROM)*), which is in charge of drafting the main spatial planning instruments at this level. Other Ministries also participate in the definition of national spatial policies and the main documents are approved by the Government in a plenary session of the Council of Ministers and adopted by Parliament.

The Government is assisted by the “National Spatial Planning Commission” (*Rijksplanologische Commissie*), established under article 51 of the Spatial Planning Act for the purpose of consultation in this field. The Commission is made up of high-ranking representatives from the various ministries and also acts as a coordinating venue for the preparation of government decisions.

An example of how different Ministries can become involved in the definition of national spatial planning policies is the case of Schiphol airport. The “Ministry of Transport, Public Works and Water Management” (*Ministerie van Verkeer en Waterstaat*) assumed an active role in defining the spatial model as a result of the airport development in which the protection of the population area in terms of noise, risk and air pollution was balanced with the need to allow Schiphol to grow in order to maintain its leading position.

⁴ A copy of the Spatial Planning Act as of 1999, can be downloaded at: <http://www2.vrom.nl/docs/internationaal/SpatialPlanningAct.pdf>.

3.1.2. Regional

The Netherlands has often been defined as a “decentralized unitary state” divided into 12 “Provinces” (*Provincies*) which have limited competences in general but important powers in the field of spatial planning. As a rule, Provinces enjoy a considerable degree of autonomy in the pursuit of the provincial interest as long as they do not go against national policy.

With respect to spatial planning, Provinces adopt their own instruments and are responsible for supervising the activities of municipalities in order to insure that national interests are taken into consideration.

Provincial governments are also assisted by a advisory body, the “Provincial Spatial Planning Commission” (*Provinciale Planologische Commissie*) which acts in a consultative capacity and also plays a coordinating role both horizontally, i.e. among ministries and other national bodies, and vertically, i.e. between central and local governments.

3.1.3. Local and area wide

There are no metropolitan areas in the Netherlands. Regional-cities as a new level of government were introduced in the 1990s, but did not find acceptance among the citizens and were abolished in 1999. In several areas, however, regional structures were maintained on a voluntary basis. *Regionaal Orgaan Amsterdam* (ROA), *Stadsregio Rotterdam* (SRR), *Stadsgewest Haaglanden*, *Bestuur Regio Utrecht* (BRU), *Knooppunt Arnhem-Nijmegen* (KAN), *Stadsregio Eindhoven* (SRE) and *Regio Twente* are organized as regional associations of cities and cooperate in some fields, particularly in urban transport and in the preparation of strategic spatial plans (*Regionale Structuurplannen*). They have, nevertheless, no statutory powers in the field of spatial planning.

Municipalities in the Netherlands enjoy a considerable degree of autonomy and have full powers in the field of spatial planning, subject only to the law and to the provisions of national or provincial plans and policies. Municipalities are also responsible for issuing building permits and enforcing construction and environmental legislation.

3.2. Instruments

3.2.1. Strategic plans or policy documents

a) National

National spatial policies can be adopted by central government through a variety of instruments known as “key planning decisions” (*planologische kernbeslissing* (PKB)), subject to specific procedures which include public participation and parliamentary debate. These decisions may take the form of

national policy documents, strategy formulations or structural plans, as well as individual projects of national interest. They can cover the entire country or be addressed to a specific portion or topic.

In the field of airports, a good example is the regulation of the future development of Schiphol airport and its spatial impact. This was done by means of an amendment to the Aviation Act which was processed as a key planning decision and subsequently implemented by two separate Decrees, as described below in Chapter 5.

The broadest spatial planning document at present is the “National Spatial Strategy” (*Nota Ruimte*), which updates the “Fifth National Policy Document on Spatial Planning” (*Vijfde Nota over de Ruimtelijke Ordening*), which was prepared by the previous government but not formally adopted. The Strategy also integrates the Second National Structure Plan for Green Areas (*Tweede Structuurschema Groene Ruimte (SGR2)*), which had also been prepared but not adopted under the previous government and the Mobility Policy Document (*Nota Mobiliteit*). The National Spatial Strategy has been submitted to Parliament and is pending final approval.

The document sets out very general goals and guiding principles for spatial policy until 2020. It emphasizes some procedural changes to be introduced in order to reduce the role of central government and increase the capabilities of local governments.

In relation to airports, it is worthy of note that the National Spatial Strategy places great importance on the role of such infrastructures under paragraph 5 “*Concentration of urbanization and infrastructure*” in a section dedicated to “*main ports, brainports and greenports*”. The main ports designated as such in the Strategy and in all subsequent spatial planning documents are Schiphol Airport and the Seaport of Rotterdam. The contents of this section of the summary provides a very clear statement on the government’s policy regarding the airport:

“The national government maintains that Schiphol should be able to develop further at its current location until 2030. Businesses and offices may be located in the immediate vicinity of Schiphol provided they are airport-related, determined on the basis of the importance of accessibility, safety and the future demands that Schiphol itself will place on the available space. The government does not consider it desirable for new urban areas to be built under frequently used flight paths. In concrete terms, this means that no new urban areas can be developed within and beside the noise contours associated with the five runway system, with the exception of the existing locations reserved for developments designated in the context of the Fourth National Spatial Planning Policy Document. In order to leave sufficient space for the development of Schiphol both now and in the

future, no new housing locations may be developed under the flight paths over Hoofddorp West, Noordwijkerhout and the Legmeerpolder land reclamation area.”⁵

Further below in the text it states, that regional airports will be regulated on the basis of the Schiphol model in order to establish basic standards of quality for public safety and security.

Other policy documents treated as “key planning decisions” deal with more specific topics such as, for example, the “Mobility Policy Document” (*Nota Mobiliteit*) which not only sets out the policy on traffic and transport, but also develops in greater detail the National Spatial Strategy (*Nota Ruimte*).

The key planning decision procedure has also been followed in the case of some structural plans for specific areas, i.e. the Wadden Sea, or large infrastructural projects, like the high-speed railway.

National policy documents are largely indicative and have no binding power, however, some parts may be specifically designated as binding on all other administrations if they contain “key decisions” that National government considers must be necessarily implemented.

b) Provincial

Provinces prepare and adopt their own “Regional Plans” (*Streekplan*) to cover all or part of their territory. These plans are essentially strategic in nature and do not stipulate detailed land uses, as they are usually drawn at a scale of 1:50,000. They determine general land uses, location of infrastructures and large projects. Although regional plans are adopted by the Provincial Council, they must be notified to the Ministry for Housing, Spatial Planning and the Environment.

Regional plans are not directly binding on third parties, but municipalities have to comply with the provisions and the Province itself is legally bound by the plan. In order to provide some flexibility, the plan can specify that some parts may be modified without needing to undergo the whole plan revision procedure, or it may leave some areas open to future decisions. Conversely, the regional plan can include some elements which are designated as “essential” and can not be modified without a formal revision of the entire plan. As in the case of national spatial planning instruments, regional plans can determine that certain specific decisions are obligatory for municipal governments.

⁵ A copy of the summary of the National Spatial Strategy in English can be downloaded at: <http://www2.vrom.nl/docs/internationaal/engelsesamenvattingnr.pdf>.

The regional plan for the part of the Province of North-Holland where Schiphol airport is located includes a delimitation of the area currently designated as airport grounds and delimits some adjacent land for possible future airport expansion, but does not make a final decision as to the use of such area, nor does it include a detailed regulation of land uses within the airport area. The regional plan maps also reproduce the limits of the areas outside the airport that are subject to land use restrictions for security and environmental purposes.

3.2.2. *Local (framework) plans*

Municipalities can prepare spatial plans of a strategic nature, known as “structure plans” (*Structuurplan*) to cover all or part of their territory. These plans can also be adopted for areas covering more than one municipality. Structure plans are not binding, although they do impose some legal duties on the municipality.

These plans are drafted and adopted by the municipalities for a period of 10 years. The plans are usually drawn at a scale of 1:25,000 and do not contain detailed regulation of land uses, but rather a view of the future development of the municipality or a specific area, as an orientation prior to the adoption of the detailed land use plan. They are very similar in idea to regional plans and some municipalities have felt that they are not really needed.

3.2.3. *Regulatory (detailed) plans*

According to article 10 of the Spatial Planning Act, municipalities must prepare “local land use plans” (*bestemmingsplannen*) for the territory outside their built-up areas. This can be done with a single plan or with several plans covering parts of the municipality. Municipalities are not obliged to prepare local land use plans for built-up areas, but many choose to do so for all areas that must undergo urban renewal, for new subdivisions, and even for a single building plot.

Local land use plans are prepared at a minimum scale of 1:10,000 and are rather detailed since they must regulate land use with enough precision, so that each land owner can know exactly what may or may not be permitted in relation to a particular parcel of land. In some cases the plan shall only determine the use or uses allowed, but it may also contain a detailed regulation of building requirements, such as densities, height, etc.

Local land use plans may also designate areas which are only regulated in very general terms and require further decisions, or areas where it is possible to change the provisions of the plan under some circumstances, subject to the limitations specified in the plan.

These plans are drafted by the Municipality and adopted by the Municipal council, but require the approval of the Provincial Executive. Once approved,

local land use plans are binding on all parties, both public and private, and constitute the basis for issuing building permits.

In the case of airports these plans include a detailed regulation of land uses inside the airport grounds and reproduce in detail all land use and construction restrictions established for security or environmental purposes in the surrounding areas. The plan in itself, nevertheless, can not be considered an “airport plan”, but rather a concretization of what has already been determined in other documents with respect to the development of the airport.

3.3. Process

One could say that spatial planning in the Netherlands is “*avant tout*” a set of procedural rules designed to facilitate vertical and horizontal coordination among levels of government and ample citizen participation. The Spatial Planning Act dedicates far more space to regulating procedural matters than to establishing what the substantive content of each type of plan has to include.

In the Dutch system, it can be said that what matters is not the form or content of the planning instruments, but the process through which they are made and adopted. The goal is to promote as much consensus as possible, even if that means that some policy documents and plans may take many years to be adopted. The philosophy of what has come to be known as the “Polder Model” is that it is far better to spend time seeking an agreement before the plan is adopted than to waste time and effort in legal battles afterwards, and also that implementation is much easier when the debate has been thorough and has allowed all concerned parties to reach a consensus.

This system has the particularity that central government often begins implementing some of the policies included in the national spatial planning policy before it is formally adopted. In a process that often takes a few years there seems to be no objection to this practice once the first document has been made public, but well before Parliament has approved its final adoption.

3.3.1. *Inter-government consultation*

- Horizontal: within the same level of government:

Key planning decisions are discussed in the National Spatial Planning Commission and must be adopted by the Council of Ministers before they can be subject to public participation and sent to Parliament. All Ministries can participate in the process and many interdepartmental debates may take place before an agreement is reached and the policy document is made public.

Likewise, provincial and municipal planning instruments are debated within the respective administrations, and very often with adjoining provinces and municipalities. In all provinces, the Provincial Spatial Planning Commission

must be consulted in the preparation of the regional plan. In municipalities, the forum where all horizontal coordination takes place is usually the municipal executive (*College van Burgmeester en Wethouders*), although some municipalities also have consultative planning commissions.

- Vertical: between levels of government

Spatial planning instruments are also required to undergo a process of vertical coordination in which all levels of government can participate. The Spatial Planning Act requires that these consultations take place, but does not specify how they should be conducted. Although the opinions of other administrations are not binding, the planning documents must always include a statement about the results of the consultation process.

3.3.2. *Policy Integration*

The coordination process that must take place at each level of government aims at achieving as much integration as possible among the different policies. The fact that both national and provincial governments can designate which projects are of supra-local interest and must be included in local plans enables vertical integration even though the consensus building model does not accomplish its objective.

With regard to airports, the fact that the development and spatial impact of Schiphol airport have been established as a key planning decision by national government implies that all spatial planning instruments must integrate the provisions of the Aviation Act and the implementation Decrees.

3.3.3. *Citizen participation*

Citizen participation takes place at all levels in relation to all spatial planning instruments. National key planning decisions must be submitted to the citizens before they can be adopted by the Government and sent to Parliament, and provincial and local planning instruments are dealt with in exactly the same way.

Anyone is entitled to participate in the process and to submit an objection in writing to any planning instrument. All plans must include a statement describing what has been the result of the public participation procedure. The law does not specify how the public participation process is to take place, but only sets out the minimum duration and requires that the documents be made available to the public.

In the case of local land use plans citizens can submit their objections both before the plan is adopted by the municipal council and prior to the final approval by the provincial administration.

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

All building or construction activities require a building permit which is issued by the municipal government. Building permits (*Bouwvergunning*) are required according to article 40 of the Housing Act (*Woningwet*), but other kinds of related permits may be necessary such as construction permits (*aanlegvergunning*) for activities that do not involve the erection of a building, demolition permits (*sloopvergunning*), or the permit to occupy a dwelling (*woonvergunning*). Some of these permits are required by the Spatial Planning Act (article 44) and not the Housing Act.

The municipal government is obligated to grant a building permit when it is in accordance with the local land use plan. In the absence of such plan, the proposal shall be considered in the light of the building ordinances that all municipalities must adopt and the provisions of the structural plan if the municipality has adopted one for the affected area.

The National Spatial Strategy has called for the planning and plan implementation procedures to be simplified with less rules and less complicated legislation. Drafts have been prepared for a revised Spatial Planning Act and an Interim Urban and Environmental Procedures Act which would give public – private partnerships a greater role in the development of large projects.

4.1.2. *Exceptions or exemptions*

There are only a few exceptions to the building or construction permit requirement, limited to cases of minor importance in which either no permit is necessary or prior notification to the municipality about the intended construction will suffice.

For activities which require a building or construction permit, it is possible to obtain a “derogation” in some cases. Article 15 of the Spatial Planning Act provides that local land use plans may determine the circumstances and areas where an exception may be granted, but the most important exceptions are those granted under article 19 of the same Act when the local land use plan is being revised. Such exceptions must be approved by the provincial administration.

There are no exemptions or general exceptions for public projects such as airports, but in 1994 the so-called “NIMBY Act” amended the Spatial Planning Act to allow the Ministry for Housing, Spatial Planning and the Environment to direct a municipality to revise a local land-use plan in order to facilitate the

implementation of national policies. The same reform enables both the Ministry and the Provincial authorities to grant an exemption when the local plan prevents the execution of a project of national or provincial interest. Article 40.-1 of the Act provides that:

“The Provincial Executive may, in the interests of the realisation of a project, request the Mayor and Alderman to grant an exemption to the current local land use plan to the extent that it would advance supra-municipal interests, the realisation of that project in the short-term is necessary and in the opinion of the Provincial Executive or of the Minister the decision-making process regarding the realisation of the project has reached an impasse.”

This provision was introduced in order to overcome the opposition, the “NIMBY (Not In My Backyard) syndrome”, from municipalities which objected on the basis of local reasons to some projects which were considered of national importance. Once these exemptions are granted, municipalities are obligated to revise their local land use plan in order to make them compatible with the project.

In a similar vein, article 39 of the Spatial Planning Act determines that specific projects of national interest that have been approved following the “key planning decision” (PKB) procedure are obligatory for all Administrations, which can not refuse to grant the construction permit.

4.1.3. Institutions involved: inter-government relations

Construction permits are issued by municipal governments regardless of whether the project is public or private.

4.1.4. Relationship with planning

Building and construction permits can only be granted when they are in accordance with the plan, with the exception of the limited number of cases of derogations and exemptions mentioned above. Since the local land use plan is seen as a source of legal certainty, the permit can not be refused if it is in accordance with the plan.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Environmental Impact Assessment has been a feature of Dutch policy and practice for many years and is required, in line with the provisions of the EU Directives, not only for many projects but also for a number of plans, such as some spatial plans, the National Plan for Electricity Supply (*Structuurschema Elektriciteitsvoorziening*) or the National Waste Management Plan (*Landelijk Afvalbeheersplan*). Not all spatial plans, however, have been subject to this

requirement, and local land use plans have often not undergone the EIA procedure. As a rule, spatial plans have been required to undergo the EIA procedure when they include any activity or project which are among those subject to evaluation according to the law. This requirement only applies, nevertheless, to the first plan to include such project or activity. This means that if a large infrastructure project is provided for in a national plan or policy, it will be evaluated at this level, and it will be not necessary to evaluate provincial or local plans if they include the provisions of the national plan.

The “Fifth National Policy Document on Spatial Planning”, for example, was subject to Environmental Impact Assessment in relation to those parts which contemplated specific projects. The same can be said about the revision of the Aviation Act that established the policy and the specific rules for the development of Schiphol Airport, and the two Decrees which implement the Act. The fact that the regulation of Schiphol Airport, established in these Decrees, sets out air traffic patterns, noise levels, etc. in detail, implies that many changes require a revision of the legislation, something that may be considered as a factor of rigidity which could be revised in the future in order to allow some more flexibility.

Schiphol development has actually been the object of several environmental evaluation processes. Between 1992 and 1995 a strategic evaluation was conducted as a basis for the policy decision adopted in 1995 to enlarge the airport by constructing a fifth runway. A second strategic evaluation was launched in 1999 to determine the long-term future of the airport and to decide whether or not to build a new airport. Project EIAs have also taken place every time that new licensing was required because of changes in runway use.

Plan evaluation is performed in the same way as project evaluation, since the Environmental Management Act of 1987 (*Wet milieubeheer*), as amended, and the Environmental Impact Assessment Decree of 1994, as amended, do not differentiate between both types of evaluation. The 1987 Act required EIAs for a number of spatial and sectoral plans, in areas like power production, waste management, water supply, industrial areas or new residential areas.

The legislation required to transpose Directive 2001/42/EC⁶ (the “SEA” Directive), has been prepared and is pending approval. It follows the lines established by the Directive and modifies the evaluation system that was applied until now for plans in the Netherlands.

⁶ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

4.2.2. *Other environmental controls*

The main environmental permit, besides the EIA, is probably the “Integral Environmental Permit” (*Geïntegreerde milieuvergunning*), which the Environmental Management Act (*Wet milieubeheer*) established in order to replace with one single permit the authorizations that were previously required under the “Public Nuisance Act” (*Hinderwet*) and the legislation regulating waste, air pollution, noise, and chemical wastes. There are still some permits, like those required for water discharge, that have not been integrated and must be obtained separately.

4.2.3. *Institutions involved*

As a rule, environmental permits are issued by municipalities but there are cases when they are within the competence of the Province or even Central Government.

In the case of Schiphol Airport, for example, environmental permits are the responsibility of the provincial administration, since the impact of airport is considerable and affects more than one municipality.

4.2.4. *Integration with other permits*

Most environmental permits have been integrated into one single permit, as mentioned above but they are separate from building or construction permits.

5. AIRPORT PLANNING AND CONSTRUCTION

The description that follows only applies to Schiphol airport. The situation of regional airports will change in the short term, as new legislation is being prepared for that purpose. The new system shall be closer to the one followed nowadays for Schiphol and shall grant more powers to the provincial administrations.

5.1. Policy and planning

Schiphol airport was regulated by means of a specific law, the “Act of 27 June 2002 amending the Aviation Act (*Wet luchtvaart*) concerning the institution and the use of the airport Schiphol” (*Wet van 27 juni 2002 tot wijziging van de Wet luchtvaart inzake de inrichting en het gebruik van de luchthaven Schiphol*), which came into force on 20 February 2003. The Schiphol Act (as it has come to be known) is Chapter 8 of the Aviation Act and is essentially a framework act which does not include a detailed regulation of the subject.

The Act was complemented by two Decrees adopted by the Council of Ministers which establish detailed regulation for the protection of the environment: the “Air Traffic Decree Schiphol” (*Luchthavenverkeerbesluit Schiphol (LVB)*) and the “Airport Zoning Decree Schiphol” (*Luchthavenindelingbesluit Schiphol (LIB)*), both these Decrees were amended in 2004. The first Decree, LVB, establishes the maximum limits for noise and air pollution, regulates third-party risk and provides detailed regulations for the operation of the runways and the use of airspace in and around Schiphol. The second Decree, LIB, regulates the use of land around the airport for environmental, safety and operational purposes. Both decrees are discussed below in this Chapter.

When the Act was passed by Parliament a motion was introduced⁷ which provided that the system established by the Act must be evaluated after a period of 3 years in order to find out how well it is operating in practice. The Dutch Government is currently working on this evaluation with the participation of several ministries, advisory and technical bodies and other administrations. The evaluation is expected to be ready by February 2006.

5.1.1. Institutions

Airport policy is proposed by the Ministry of Transport, Public Works and Water Management in coordination with the Ministry of Housing, Spatial Planning and the Environment and approved by the Council of Ministers before it is sent to Parliament for final approval. In the case of Schiphol, the framework law was adopted by Parliament and the implementation Decrees by the Government.

⁷ Known as the “Baarda motion” named after the member of Parliament who introduced it.

Any future modification of the airport area, or the environmental protection conditions, or the land use restrictions in the area around the airport which were detailed in the Decrees shall require a further Decree, involving all the members of the Cabinet of the Central Government. For major changes, the Aviation Act would have to be amended, which in turn would require a decision by Parliament.

5.1.2. Instruments

Airport policy is first broadly defined in the general policy documents approved by Government and established as “key planning decisions”. The National Spatial Strategy includes specific provisions concerning Schiphol airport, as mentioned above in 3.2.1, but this is not the only major policy formulation in which airports are mentioned. The Mobility Policy Document⁸ (*Nota Mobiliteit*) is closely linked to the Spatial Planning Policy Document (*Nota Ruimte*) and further develops some of the issues included in the latter. Chapter 4 of the Mobility Policy addresses aviation and airports, and paragraph 4.2 deals specifically with Schiphol and regional airports, expressing the determination to consolidate and improve Schiphol’s market share while maintaining the environmental balance and the intention to decentralize policy for regional and small airports:

“The state wants to decentralise policy for regional and small airports and place responsibility in the hands of the provinces, thus moving considerations regarding the benefits and costs of airports in the administrative layer in which the effects of the airports are actually felt. A change will be made to the Aviation Act (Wet Luchtvaart) to bring regulations for regional and small airports in line with the system used by the state for Schiphol.”

The policy document affirms the central government’s commitment in this field and provides details about those parts of the policy that are considered to be “key planning decisions” for the purposes of the Spatial Planning Act.

Further to these general policy statements, the Government promoted the amendment of the Aviation Act concerning Schiphol Airport by adopting the two implementation Decrees. It can be implied that in the case of Schiphol airport planning has been done by means of an Act of Parliament and two Decrees, and not through a “planning instrument”.

This does not mean that there are no airport planning documents of the “master plan” type, but they are technical instruments prepared by the airport company. The Schiphol Group is currently defining its strategic plan and airport development plan for the next two decades in close cooperation with KLM and Air Traffic Control the Netherlands (*Luchtverkeersleiding Nederland* (LVNL)).

⁸ Mobility Policy Document. English version, pages 17-18.

The plans for the future of the airport are being extensively discussed with the regional and local administrations as well as with the citizen organizations in the area, in order to define the grounds for a proposal to be considered by the Government.

Some of the proposals under consideration, such as the building of a new terminal, might be feasible without amending the Aviation Act or the implementation Decrees, but they must be incorporated into the regional structure plan and the local land use plan, since these spatial planning documents regulate the use of land within the boundaries of the airport.

5.1.3. *Process*

Airport policy and plans go through the consensus-building process that is applied to policy-making in general, and to spatial planning and environmental issues in particular.

Before any proposal can be put forward by the airport company, there will have to be very extensive discussions within what is usually known as “the aviation sector” which includes KLM, Air Traffic Control the Netherlands and other airport users. The issues shall also be discussed with the province of North Holland and with all the municipalities affected, and they shall also be the object of meetings with the representatives of citizen organizations, and especially with the organization that the Aviation Act set up for this purpose: CROS.

CROS stands for “Regional Consultative Committee for Schiphol Airport” (*Commissie Regionaal Overleg Luchthaven Schiphol*) and was created by the Schiphol Act. This consultative body, comprising representatives from the aviation sector, the province, municipalities and residents, acts as a coordination forum and gives opinions on matters regarding the structure and usage of the airport.

Before any changes can be integrated into the airport operation, it may be necessary to submit the project to the Environmental Impact Assessment procedure, and any amendments to the Aviation Act or the implementation Decrees would require not only an EIA but a decision by the Council of Ministers and, possibly, by Parliament. Depending on the nature of the amendment, the new decision may have to be adopted following the “key planning decision” procedure, which once again provides ample opportunity for citizen participation.

5.2. **Spatial impact**

5.2.1. *Implementation of ICAO Annex 14 requirements*

The Airport Zoning Decree Schiphol (LIB) regulates all building and land use restrictions arising from the implementation of Annex 14. The Decree is

accompanied by a set of maps in which the construction limitations derived from the obstacle limitation surfaces are depicted in detail. Building limitations are also applied in order to protect the operation of the ILS system and there are land use restrictions aimed at preventing the location of activities that may attract birds and generate a bird-strike hazard.

These maps must be reproduced in spatial plans, and this has been the case both with the Provincial Structure Plan and the Municipal land use plans. Implementation of building restrictions is essentially in the hands of the municipalities as part of the general development control system. The erection of structures that do not require a building permit such as cranes, for example, is regulated directly by the LIB Decree and enforced by the aviation authority.

In some cases it is possible to obtain an exemption from these restrictions if it can be proven that there is no risk to aviation operations. In order to obtain these exemptions the developer or the municipality have to apply to the Transport and Water Management Inspectorate (IVW), which has been designated as Civil Aviation Authority and is also responsible for issuing or rejecting such requests and enforcing the restrictions imposed by the LIB and LVB Decrees.

5.2.2. Noise Impact

Noise impact is also contemplated in the LIB Decree and its maps. Provincial Structure Plans and Local Land Use Plans reproduce the contours of the areas where building restrictions apply due to noise. The area officially affected by noise was initially delimited using the annual 35 Ke⁹ contour (equivalent approximately to 55.5 L_{den}) but the Dutch Parliament decided in July 2005 to enlarge it to include the 20Ke contour (approximately 46 L_{den})¹⁰. This decision has not yet been implemented since the practical implications are still being evaluated.

This policy is clearly defined in the National Spatial Strategy which states that *“no new urban areas can be developed within and beside the noise contours associated with the five runway system ...In order to leave sufficient space for the development of Schiphol both now and in the future, no new housing locations may be developed under the flight paths over Hoofddorp West, Noordwijkerhout and the Legmeerpolder land reclamation area”*.

⁹ The formerly used Ke (*Kosten eenheden*) indicator is still cited for comparative purposes, but the official indicators are now L_{den} and L_{night}.

¹⁰ Conversion according to Barbara Braasma “The value of aircraft noise nuisance using the well being evaluation method”. Presentation at the workshop *A billion euro question: “How much should we pay for noise control, and how much is it worth?”*. The Hague August 2001. Other authors make the conversion as 20 Ke = ~50L_{DEN} and 45 Ke = ~58 L_{DEN}.

Currently, no new housing is allowed within the 35 Ke zone, but it is still not clear how the new restrictions based on the 20 Ke contour will be implemented. Part of the problem stems from the fact that this may prevent the construction of some large new public housing projects included in an addendum to the Fourth National Spatial Policy Report.

The new airport configuration has also made it necessary to demolish 43 houses and 11 non-residential buildings. The cost of the demolition programme is to be borne by the airlines through a charge levied by the airport operator.

Land use restrictions as a result of noise are treated like all limitations arising from spatial planning and very seldom entitle property owners to obtain any compensation other than sound-proofing installation.

5.2.3. Risk prevention

The Netherlands is currently (2005) the only country in continental Europe where there is a legal obligation to take third-party risk into account in order to impose land use restrictions in the vicinity of airports.

The Airport Zoning Decree (LIB) also provides the criteria and delimits the areas where construction can not take place or land uses are regulated on account of risk. In some areas the limitations go as far as to require the demolition of existing buildings. Some 82 houses and 21 non-residential buildings are subject to demolition after the establishment of the new runway.

Risk prevention areas are delimited by establishing the contours within which the population would be subject to certain risk levels. Risk is calculated according to a set of formulae that takes into account the number of movements, the weight of the aircraft, and distance from the end of the runway. Two different types of risk are taken into consideration: individual risk and group risk.

Individual risk (IR) represents the probability that a person living in one place for one year may die victim of an air crash. The IR contour of 10^{-5} , representing a probability of 1 in a 100,000 per year, has been used to prohibit any new construction in the area and existing buildings must be demolished. In the IR contour 10^{-6} –a probability of 1 in 1,000,000 per year– existing buildings are allowed to remain, but no new houses, hospitals or schools are permitted.

Group risk is defined as the annual probability that a group of persons who permanently stay in one place may die as a result of airplane crash. Group risk is represented in diagrams which show the probability and the number of fatally injured persons. The LIB Decree does not include any limit for Group risk, but spatial policies aim at preventing large gatherings of people in one location.

Third-party risk contours are also included in the provincial Structure Plan and the local land use plans for the area. The resultant restrictions are treated in the same manner as all other land use regulations emanating from spatial plans.

The Schiphol Act established a limit on the number of dwellings that could be subject to a risk level of 10^{-6} . This limit was set at 774 homes, which represents a standstill situation with respect to 1990. The concept of “total risk weight” (TRG) introduced in relation to Schiphol, which places a ceiling on the total “amount” of risk that the aviation sector can generate, is unique among the few countries that have regulated third-party risk.

5.2.4. Land reserve for future construction

The abovementioned legislation on Schiphol airport included land to be used for future airport development, but the current plans of the Schiphol Group may call for more land. Some of it may come from land that has tentatively been designated for that purpose in the provincial Structure Plan, pending a future decision on the definitive land use. This “interim designation” has made it possible to preserve these areas from development that would prevent the airport from growing in that direction.

The land use restrictions deriving from this interim situation have again been treated as ordinary spatial plan regulation and do not give rise to compensation. Once the airport decides whether it needs the land, then it will become necessary to acquire it. The Airport Operator has already acquired adjoining land for future development.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: Construction within the airport requires a building permit issued by the Municipality. There is no special treatment for airports.
- b) Environmental permits (water, waste, air, etc.): Some environmental permits, i.e. noise, are included in the Government decision to build the airport, and embodied in the result of the EIA process. Some permits, i.e. regarding water and waste, are required under the same conditions as any other economic activity. In the case of Schiphol these permits are issued by the Province.
- c) Civil aviation: Airport buildings do not require an authorization from the CAA if they are built within the limits of the obstacle limitation surfaces and according to the airport manual.

The development of Schiphol airport is regulated by the Aviation Act (*Wet luchtvaart*), which sets out specific procedures for the construction of new infrastructure.

5.3.2. *Institutions and processes involved*

- a) Authorization: The decision to build the airport was taken by central Government and ratified by Parliament with ample participation from citizens and other administrative levels.

Building permits are issued by Municipalities and environmental permits are issued by local authorities or by the Province, in the case of Schiphol.

- b) Supervision: Compliance with building and environmental permits is supervised by the permit issuing authority.

Enforcement of the EIA terms and the requisites set out in the Schiphol Act and the two implementation Decrees lies mainly with the Transport and Water Management Inspectorate (IVW).

Supervision of activities covered by other environmental permits lies with the authority that issued them.

5.3.3. *Integration with planning and environmental controls*

Most environmental authorizations are unified by the “Integral Environmental Permit” which is normally issued by municipalities together with the building permit, although in the case of activities or projects with special relevance the permit is issued by the provincial authorities.

When both a building permit and an environmental permit are required, both permits must be issued concurrently.

5.4. **Airport operation**

5.4.1. *Operating permit*

Airports must be licensed according to article 33 of the Aviation Law.

5.4.2. *Airport certification*

Airport certification is a legal requirement, which is now being implemented in Dutch airports. Schiphol has already been certified and there is a programme to progressively certify other airports in the country.

Certification is the responsibility of the Transport and Water Management Inspectorate (IVW) and is restricted to aviation issues in accordance with the requirements established by ICAO.

6. AIRPORT NOISE AND AIR QUALITY

NOISE

6.1. Legislation

Noise pollution is regulated in the Netherlands by the “Noise Nuisance Act” of 1979 (*Wet Geluidhinder*), which was amended on June 30, 2004 in order to adapt the national legislation to Directive 2002/49/EC¹¹ (the “noise” Directive)¹². The 2004 Act also modified, among others, the Aviation Act (*Wet luchtvaart*) in order to regulate noise mapping and action plans consonant with the EU legislation.

Noise policy in the Netherlands is rather strict and has set a general guidance value of 50 dB(A) as a desired noise standard with a maximum limit of 70 dB(A), both values calculated on the basis of weighted noise from road and rail traffic and industry. Municipalities have to take noise into account in their spatial planning documents and to take measures to achieve the desired noise standards in residential areas, hospitals and schools.

Airport noise is specifically regulated in the Aviation Act which sets the requirements for Schiphol Airport, devising a new system of limits and controls which has been in operation since 2003 and is now subject to evaluation to determine its effectiveness. The noise regulation established by the Act has been detailed in the Air Traffic Decree (*LVB*).

Directive 2002/30/EC¹³ (the “noise-related operating restrictions” Directive) is also transposed into Dutch legislation.

6.2. Institutions

All levels of government are involved in the implementation of noise policy. Central Government sets the general legislation providing guidelines and maximum values, but Provincial and Municipal governments can set their own goals. Implementation is largely in the hands of local administrations, through spatial planning and development control. Central Government, nevertheless,

¹¹ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

¹² *Wet van 30 juni 2004 tot wijziging van de Wet geluidhinder, de Wet luchtvaart en de Spoorwegwet in verband met de implementatie van richtlijn nr. 2002/49/EG van het Europees Parlement en de Raad van de Europese Unie van 25 juni 2002 inzake de evaluatie en de beheersing van omgevingslawaai.*

¹³ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

plays an important role with respect to noise from rail and road traffic and provides assistance for noise abatement programmes.

With respect to aircraft noise, the main role is played by Central Government, as the noise mitigation and control system is defined in detail by the Aviation Act and the implementation Decrees for Schiphol. Municipalities and Provinces, must adopt and enforce spatial plans in accordance with national law.

The main body responsible for the enforcement of the noise provisions of the Schiphol Act is the Transport and Water Management Inspectorate (IVW) of the “Ministry of Transport, Public Works and Water Management” (V&W).

The Regional Consultative Committee for Schiphol, CROS, (*Commissie Regionaal Overleg Luchthaven Schiphol*) plays an important role with respect to noise, as it acts not only as a forum for all concerned, administrations, citizens and the aviation sector, but also as a “complaint centre” where citizens can submit their objections by telephone, by e-mail or in writing and lodge formal complaints for breach of the noise regulations. Each complaint is analysed and referenced with actual measurements and flight information and an answer is provided. During 2004 the number of complaints rose to over 780,000, as a consequence of the new runway opened in 2003, but the number of people complaining was only around 10,000.¹⁴

6.3. Instruments

a) Planning:

Noise abatement plans are now provided for in the Noise Nuisance Act, but they shall not become compulsory for a few years. In the vicinity of Schiphol, mitigation measures were included in the Aviation Act as part of the overall legislation which regulates the building and operation of the enlarged airport.

b) Land use restrictions:

The vicinity of the airport is subject to land use restrictions derived from noise exposure. As stated above, the Aviation Act and the Airport Zoning Decree (LIB), establish the noise zones and permitted land uses which must be integrated into the spatial plans. From 2003 to this year, no new residential units were allowed within the 35 Ke area, with the exception of small projects of up to 25 dwellings with the approval of the VROM Inspectorate. Existing homes could remain and new office or industrial uses were allowed. The decision to enlarge this area to cover the 20 Ke contour was adopted by Parliament but is pending implementation.

¹⁴ Detailed “complaint reports” can be found at CROS site: www.crosinfo.nl.

c) Compensation:

Land use restrictions do not usually give rise to financial compensation, as they are considered normal regulations on the use of property. Noise derived restrictions are no different from others in that respect.

Since 1984 the Government has been carrying out a home insulation programme (*Project Geluidsisolatie Schiphol (PROGIS)*). In the first phase, from 1984 to 1997, 4,320 homes were insulated and 6,700 from 1997 to 2005. The total number of homes eligible for sound insulation is estimated at 17,000, but the number may rise as the evaluation of the effects of the new runway are still under way.

Homes are eligible for sound insulation if they are located within the 40, 50 or 60 Ke contours for daytime noise or the 26 dB(A) L_{Aeq} contour, as measured in bedrooms, for night noise.

The cost of the soundproofing programme (€127 million for Phase 1, €395.8 million for Phase 2) is covered by a surcharge levied by the airport on behalf of the Dutch Government, which will disappear when the programme is completed. The charge is based on the certificated aircraft noise level, taking into account the weight of the airplane. The cost of the insulation work is paid directly to the contractor, not the homeowner.

In other areas, the Government has been pursuing since the mid 1980s an ambitious programme to mitigate noise from rail and road traffic by erecting barriers and insulating homes.

6.4. Integration with spatial planning

Spatial planning integrates noise zoning by reproducing the noise contours in the plan maps and regulating the use of land in accordance with the provisions of the Aviation Act and the Airport Zoning Decree (LIB).

6.5. Integration with development, construction or operation controls

Land use limitations are enforced by the Municipalities as part of their normal responsibilities, as there is no special provision for restrictions derived from noise zoning.

The issue of construction noise is dealt with in the EIA for each project, which includes the specific measures to be taken, if necessary.

With regard to the operation of the airport, the Aviation Act and the “Air Traffic Decree Schiphol” (LVB) have put in place an elaborate system which combines noise abatement procedures and preferential runways, routes, operational restrictions and noise limits.

The aim of the system is to limit the number of homes affected by high noise levels (over 35 Ke) during the day to a maximum of 10,000 and the number of people subject to more than 20 Ke to no more than 45,000. For night noise, the goal was set at a maximum of 10,100 homes in the area of more than 26 dB(A) L_{aeq} , and a maximum of 39,000 people subject to more than 20 dB(A) L_{aeq} .

The operational restrictions impose curfews based on the margin of the sum of the three noise certification levels, in relation to the sum of the three applicable noise certification limits in ICAO Annex 16 Chapter 3. If the margin is less than 5 EPNdB, the following restrictions apply:

- For aircraft equipped with engines with bypass ratio ≤ 3 , new operations are not allowed.
- For aircraft equipped with engines with bypass ratio ≤ 3 , takeoff and landing is not allowed between 18:00 and 08:00 LT.
- For aircraft equipped with engines with bypass ratio > 3 , it is not allowed to plan take-offs between 23:00 and 06:00 LT.

When the abovementioned margin is 5 EPNdB or more, no restrictions are applied.

The noise limits were determined by setting a total noise volume for the entire airport for a period of one year, and a separate limit for each of a number of enforcement points. The "Total Volume of Noise Load" (*Totale Volume van de Geluidbelasting* (TVG)) sets a maximum noise level calculated on the basis of L_{den} and L_{night} estimates averaged over a year, thus defining an indirect limit to the number of operations in the airport. This TVG limit is combined with the individual limits set for 35 points considered over a 24h period, and 25 points for the night-time period (23:00-07:00h). Runway use is restricted between 23.00h and 06.00h.

Both the TVG and the enforcement point limits are based on a very complex model based on a traffic scenario, and the airport is not allowed to exceed neither the total volume nor the limit established for each enforcement point, with a limited margin of flexibility to accommodate weather conditions up to a certain extent. This implies that airlines have to plan their routes taking into account the individual point limitations and whether there is a risk a particular point may become saturated. In order to manage the system, the airport is completely coordinated.

Monitoring is carried out on the basis of the calculations which take into account individual data for each flight (actual flight path, aircraft type, take-off or landing procedure and the time of day). Evening and night flights are more heavily weighted than day flights.

The system is enforced by the Transport and Water Management Inspectorate (IVW), which acts not only as the CAA, but as the institution which has the primary responsibility for the implementation of the environmental protection measures established under the Aviation Act.

The combination of maximum noise levels and the regulation of runway use and air routes contained in the Decree has resulted in a complex system which is now being evaluated as a result of the aforementioned *Baarda* motion. This evaluation concerns not only noise, but also aspects such as risk and air quality, and is conducted by the Ministry of Transport, Public Works and Water Management with the cooperation of the Transport and Water Management Inspectorate (IVW), The Ministry of Housing, Spatial Planning and the Environment, the Ministry of Economic Affairs, the Committee for the Environmental Effects Report (*Commissie voor de Milieu-effectrapportage*) and the Committee for Regional Consultation on Schiphol (CROS). The economic sectors involved in the airport operation and residents of the surrounding areas are also consulted.¹⁵ The final proposal for the modification of the system shall be presented jointly by Ministry of Transport, Public Works and Water Management and the Ministry of Housing, Spatial Planning and the Environment.

The evaluation also covers a study of the effectiveness of the chosen policy measurements. The experiences, attitudes and opinions of both the citizens in the vicinity of the airport and the general public are also taken into account. The government is also asking the population and other parties for their suggestions regarding improvement.

The evaluation is accompanied by a technical appraisal of the enforcement systems conducted by a "Committee of Experts on Airport Noise" (*Commissie Deskundigen Vliegtuiggeluid*, CDV), which shall make recommendations as to how the airport surrounding area should be delimited for noise purposes as well as noise measurement systems and standards.

Despite the fact that the current system is based on calculated noise, not on measurements, the airport has been operating a monitoring network since 1994, the so-called NOMOS (Noise Monitoring System) which now has 21 stations in residential areas and a mobile station. The operation of the system is entirely transparent and can be followed in real time on the web page www.schiphol.nl/nomos/nomos_home. These stations are only used for information purposes and are currently not linked to the enforcement system.

¹⁵ A description of the process is given in the paper "Action Plan for the Evaluation of the Schiphol Airport". Ministry of Transport and Public Works. June 2004. The process can be followed on a special web page: www.evaluatieschiphol.nl, and the CROS page on the subject: www.crosinfo.nl/FAQ/evaluatie.html.

On top of the measures instituted by the Aviation Act and the implementation Decrees, the Airport operator has regulated airport charges in such a way that fees paid by aircraft depend not only on weight, but also on noise and the time of day. The charge system is configured to penalize the use of noisier aircraft as well as night flights, but to provide incentives to the utilization of less noisy planes by reducing take-off and landing charges. For this purpose aircraft are classified into 3 categories based on EPNdB values in their ICAO certification.¹⁶

AIR QUALITY

6.6. Legislation

In the Netherlands, air quality is regulated by the Air Pollution Act of 1970 (*Wet inzake de luchtverontreiniging (Wlv)*), which has repeatedly been amended over its long life to adapt it to new policies and to EU legislation. Current standards are defined in the Air Quality Decree of 2005 (*Besluit Luchtkwaliteit, 2005*).

The specific legislation for Schiphol airport also included provisions concerning air quality. The Aviation Act sets emission limit values for five different substances (CO, NO_x, VOC, SO₂ and PM₁₀) per weighted aircraft movement. These limits are not dependent on the number of movements but on the composition of the fleet. Article 3.2.1 of the Decree also requires that jets with 3 or 4 engines must shut off one of them after landing, unless the captain considers it unsafe to do so. The use of APUs (Auxiliary Power Units) is regulated by article 3.2.2, which requires the use of replacement power supplies, where available.

If emissions of one or more substances are calculated to exceed the legal limit, then the airport can be constrained to remain below an absolute limit based on the total emissions allowed in the previous year.

The Environmental Management Act (*Wet Milieubeheer*) has also led to the establishment of emission limits for engine testing, and limit values have also been set for PM₁₀, NO_x, hydrocarbons and SO₂

With regard to immission limits, the air quality standards that apply in the vicinity of the airport are the same as in the rest of the country. A study conducted in 2001 by the Province of North Holland and the Schiphol Group concluded that for some substances (C₆, C₁₂ and VOC) the airport contributed 1% due to air traffic and 2% on account of storing and distributing aircraft fuel, while other substances such as CO, NO_x or PM, made no directly recognizable

¹⁶Schiphol Airport Charges Regulation 2005. Available at:
http://www.schiphol.nl/media/portal/_aviation_marketing/pdf/pdf_files/2005_airport_charges.pdf

contribution. This does not mean that aircraft emissions are diminishing in absolute terms, since there is an increasing number of operations but, in general, the overall air quality in the area is improving due to the fact that the main contributor to air pollution is the automobile and car emissions have been decreasing in recent years.

Air quality in the vicinity of the airport is monitored by a network of stations owned and operated by the Province of North Holland.

6.7. Implementation

The air quality provisions for the airport are enforced by the Transport and Water Management Inspectorate (IWW) of the Province of North Holland which has a general competence in this field pursuant to the Environmental Management Act) and the Dutch Emission authority (*Nederlandse Emissieautoriteit*) which is in charge of the Emission Trading System.

Outside airport grounds the general legislation on air quality is applied and enforced by Municipalities, Provinces and the Ministry for Housing, Spatial Planning and the Environment Inspectorate (VROM). The Implementation Decree of the Directive 96/62/EC¹⁷ (the “Air Quality Framework” Directive) (*Besluit uitvoering EG-kaderrichtlijn luchtkwaliteit*) obligates municipalities to achieve the desired standards and to adopt action plans to improve the situation in the vicinity of sensitive areas.

¹⁷ Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

7. CASE STUDY – SCHIPHOL AIRPORT

The comments and descriptions included in the whole report refer to Amsterdam Schiphol airport.

A fifth runway was opened at Amsterdam Schiphol Airport in February 2003.



Figure 8. Schiphol airport

The first plans for the fifth runway were already prepared in 1970. In 1995, the Dutch Parliament approved the “Government White Paper on Amsterdam Airport Schiphol and its environs, Airport Operations Ruling on the grounds of Amsterdam Airport Schiphol and Airport Operations Rulings from the Ministry of Housing, Spatial Planning and the Environment, and the Ministry of Transport and Public Works”.

This White Paper permitted the construction of the fifth runway subject to certain conditions. Noise levels in the surrounding areas of the airport should

not increase. In order to achieve that objective, it imposed restrictions on passengers numbers and cargo tonnage.

In the late 1990s, the question arose as to how to solve the problems of surrounding noise impact limits, and how the relationship between the government authorities, the aviation sector and the regional authorities should be defined. A new system was then analysed to avoid the constraints to air traffic growth imposed by the White Paper of 1995, without increasing the noise impact on the population.

A Total Noise Volume was proposed on the basis of a maximum number of houses affected by noise, together with a set of measures including a network of enforcement points with limit values, appropriate runway use regulations, limit values for emissions, etc. It should be noted that this approach also considered that air pollution and third-party risk were negative impacts to be taken into account in the decision.

The construction of the fifth runway at Schiphol started in September 2000. The new system of environmental standards was approved through an amendment to the Aviation Act, which should have entered into force at the same time that the runway was opened.

The runway opened to commercial traffic on 20 February 2003. It is only used into and from the north. Overall noise disturbance in the area should be reduced with a fully-operational five-runway system due to the approach and departure routes passing over areas with relatively low population densities.

The Schiphol Act (as it has come to be known) entered into force on the same day as the new Chapter 8 of the Aviation Act. It is essentially a framework regulation which does not include detailed specifications on the subject. The two decrees (the Air Traffic Decree – LVB, and the Airport Zoning Decree – LIB) which implemented the Act define the legal context within which the aviation sector, comprising the airport, the air traffic services and the airlines, must operate.

LIB regulates the use of land around the airport for environmental, safety and operational purposes. This Decree prohibits building in areas where it would be undesirable in terms of noise, air pollution or safety.

Both decrees were amended in 2004 to solve problems caused by the fact that the original Decrees had been based on an unrealistic distribution of air traffic. The areas defined by LIB for protection purposes are now the following:

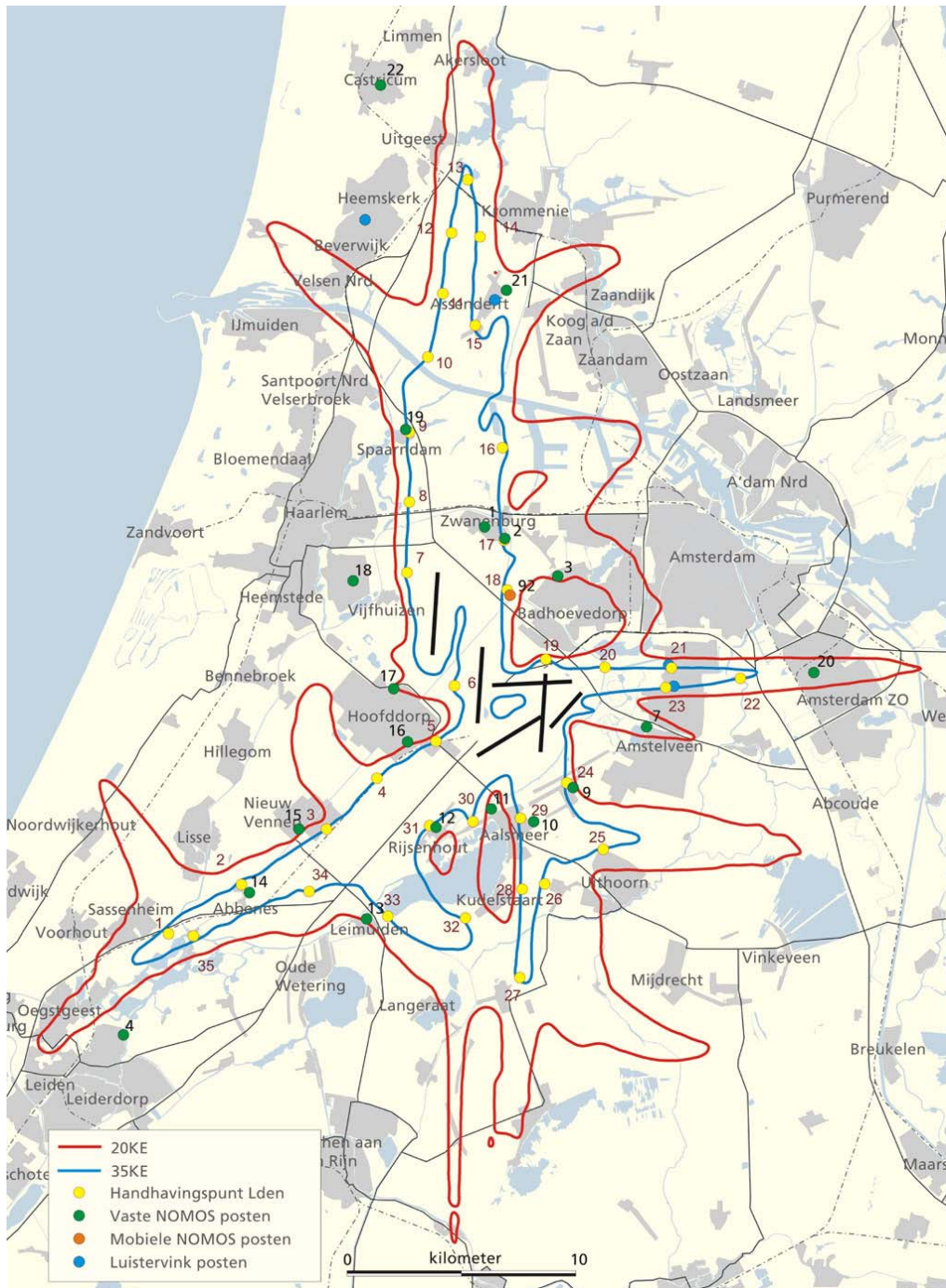


Figure 9. Noise areas defined by LIB

The Schiphol Act included the need to carry out an assessment of the situation and of the functioning of the environmental standards system after three years of implementation. The Dutch Government is currently working on this evaluation, together with the aviation sector. The airport, the air traffic services and the airlines have already prepared a position statement on their perception of the results already achieved and the requirements for new regulations and standards.

The evaluation is expected to be ready by February 2006.

COUNTRY CONTACTS

- **Ministry of Transport – Department of Civil Aviation**

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁸)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁸ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Provincies</i>	Provinces
<i>Staten-Generaal</i>	Bicanmeral Parliament
<i>Gemeenten</i>	Municipalities
<i>Provinciale Staten</i>	Local Parliament
<i>Gedeputeerde Staten</i>	Local executive authority
<i>Commissaris van de Koningin</i>	Royal Commissioner
<i>Woningwet</i>	Housing Act
<i>Wet op de ruimtelijke ordening (WRO)</i>	Spatial Planning Act
<i>Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (VROM)</i>	Ministry for Housing, Spatial planning and the Environment
<i>Rijksplanologische Commissie</i>	National Spatial Planning Commission
<i>Ministerie van Verkeer en Waterstaat</i>	Ministry for Transport, Public Works and Water Management
<i>Provinciale Planologische Commissie</i>	Provincial Spatial Planning Commission
<i>Regionale Structuurplannen</i>	Strategic spatial plans
<i>Planologische kernbeslissing (PKB)</i>	Key planning decisions
<i>Nota Ruimte</i>	National Spatial Strategy
<i>Nota over de Ruimtelijke Ordening</i>	National Policy document on Spatial Planning
<i>Structuurschema Groene Ruimte (SGR)</i>	National Structure Plan for Green Areas

<i>Nota Mobiliteit</i>	National Mobility Policy document
<i>Streekplan</i>	Regional plan
<i>Structuurplan</i>	Structure plan
<i>Bestemmingsplannen</i>	Local land use plans
<i>Bouwvergunning</i>	Building permit
<i>Aanlegvergunning</i>	Construction permit
<i>Sloopvergunning</i>	Demolition permit
<i>Woonvergunning</i>	Permit of use
<i>Wet milieubeheer</i>	Environmental Management Act
<i>Geïntegreerde milieuvergunning</i>	Integral environmental permit
<i>Hinderwet</i>	Public Nuisance Act
<i>Wet luchtvaart</i>	Aviation Act
<i>Luchthavenverkeerbesluit Schiphol (LVB)</i>	Air Traffic Decree Schiphol
<i>Luchthavenindelingbesluit Schiphol (LIB)</i>	Airport Zoning Decree Schiphol
<i>Commissie Regionaal Overleg Luchthaven Schiphol CROS</i>	Regional Consultative Committee for Schiphol Airport
<i>Project Geluidsisolatie Schiphol (PROGIS)</i>	Insulation program around Schiphol
<i>Totale Volume van de Geluidbelasting (TVG)</i>	Total Volume of Noise Load
<i>Commissie voor de Milieu- effectrapportage</i>	Committee for the Environmental Effects Report
<i>Commissie Deskundigen</i>	Committee of Experts on Airport Noise

Vliegtuiggeluid, CDV

*Wet inzake de
luchtverontreiniging (Wlv)*

Air Pollution Act

Besluit Luchtkwaliteit,

Air Quality Decree

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 - Spatial Planning Act

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INECO

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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

POLAND

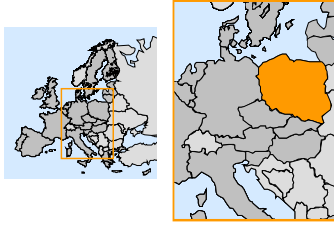


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POLAND		Location Map												
Population	38.6 mill. (126.9 inhabitants per sq. Km)													
Airports network The Public Enterprise “Polish Airports” (PPL) is reducing its holdings in most of the airports, except Warsaw. However, there are 12 international airports and PPL has shares in 11 of them.														
Spatial planning system Polish spatial planning system is basically hierarchical <ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">National level</td> <td>The Government Centre for Strategic Studies (RCSS) is in charge of preparing national policies on spatial planning and long-term regional development</td> </tr> <tr> <td>Regional level</td> <td>The Marshall Office and its Department of Strategy and Development are responsible for regional planning, supervised by the regional representatives of the Central Government</td> </tr> <tr> <td>Local level</td> <td>Municipalities have assumed important responsibilities in the field of spatial planning. However, their implementation capabilities are rather weak</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="width: 20%;">National level</td> <td>National Development Plan and Concept of National Spatial Policy</td> </tr> <tr> <td>Regional level</td> <td>Regional Strategic and Spatial Development Plans</td> </tr> <tr> <td>Local level</td> <td>Comprehensive Planning Studies Local Plans & Decisions on Location and Building Conditions</td> </tr> </table> • Process: Spatial plans in Poland are subject to both inter-governmental consultation and citizen participation, regardless of their nature and purpose 			National level	The Government Centre for Strategic Studies (RCSS) is in charge of preparing national policies on spatial planning and long-term regional development	Regional level	The Marshall Office and its Department of Strategy and Development are responsible for regional planning, supervised by the regional representatives of the Central Government	Local level	Municipalities have assumed important responsibilities in the field of spatial planning. However, their implementation capabilities are rather weak	National level	National Development Plan and Concept of National Spatial Policy	Regional level	Regional Strategic and Spatial Development Plans	Local level	Comprehensive Planning Studies Local Plans & Decisions on Location and Building Conditions
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Airport planning <ul style="list-style-type: none"> • Policy and planning: the Polish Civil Aviation Authority is responsible for airport policy and planning, while the Ministry of Infrastructures is responsible for control activities. Master plans are not compulsory and only the concept (konceptcja) is usually submitted to the CAA • Spatial impact: Polish law on Civil Aviation directly establishes that ICAO Annex requirements are binding. An “area of limited use” is included in the approval of the planning decision, although the law does not provide for land reserves • Construction: Different permits are required: Planning decision, building permit, civil aviation licence and utilization permit. • Operation: Airports are required to obtain prior authorization from civil aviation authorities. Airport certification is regulated in Poland by the Law on Civil Aviation, according to ICAO requirements 														
Airport noise and air quality There is no specific noise or air quality legislation, although noise contours are used to define “areas of limited use”														

1. SUMMARY

SPATIAL PLANNING SYSTEM

The “National Development Plan” provides the socio-economic guidelines for the development of the country and is the basis for the utilization of EU structural funds. The “Concept of National Spatial Policy” is more spatially oriented and defines a series of strategic objectives regarding the spatial structure.

Regional planning reproduces the same division between development planning and spatial planning. All regions prepare Spatial Development Plans in order to define the basic spatial structure, allocate infrastructures and services and set requirements for the protection of the natural environment and cultural heritage.

Municipalities are required to adopt non-binding “Planning Studies” (*Studium Uwarunkowań*) covering their entire territory, to establish the local planning policy, identify potential areas for public services, and define detailed planning priorities.

“Local Spatial Development Plans” are prepared for specific areas to regulate land uses in detail and to establish development parameters, including building alignment and overall dimensions, development intensity indexes, etc.

Central and regional government projects must necessarily be included within local land use plans.

REGULATIONS AND PERMITS

Construction permits

All building and construction activities require a building permit, issued by different authorities depending on the project.

There are some activities excluded from this requisite but airports are not among them.

In areas not covered by a regulatory plan it is necessary to obtain a “planning decision” before any construction work or land use can be authorized. In the case of public projects this is known as “Decision on Localization”, for private developments it is a “Decision on Building Conditions”.

Environmental permits

Environmental Impact Assessments are required both for projects and plans or programs, in line with EU legislation. The evaluation is required at the “planning decision” stage when there is no regulatory plan, but this does not preclude further evaluation at the project phase.

Separate permits are required with regard to water, waste, air pollution and the operation of contaminating industries and activities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

There is no national airport planning. The Ministry of Infrastructure appointed a commission to review possible locations for a new airport for central Poland. The Commission chose 2 locations in January 2004 but the final decision will probably not be made until 2006.

- Airport

There are no statutory master plans, although some airports, i.e. Katowice, are beginning to prepare this kind of document to guide future development. Airports prepare an outline or “concept” for future development which is submitted to the Civil Aviation Authority.

Spatial impact

- Implementation of ICAO Annex 14 requirements)

ICAO Annex 14 standards are considered binding and apply in the vicinity of the airports.

Planning decisions to build a new airport would include a “restricted area” where the resultant safeguarded areas would be represented.

- Noise Impact

Noise contours are taken into account to establish the “restricted area” in the vicinity of the airport.

- Risk prevention

There are no risk prevention provisions.

- Land reserve for future construction

Land reserves can be established in the local plan, but are not required by law.

Construction

Airports require construction permits, as well as a “Decision on Localization” when not included in a local land use plan. They are issued by the regional deconcentrated offices of the central administration.

Operation

Airports require an operating license issued by the CAA. A “use permit” may be necessary for new airport buildings, but infrastructures are clearly excluded from this requirement.

AIRPORT NOISE AND AIR QUALITY

Noise

There is no specific noise legislation concerning airports other than that which applies to aircraft operation. Noise and air quality considerations have been built into the EIAs of recent airport projects.

The EIA for the enlargement of the airport of Warsaw established a set of noise contours together with monitoring systems, a quarterly report to be submitted to the regional representative of the central government, sound insulation programs for affected homes and, in some cases, compensation to homeowners.

Noise contours have been used as the basis to define the “restricted area” included in spatial plans near the airport.

Spatial plans must take noise pollution into consideration and shall prohibit the location of residential development, hospitals, schools or cultural uses in areas that do not meet the noise standards established for different land uses.

Air Quality

There are no special provisions concerning airport operation since these infrastructures are not included in the list of potential air polluters.

Air quality regulations are basically aimed at controlling emissions, and spatial plans do not, as a rule, consider contamination issues other than to separate industrial uses from other non-polluting uses.

2. CONTEXT

Poland is a republic in central Europe. It is located in the east-central portion of Europe and is bordered on the east by Russia, Lithuania, Belarus, and Ukraine, on the west by Germany, on the south by the Czech Republic and Slovakia, and on the north by the Baltic Sea.

Poland was first united in the 10th century; dissolved after the third partition effected by Austria, Russia, and Prussia in 1795; re-established independence in 1918; invaded by Germany in 1939; ruled by a Communist government from 1947 to 1989, when a multiparty system was introduced.

Poland is divided into 16 regions: Zachodnio-Pomorskie, Pomorskie, Warmińsko-Mazurskie, Lubuskie, Wielkopolskie, Kujawsko-Pomorskie, Mazowieckie, Lubelskie, Łódzkie, Dolnośląskie, Opolskie, Śląskie, Małopolskie, Świętokrzyskie and Podkarpackie. Polish is the only official language throughout the country.



Figure 1. Map of Poland

Poland's GDP per capita is one of the lowest of the EU-25 (average 22,400)¹. Admission to the European single currency is not expected before 2009, and at present the national currency is the Zloty.

¹ GDP per capita in PPS (Purchasing Power Standards) at current market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	38,190,600
Latitude / Longitude	52°00' N, 20°00' E
Land area	304,465 sq Km
Coastline	491 Km
Capital City	Warsaw (1,6 million)
GDP per capita (PPS at market prices)	10,500
GDP real growth rate	5.3 %
Inflation rate	3.6 %
Unemployment rate	18.8 %

Table 1. Poland: Main facts and figures (2004)²

2.1. Population and statistics

Currently, the population of Poland is close to the 40 million threshold, with an average density of 126.9 inhabitants per sq Km. This means that Poland is above the European average (115 inhabitants per sq Km).

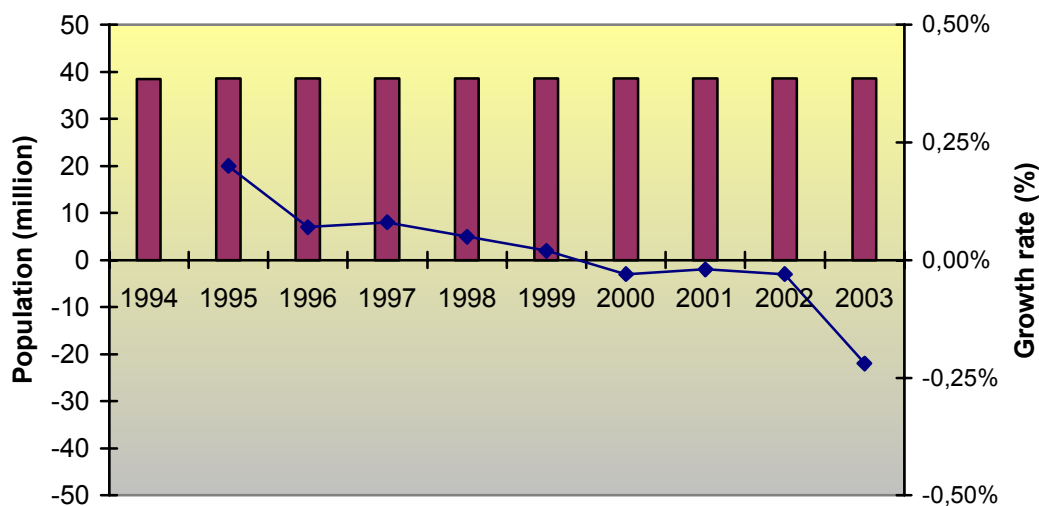


Figure 2. Population growth

² Source: EUROSTAT

During the last 4 years, the population trend in Poland has decreased slightly, with a negative growth rate. The main causes are emigration, with one of the lowest net migration rates in the EU, -0.3 immigrants per 1,000 inhabitants (2002), and the continuous fall in the birthrate since the 80's, with 10.78 births/1,000 population (2004 est). The median age in Poland is low, 36.43, one of the youngest in the EU.

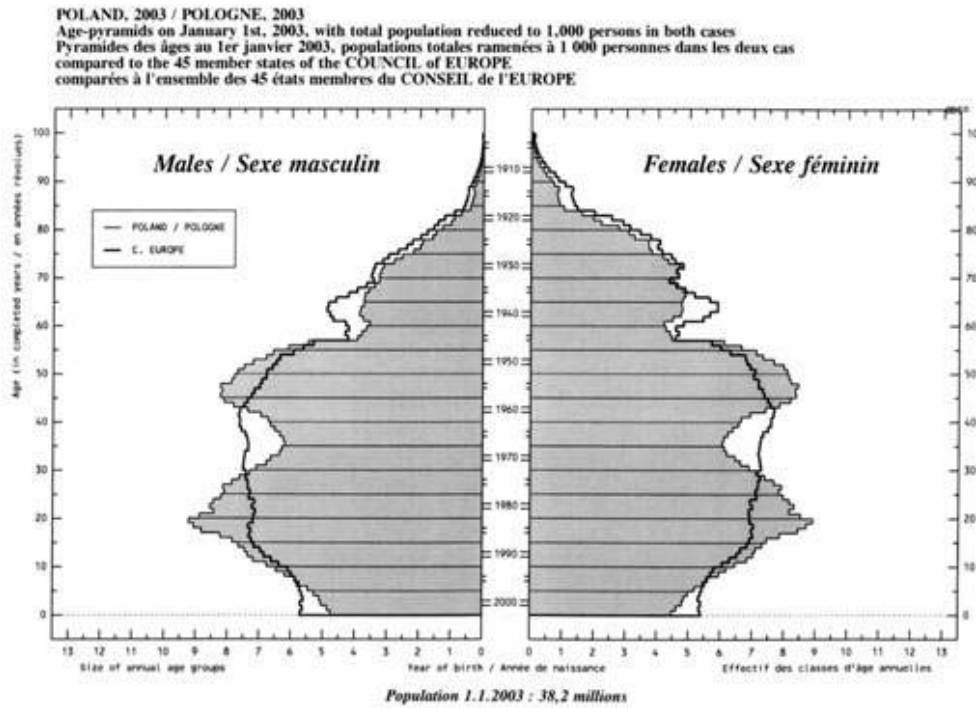
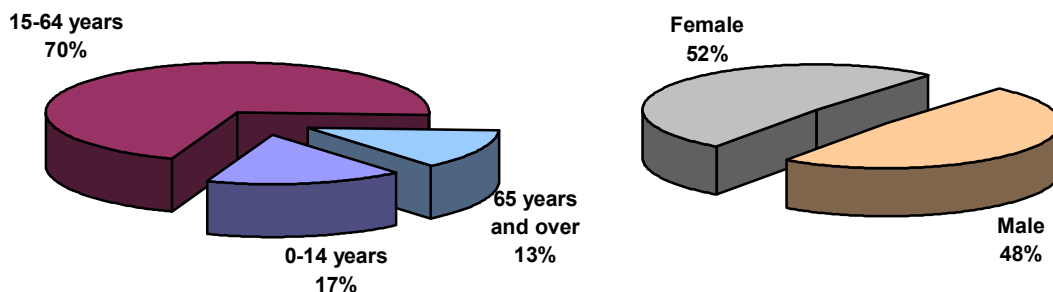


Figure 3. Age-pyramids (2003)³

The figure above shows the low Polish birthrate and the age structure, with the bulk of population between the age of 15 and 64 (70%).



Figures 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

2.2.1. Power distribution

Poland was the first country from the former eastern block to leave the communist system. The first elections took place in 1989 and were won overwhelmingly by the representatives of Solidarity. The process of transformation also continued internationally and in 1999 Poland joined NATO.

The Parliament (also called National Assembly) adopted a new Constitution that was submitted to public vote. The new Constitution of the Republic of Poland was approved by the Constitutional Referendum held on 25 May 1997.

The Republic of Poland (*Rzeczpospolita Polska*) is a unitary parliamentary-presidential republic. The President of the Republic is elected by popular vote for a five-year term and is the Head of the State. The Prime Minister is appointed by the President and leads the Council of Ministers.

All legislative power is vested in the Parliament, which has two chambers: the lower Chamber (*Sejm*) with 460 seats and the Higher Chamber (*Senat*) with 100 seats, both of which are elected for a four-year term.

The judicial power includes a Supreme Court, which is the highest appeal court, a Supreme Administrative Court, the Constitutional Tribunal and a number of lower courts supervised by the Supreme Court. The Constitutional Court only deals with constitutional matters.

2.2.2. Regional and local levels

There are four levels of government in Poland: State, Regions, Counties and Municipalities. Since 1 Jan 1999, Poland is divided into 16 regions (*voivodships*), which are at the same time decentralized divisions of the State and self-governing communities.

Regions are divided into 373 districts or counties⁴ (*powiats*) which, in turn, are divided into 2.489 municipalities (*gminas*). Some districts have the status of city-districts (*powiat-grodzki*)⁵. There are self-governing authorities at the regional, county and local levels of public administration, but all the legislative power and still a substantial part of the executive power are bound to the central institutions of the state. The State also exercises its control functions (restricted to public safety, building, environmental and health standards and general conformity of laws), through the regional representatives of the central government (*Wojewoda*).

⁴ The translation of “*powiat*” in the literature is not uniform. The terms districts and counties are used with the same frequency.

⁵ Currently there are 65 entities with “municipal-district” status.

Regions have a population ranging from 1 to 5 million within an area of between 10,000 and 35,000 km². The average population of a district is 103,000 and the average area is 836,4 km². Most of the municipal districts are cities with more than 100,000 people.

Regional self-government comprises the Regional Assembly or Parliament (*Seymik*) and the Board of the Region (executive body), headed by the Marshal of the Region.

Districts constitute a second tier of local government with a limited number of powers including, among others, education, health, public order, roads, building supervision, environment and promotion of economic activities. The maximum authority is the President (*Starostwa*). In general, the district has a self-governing character, but at the same time it performs specific tasks commissioned by the State. In the case of construction, there is a District Inspector of construction (*Powiatowy Inspektor Budowlanego*) who issues the permission of utilization for projects of district significance.

The traditional self-governing entities at local level are the municipalities, called “*gminy*”, comprising urban (towns, cities), urban-rural and rural municipalities. The maximum local authority is the President (*Wójt, Burgmistrz or President Miasta*, for rural, semi-rural or urban municipalities, respectively). The average population is 15,000 and the average area 125 km². The 2,489 municipalities are very different in size and social, economic and environmental features. Municipalities have assumed important responsibilities in the field of spatial planning, although their implementation capability is not always what would be required. They are responsible for the preparation of the planning (*Studium Uwarunkowan*) and the local spatial development plans (*Plan Zagospodarowania Przestrzenny*), although in general their implementation capabilities are rather weak.

In the environmental and planning field, it is the State that legislates and the participation of the local and regional authorities is connected –in the implementation stage- by the approval of the proposed Environmental Impact Assessment (EIA - *raport wpływ na środowiska*) prepared by the investor.

2.3. Main airports

In the Civil Aviation register (Urząd Lotnisko Ciwilnego) there are 46 airports and 33 landing fields.

The Public Enterprise “Polish Airports” (*PPL - Polskie Porty Lotniczy*) was created in 1959 for the management of the main airports. The current trend is to create a separate company for each airport, and (with the exception of Warsaw) to distribute shares to other agents, such as the regional governments. There are 12 international airports, 3 of which (Warsaw, Rzeszów and Zielona Góra)

are managed by the PPL organization. Rzeszów and Zielona Góra are in process of becoming separate companies.

In the other 9 airports, PPL has the following stakes: Kraków-Balice 85.04%, Poznań-Ławica 63.80%, Szczecin-Goleniów 56.67%, Wrocław 47.78%, Gdańsk-Trójmiasto 38.07%, Katowice 33.10%, Mazury-Szczytno 32.52%, and Bydgoszcz 23.48%.

PPL has no stake in Łódź-Lublinek .

The airports of Warsaw-Okęcie, Kraków-Balice, Poznań-Ławica, Wrocław, Gdańsk-Trójmiasto, Katowice, Bydgoszcz and Łódź-Lublinek belong to the Trans-European Network (TEN-T).

The Association Aeroklub Polski comprises 65 aerodromes. Military airports are managed by the Army through the Military Property Agency (*Agencja Mienia Wojskowego*) which is responsible for the negotiations with the civil authorities. Currently, there are 5 military airports with a civil operator (Kraków, Wrocław, Bydgoszcz Zielona Góra and Szczytno). On the other hand, Warsaw-Okęcie is a civil airport but there is an agreement with the Army for military use.

In 2004, PPL airports handled a traffic of 7 million passengers (6 million in Warsaw). Since the accession to the UE on 1 May 2004, several airports have seen a significant increase in traffic, due to the fact that Low Cost Carriers are entering the market (for instance the traffic in the fourth biggest airport, Katowice, grew from 258,000 passengers in 2003 to 622,000 passengers in 2004). In general, airports which have been successful in attracting LCC will need to be expanded soon.



Figure 6. Main Polish airports

The following table shows the commercial passenger traffic and cargo for the main Polish airports during year 2003:

Airport	Passengers	Cargo (Tons)
Warsaw	5,166,991	40,514
Cracow	593,214	2,071
Gdansk	364,367	2,309
Wroclaw	284,334	721
Katowice	257,991	3,548

Table 1. Main Polish airport data

3. SPATIAL PLANNING SYSTEM

Poland has a long-standing tradition of spatial planning beginning in 1928. In contemporary days, the basis of the current system was laid by the Spatial Planning Law of 1994, which was abrogated by the current Law on Spatial Planning of March 27, 2003. Certain aspects of the system are completed in the Law on Constructions of July 7, 1994 (as amended in 2000, 2001, 2003 and 2004) and the Law on Access to Information on the Environment and its Protection and on Environmental Impact Assessment, of November 9, 2000, as well as the Environmental Protection Law of 2001.

According to Polish legislation there are three levels of the planning system (national, regional, and local) and lower planning instruments must take into account the provisions of the higher plans.

3.1. Institutions

3.1.1. National

The Government Centre for Strategic Studies (RCSS) is in charge of preparing national policies on spatial planning and long-term regional development, as well as analysing the consistency of regional development policies and programs of other levels of government.

3.1.2. Regional

The regional body responsible for planning is the Marshal Office and its Department of Strategy and Development. Other public institutions and independent entities are involved in the formulation, implementation and monitoring of regional plans. They include public institutions such as regional development agencies, non-governmental organisations, foundations and even private institutes.

Regional representatives of Central Government play an important role in the planning system, as one of their main functions is to supervise and collaborate in regional and municipal plans in order to ensure coherence with national planning interests.

3.1.3. Local and area wide

Municipal governments have the power to draft and adopt comprehensive municipal plans and local development plans. Districts have little power in the planning field, although they can prepare spatial planning studies and are consulted with regard to regional and municipal plans.

There are no metropolitan governments in Poland, but the Spatial Planning Law of 2003, which introduced the concept of metropolitan area, mandates regional

plans to include specific provisions for metropolitan areas, treating them as separate planning units.

3.2. Instruments

3.2.1. Strategic plans or policy documents

Strategic planning is based on regional development instruments, the most important of which is the National Development Plan (*NDP - Narodowy Plan Rozwoju*), and on more spatially oriented documents such as the “Concept of National Spatial Policy”⁶.

The NDP provides the socioeconomic guidelines for the development of the country over a period of years and plays a major role in the utilization of EU structural and cohesion funds. The next NDP is being prepared for the period 2007-2013 which overlaps with the next Community Framework Agreement period. The plan has very broad objectives, including national strategy for regional development, sector strategies, strategies for the development of the regions, a multiyear program of public finances, concepts for the territorial organization of the country and the main aspects of policy.

The NDP is approved by law and includes the 16 regional plans and the list of projects of regional importance. All municipalities are obliged to include these projects in their local plans. The failure to include a project envisaged in the NDP is a reason for the *Wojewoda* (Regional Representative of the State) to reject the approval to a local plan.

The Concept of National Spatial Policy provides a long-term view of the country’s sustainable development in a territorial context and defines a series of strategic objectives regarding the spatial structure and the need to modernize and move towards environmentally sustainable land development processes.

At regional level, “*voivoidships*” also adopt regional development plans of a socioeconomic nature and spatial planning instruments. The Spatial Development Plan defines the basic spatial structure, allocates infrastructures and services, and sets requirements for the protection of the natural environment and cultural heritage. Regions are obligated to adopt regional Spatial Development Plans and all 16 had already done so by 2005.

3.2.2. Local (framework) plans

At municipal level, the “Planning Study” (*Studium Uwarunkowań*) sets out the general conditions and directions for a coherent and sustainable spatial

⁶ *Koncepcja Polityki Przestrzennego Zagospodarowania Kraju*, Monitor Polski No 26 item 432 of August 16th, 2001.

development within the municipality. These studies establish the local planning policy, identify potential areas for public services, and define the most urgent detailed plans, etc. They should take national and regional goals into account (or they may be vetoed by the state representative). For instance, an airport Master Plan could be included in the study of the municipality.

Planning studies cover the entire municipal territory and must be adopted by all municipalities. However, they do not have any regulatory authority and, therefore, are not legally binding and do not originate development rights.

3.2.3. *Regulatory (detailed) plans*

Local authorities (*gminas*) administer and draw up Local Spatial Development Plans (hereinafter “Local Plans”) (*Plan Zagospodarowania Przestrzenny*) in accordance with the Town and Country Planning Act⁷ of 27 March 2003.

The purpose of Local Plans, which must be in accordance with the municipal Planning Study, is to regulate land uses in detail, to set development parameters, including building alignment and overall dimensions, development intensity index, to establish detailed conditions for developing land and restrictions on its use, which may include a ban on development, and to establish the principles for the protection of the environment, and the natural and cultural heritage.

As a rule, these regulatory plans are only prepared when they are needed and cover specific areas within the municipality. In some cases the adoption of Local Plans may be compulsory, if the municipal Planning Study shows that it is necessary for the implementation of national or regional programmes.

Local Plans are adopted as municipal by-laws and constitute the legal basis for detailed land management within their territory. These plans are legally binding on public and private entities and persons and grant development rights to property owners. Expropriations can only occur where projects have been included in the local plan. Public projects can not be given the go-ahead unless contemplated in such a plan. The fact that regional and central projects must also be included in local plans obligates all levels of government to negotiate at the time when these plans are prepared and adopted, which may lead to lengthy procedures.

When there is no local plan for a given piece of land, the permitted use and conditions for development are determined by means of a “Planning Decision” which may take the form of a Decision on Location (*Lokalizacja Inwestycji*), in the case of public investments, or a Decision on Building Conditions (*Decysja warunkach zabudowy*), in the case of other projects. These decisions are only

⁷ Journal of Laws No. 80, item 717 with subsequent amendments.

issued upon request and set out the specific rules for the development of a particular project.

In the case of airports the decision on location is issued directly by the head of the State's regional office (*Wojewoda*).

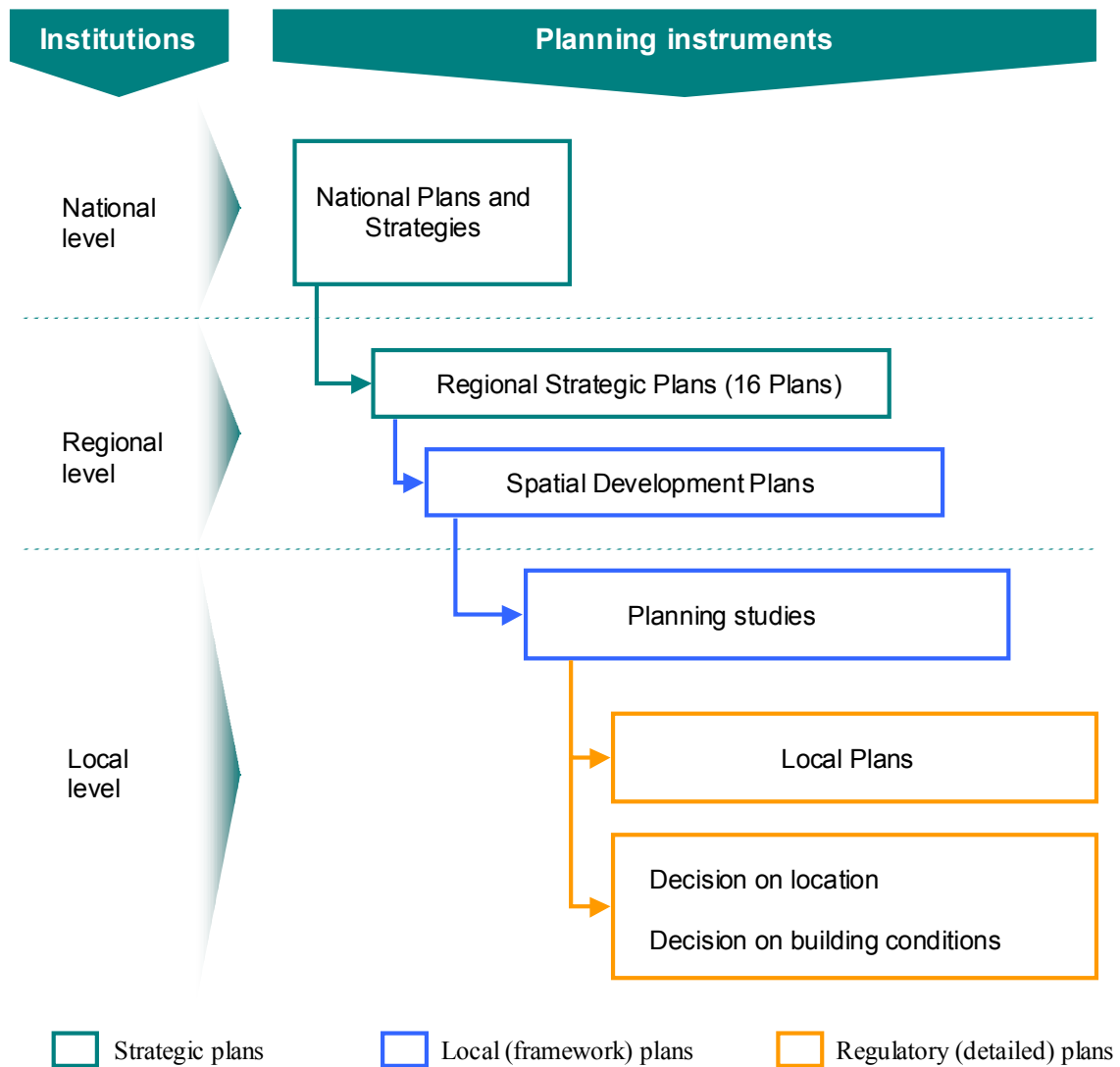


Figure 6. Polish spatial planning instruments

Pursuant to the adoption of the Spatial Planning Law, all municipal planning studies and local development plans adopted before January 1, 1995 were declared invalid on 31 December 2003. In practice, this means these plans are not binding throughout most of Poland and developers must undergo a special procedure to determine the planning parameters to be applied in each case. At the time of writing, less than 10% of the territory of the municipality of Warsaw is covered by a valid local plan and therefore most investments require a specific planning decision.

3.3. Process

Spatial plans in Poland are subject to both inter-governmental consultation and citizen participation, regardless of their nature and purpose. The Law of 2003 streamlined procedures for the adoption of planning documents but the result is yet to be seen. Until now, the process for municipal planning studies has taken anywhere from 18 months to 3 years.

3.3.1. Inter-governmental consultation

Consultation and co-operation between different government administrations, public and private entities and citizens is compulsory in the spatial planning process.

National planning instruments are approved by the Council of Ministers after a process of consultation with all the departments and institutions concerned.

Regional Strategic and Development Plans are adopted by resolution of the regional assembly. It is essential in this process the collaboration of the Minister responsible for spatial planning issues and the municipal authorities.

The Municipal Council is the responsible for approving Planning Studies and local Development Plans, but the draft plans must first be submitted to the regional representative of the central government, to the regional board, to the boards of neighbouring municipalities and to sector authorities. The representative of the State can only object on legal grounds or when the municipality has failed to take into account central or regional plans and projects.

3.3.2. Policy Integration

Spatial policy integration is only mandatory for national interests. In this case, the common tasks proposed by a higher level of government can only be introduced into the plan, as a rule, by means of negotiations, which involves long periods of discussion.

Airport Master Plans have no statutory basis and their integration into spatial planning instruments is not required by law. The approval for the location of a specific project, such as an airport, includes the “area of limited use” which establishes land-use constraints around the airport.

3.3.3. Citizen participation

In the Spatial Planning Law of 1994, the local plan was the only document which was subject to public participation. After the adoption of the law on Access to Information on the Environment and its Protection and on Environmental Impact Assessment of 9 November 2000, all draft spatial plans are subject to an Environmental Impact Assessment procedure which includes

public participation in the terms prescribed by the above Law, i.e. all citizens have the right to submit comments and recommendations in the course of a strategic or regional EIA.

Objections to plans must be submitted in writing and have to be formally considered by the planning authority.

4. REGULATIONS AND PERMITS

Construction activities are regulated both by the Spatial Planning Law and the Construction Law. The former refers to the relationship between spatial plans and development or construction projects and the latter focuses on the process and requirements to issue a construction permit.

In areas covered by a Local Development Plan the construction permit can be issued directly as long as the project complies with the provisions of the Plan. Where no such plan exists it is necessary to obtain a planning decision before any construction work or land use can be authorised. For projects that may have an adverse impact on the environment, the Environmental Impact Assessment will have to be conducted at this stage.

The planning decision shall provide detailed conditions for the development and shall be used as a basis for building permits. These decisions can only be issued when a certain number of requirements are met, i.e. the land must be accessible by public road, existing and projected infrastructures must be sufficient for the planned development and the proposal must comply with all other relevant legislation.

Planning decisions are issued by the head of the local authority, or the regional authority in some cases, in accordance with the Spatial Planning Law. When the proposed development implies the transformation of agricultural or forest lands, it may also be necessary to obtain a favourable decision from the Ministry of Agriculture or the Ministry of the Environment.

When a planning decision has been issued, or in cases where a valid local development plan already exists, the application for a building permit may be submitted to the municipality. Building permits are issued by mayors and may include detailed conditions regulating both the construction process and the ultimate outcome, and establishing a specific timeframe for the completion of the works.

In many cases, a building can be occupied after notifying the competent authority, provided that no objection is raised within a 21-day period. For certain categories of constructions it is necessary to obtain an occupancy permit which may establish certain conditions. Airports are not included in the list of categories that require an occupancy permit.

4.1. Development control system

4.1.1. Activities subject to development control:

In principle, all building and construction activities require a building permit issued by the different authorities as mentioned above, depending on the kind of investment.

4.1.2. Exceptions or exemptions

The Law on Construction includes a long list of works that do not require a building permit, including, among others:

- Farming facilities
- Free-standing utility buildings
- Small summer houses (10 m²)
- Umbrella roofs with a footprint area of up to 10 m²
- Electricity, water supply and sewage disposal systems
- Gas, heating and telecommunications connections to buildings
- Specific types of parking lots and parking bays
- Provisional buildings
- Fences
- Repair work
- Reconstruction of existing buildings or facilities in certain conditions

Airports are not included in this list of exceptions.

4.1.3. Institutions involved: inter-government relations

Article 82 of the Construction Law defines the competent authorities according to construction types. In the case of “civil airports – together with accompanying objects and installations”, the building permit shall be issued by the head of the State’s regional office (Wojewoda).

4.1.4. Relationship with planning

No construction can be authorised unless it is in accordance with the local plan or with the planning decision adopted for the specific case when there is no local development plan.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

The Environmental Protection Act of 2001 provides the basis for the current regulation of EIAs in Poland which is contained in the Law on Access to

Information on the Environment and its Protection and on Environmental Impact Assessment, of November 9, 2000, where the requirements and procedures for EIA are regulated in detail. Chapter 4 refers to the “environmental impact assessment procedure, relating to the implementation of plans and programmes”, and Chapter 5 to “the environmental impact assessment procedure for proposed projects”.

The Law essentially complies with the line set by the EU Directives on this subject, although in January 2004 the EU Commission, summarizing Poland’s position regarding the adoption of the Community acquis, stated that:

*“In the field of **horizontal legislation**, the necessary legislation is in place and is in line with the acquis, except for the recent acquis on strategic environmental impact assessment.”⁸*

No reasons are stated for this opinion but, in any case, the Law requires an environmental impact assessment for “the draft concept of the national land-use policy, draft land-use plans and draft regional development strategies” and “draft policies, strategies, plans or programmes in the fields of ..., transport, ... and land use, where their preparation by the national or voivodship public administration authorities is provided for by law”. Spatial planning instruments had already been required to include an evaluation of their impact on the environment since the Spatial Planning Law of 1994 and planning decisions for development in areas without spatial plans are subject to EIA pursuant to the abovementioned Law of November 9, 2000.

The Environmental Impact Assessment (EIA) process for construction projects may require two steps, one in order to obtain the planning decision and another for the building permit.

At the time of applying for a planning decision the developer must submit an EIA which establishes the impact of the project and proposes the delimitation of restricted use areas (*obszar ograniczonego użytkowania*) in the zones affected.

These zones serve as a basis for deciding compensation and mitigation measures as well as to decide land use restrictions where necessary. For instance, no hospitals or schools are allowed in the technical area surrounding an airport. The State representative in the region shall communicate this information to all the local governments affected, which shall have to adapt their local plans.

The application will be subject to an Environmental Impact Assessment procedure again, when the building permit applied for.

⁸ <http://europa.eu.int/scadplus/leg/en/lvb/e15106.htm>

4.2.2. *Other environmental controls*

Polish law also establishes specific permit requirements with regard to water, waste, air pollution and the operation of contaminating industries and activities. Building permits are issued on the condition that the developer obtains all permits, approvals, consents or opinions required by law.

4.2.3. *Institutions involved*

Environmental Impact Assessment is a matter within the competence of the Minister of the Environment, the regional state representative, or the head of the district administration, depending on the nature of the project. The majority of projects are dealt with at the “voivodship” level.

In order to assist these authorities, the law established a National EIA Commission and one EIA Commission in each region.

4.2.4. *Integration with other permits*

EIA is integrated within the planning and construction process.

Specific sectoral licences (such as the airport licence granted by the Civil Aviation Authority) are not connected with the environmental assessment and planning procedures.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

According to the Law on Civil Aviation, the Civil Aviation Authority is responsible for airport policy and planning, whereas a Ministry is responsible for control activities (at the time of writing, the Ministry of Infrastructure). Other than the spatial permits, only the Civil Aviation Authority licence is required in order to begin operations.

5.1.2. Instruments

There are no statutory master plans, although some airports, i.e. Katowice, are beginning to prepare this kind of document as a guide to future development.

Airports usually prepare an outline or “concept” (*koncepcja*) which is submitted to the Civil Aviation Authority in a relatively simple process. This type of document would be required to build a new airport, indicating the different investments.

5.1.3. Process

In order to include a new airport in the Register of Airports, the Civil Aviation Authority shall have to open a consultation process according to a legally established procedure.

No specific process is established for the preparation of airport master plans, since they are not regulated by law and only the “airport concepts” are submitted to the Civil Aviation Authority.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The Law on Civil Aviation establishes that ICAO Annex 14 requirements are binding when the text of the Annex itself states they are compulsory. In addition, recommendations are either accepted or completed with even more restrictive conditions.

5.2.2. Land reserve for future construction

The approval of planning decisions includes the “area of limited use”, which establishes limitations for the areas around an airport. No land reserve is required by Law.

5.3. Airport construction

5.3.1. *Permits and authorizations required for airport construction or development*

Airports require planning decisions when they are not included in local development plans and in all cases also require a construction permit.

When runways are longer than 2,100 m, all permits are granted by State representatives. The Law establishes that airports are within the list of “closed areas” (*Teren Zamknięty*) and therefore the spatial permissions are to be directly granted by the regional representative of the central government. Before receiving the Utilization Permit, which is issued by the Regional Construction Inspector (*Wojewódzki Inspektor Nadzoru Budowlanego*) who is also part of the Central Administration, the Airport requires the Licence from the Civil Aviation Authority (*Urząd Lotnisko Cywilnego*).

Prior to receiving the licence from the Civil Aviation Authority (ULC), an inspection is carried out by the Environmental Inspection Office (*Inspekcja Ochrona Środowiska*) and the Sanitary Office.

5.3.2. *Institutions and processes involved*

a) Authorization: Institutions involved in the airport construction process are:

- Planning Decision, if the project is not included in the local plan: The Regional Representative of the State (*Wojewoda*)
- Building permit: The Regional Representative of the State (*Wojewoda*)
- Civil aviation licence: The Civil Aviation Authority
- Utilization permit, if required: The Regional Construction Inspector

b) Supervision: Current legislation does not provide any specific regulations on the supervision of airport construction. That means that it follows the procedures of any other worksite.

5.3.3. *Integration with planning and environmental controls*

Normally, the process is relatively linear and in successive steps. In the case of projects which have not obtained a valid building permit (for example, in the case of the enlargement of Warsaw Okęcie when the court overruled the administrative decision) the utilization permit is not issued until the developer has obtained a valid building permit.

5.4. Airport operation

5.4.1. Operating permit

Airports are required to obtain prior authorization from the civil aviation authorities before they can begin operations.

In addition to the operation permit, air navigation services are essential to airport operation. In Poland, air navigation is the responsibility of the State, which performs this task through the Polish Air Traffic Agency (*Agencja Ruchu Lotniczego*).

5.4.2. Airport certification

Airport certification is regulated in Poland according to ICAO requirements. The Law on Civil Aviation defines the parameters for the Airport Manual.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

There are no specific laws for noise and air pollution. The issues of noise and air quality are subject to the Environmental Protection Law and to the separate regulations imposed by the Ministry of Infrastructure and the Ministry of Environment.

There is no specific noise legislation concerning airports other than that which applies to aircraft operation. This does not mean that airport noise has not been considered until now, since it has been a major issue in most Environmental Impact Assessments concerning new or enlarged airport facilities. The EIA for the enlargement of the airport of Warsaw has established a set of noise contours together with monitoring systems, a quarterly report is to be submitted to the representative of the central government in the region, and programs for the insulation of affected homes and, in some cases, compensation to homeowners.

In relation to air quality, Polish legislation is based on the Environmental Protection Act. There are no special provisions concerning airport operation since these infrastructures are not included in the list of potential air polluters.

6.2. Institutions

Noise and air pollution are considered environmental issues and therefore the institutions involved are the same institutions that deal with Environmental Impact Assessments.

6.3. Instruments

a) Planning:

In the case of airports, noise contours have been integrated into general spatial planning instruments. Areas of restricted use are established on the basis of the noise contours.

b) Land use restrictions:

The Law, as a rule, establishes a set of standards for noise exposure limits that are applied to the different types of land use.

The impact of airports on air quality is not specifically taken into consideration for the regulation of land uses, although it can be considered as one of the factors contributing to air pollution together with roads, factories, and any other sources.

c) Compensation:

The issue of compensation has not been raised yet with regard to development restrictions based on airport noise, since they are only applied indirectly via spatial planning.

In the vicinity of the Warsaw Airport, the Environmental Impact Assessments for its enlargement established the obligation to provide noise insulation for homes, to relocate residents or to compensate the owners for the loss of property value in areas affected by airport noise.

6.4. Integration with spatial planning

According to the Law on Spatial Planning, spatial plans must take noise pollution into consideration and must not allow residential development, hospitals, schools or cultural uses to be located in areas that do not meet established noise standards.

Noise standards are set for different types of areas according to the kind of land uses that are permitted, and the resultant “noise zones” are used to prevent the establishment of new activities that may raise the noise level beyond the accepted standard for the area or new activities that require a standard below what is accepted for the zone.

Air quality regulations are basically aimed at controlling emissions, and spatial plans do not consider, as a rule, contamination issues other than to separate industrial uses from other non-polluting uses.

7. CASE STUDY – FUTURE AIRPORT OF WARSAW

The “Polish Airports” State Enterprise (PPL) is planning to build a new airport of the Warsaw area once the current Frederic Chopin airport has reached its maximum capacity.

Frederic Chopin Airport handled 6.1 million passengers during 2004. A new passenger terminal is under construction that will allow the airport to handle 10 million passengers/year. A train feeding line leading to the airport is also planned.

This will probably be the maximum capacity for the airport, which would be very difficult to increase due to the short distance to the city (Warsaw Airport is located only 10km south-west of the city centre) and the associated noise disturbances.

This is why PPL and ULC, the Polish Civil Aviation Authority, have carried out several studies to find a new location for Warsaw Airport.

More than ten locations were initially considered, which were finally reduced to seven potential sites where a new large airport could be built (ranging from a brand new airport or expansion of an existing one).

Those seven locations were analysed and compared in terms of impact on the environment, among others. Two of them were finally selected, mainly on the basis of operational and environmental concerns.

A new study will be conducted during this year to choose the future location for Warsaw Airport. A Strategic Environmental Appraisal for both options will also be carried out. Environmental impact will be a key issue when selecting the new location.

COUNTRY CONTACTS

- **PPL “Polish Airports” State Enterprise**

Witold Piechota – Head of Environment Department

Jan Malawko – Head of Airport Planning

- **ULC – Polish Civil Aviation Authority**

Richard Malachowski – Vice President

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”⁹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

⁹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Rzeczpospolita Polska</i>	Republic of Poland
<i>Sejm</i>	Lower Chamber
<i>Senat</i>	Higher Chamber
<i>Voivodships</i>	Regions
<i>Powiats</i>	Districts or Counties
<i>Gminas</i>	Municipalities
<i>Powiat-grodzki</i>	City-district
<i>Wojewoda</i>	Representative of the central government
<i>Seymik</i>	Regional Assembly
<i>Starostwa</i>	President of district
<i>Powiatowy Inspektor Budowlanego</i>	District inspector of construction
<i>Wójt, Burgmistrz or President Miasta</i>	President of rural, semi-rural or urban municipalities, respectively
<i>PPL - Polskie Porty Lotniczy</i>	Public Enterprise "Polish Airports"
<i>NDP - Narodowy Plan Rozwoju</i>	National Development Plan
<i>Studium Uwarunkowa</i>	Planning study
<i>Plan Zagospodarowania Przestrzenny</i>	Local Spatial Development Plan
<i>Lokalizacja Inwestycji</i>	Decision on location
<i>Decyzja warunkach zabudowy</i>	Decision on building conditions
<i>Obszar ograniczonego uzytkowania</i>	Restricted use areas

<i>Koncepcja</i>	Concept
<i>Teren Zamknięty</i>	Closed areas
<i>ULC - Urząd Lotniska Ciwylnego</i>	Civil Aviation Authority
<i>Inspekcja Ochrona Środowiska</i>	Environmental Inspection Office
<i>Agencja Ruchu Lotniczego</i>	Polish Air Traffic Agency

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<http://europa.eu.int/eur-lex/lex/LexUriServ/LexUriServ.do?uri=CELEX:32002L0030:EN:HTML>
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http://europa.eu.int/eur-lex/pri/en/oj/dat/2002/l_189/l_18920020718en00120025.pdf
- Polish laws:
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<http://www.sejm.gov.pl/prawo/konst/angielski/kon1.htm>
 - Building Law
 - Access to Information on the Environment and Its Protection and on Environmental Impact Assessments
http://www.mos.gov.pl/mos/akty-p/dostep_eng.html



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

PORTUGAL

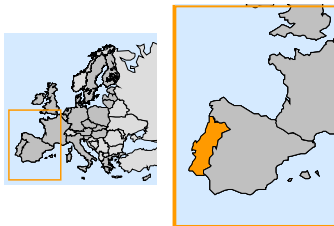


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PORTUGAL		Location Map																
Population	10.5 mill. (114.5 inhabitant per sq. Km)																	
Airports network Public airport network managed by ANA (Aeroportos de Portugal – 7 airports) and ANAM (Aeroportos e Navegação Aérea de Madeira – 2 airports)																		
Spatial planning system The spatial planning system is highly centralized although the Regional Coordination and Development Commissions (CCDR) act as deconcentrated offices of the Ministries involved in this field																		
<ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National level:</td> <td>Defines spatial planning law and instruments; approves national and regional planning instruments and ratifies local plans</td> </tr> <tr> <td style="padding-left: 20px;">Regional level:</td> <td>Regional Coordination and Development Commissions are responsible for drafting regional plans and reviewing Municipal plans</td> </tr> <tr> <td style="padding-left: 20px;">Local level:</td> <td>Municipalities draft and adopt local spatial plans</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National Program for Spatial Policy:</td> <td>Definition of broad territorial goals, including quantitative and qualitative objectives for strategic infrastructures</td> </tr> <tr> <td style="padding-left: 20px;">Sector Plans:</td> <td>Implement policies and programs with relevant spatial impacts</td> </tr> <tr> <td style="padding-left: 20px;">Special Spatial Plans:</td> <td>Used specifically in conservation areas</td> </tr> <tr> <td style="padding-left: 20px;">Regional Spatial Plans:</td> <td>Define urban systems, networks, infrastructures and services of regional significance</td> </tr> <tr> <td style="padding-left: 20px;">Municipal Director Plans:</td> <td>Comprehensive plans that encompass an entire municipality, including general zoning, major infrastructures and services. Legally binding on legal and natural persons</td> </tr> </table> • Process: The competent administration drafts the spatial plan which is analysed by a specific coordination commission. This commission is in charge of gathering the opinions of the agents involved, in order to achieve consensus. Then, the spatial plan is ready to be adopted and implemented 			National level:	Defines spatial planning law and instruments; approves national and regional planning instruments and ratifies local plans	Regional level:	Regional Coordination and Development Commissions are responsible for drafting regional plans and reviewing Municipal plans	Local level:	Municipalities draft and adopt local spatial plans	National Program for Spatial Policy:	Definition of broad territorial goals, including quantitative and qualitative objectives for strategic infrastructures	Sector Plans:	Implement policies and programs with relevant spatial impacts	Special Spatial Plans:	Used specifically in conservation areas	Regional Spatial Plans:	Define urban systems, networks, infrastructures and services of regional significance	Municipal Director Plans:	Comprehensive plans that encompass an entire municipality, including general zoning, major infrastructures and services. Legally binding on legal and natural persons
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Municipal Director Plans:	Comprehensive plans that encompass an entire municipality, including general zoning, major infrastructures and services. Legally binding on legal and natural persons																	
Regulation and permits Construction works within an airport undertaken by public entities or concessionaires do not need a building or environmental permit. Although there is no need to obtain a permit, the law requires that these works are subject to the prior opinion of the municipalities																		
Airport planning <ul style="list-style-type: none"> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Airport Master Plan</td> <td>Only for internal use</td> </tr> <tr> <td style="padding-left: 20px;">Special spatial plans</td> <td>For purposes of integration of airports in their territorial context</td> </tr> </table> • Spatial impact: the Law establishes aeronautical servitudes and municipalities are obligated to integrate them, and noise contours, into their land use planning. The law provides for the establishment of a land reserve for future airport construction or enlargement • Construction: No building or environmental permits are required • Operation: The INAC is in charge of authorizing and certifying new airports or aeronautical infrastructures 			Airport Master Plan	Only for internal use	Special spatial plans	For purposes of integration of airports in their territorial context												
Airport Master Plan	Only for internal use																	
Special spatial plans	For purposes of integration of airports in their territorial context																	
Airport noise and air quality <ul style="list-style-type: none"> • Noise regulation establishes 2 types of zones (sensitive and mixed) for the entire country. Municipalities have to adopt noise maps to define land uses • Air quality is regulated by national law and is controlled at the regional and local level. There is no specific legislation for airports 																		

1. SUMMARY

SPATIAL PLANNING SYSTEM

Instruments

The National Program for Spatial Policy (*Programa Nacional da Política de Ordenamento do Território*) sets very broad goals, including the definition of the quantitative and qualitative objectives to be attained with respect to the creation of strategic infrastructures. (Under preparation)

Regional Spatial Plans (*Planos Regionais de Ordenamento do Território*): Define regional infrastructure networks. Can include land reserves for future airports or expansion as well as for connection infrastructures.

At local level, the “Municipal Director Plans” (*Plano Director Municipal, PDM*) cover the entire municipality, must include the transportation network and infrastructures or land reserves serving the municipality or contemplated in a higher level instrument, as well as safeguarded areas for airports. PDMs must be ratified by the Council of Ministers and are binding on all parties.

Spatial plans do not regulate airport uses in detail and are not used for airport planning.

Coordination and Integration

Portuguese spatial plans are well coordinated due to the hierarchic organization of the planning instruments. The system is designed to provide a high level of coordination. In Portugal, the law requires a specific coordination institution for each planning instrument. Problems arise from the difficulties in achieving consensus and the lengthy timescales needed to adopt the plans.

Airports only take part in Coordination Commissions for municipal plans.

There is no mandatory integration of airport policies into land use planning.

REGULATIONS AND PERMITS

Construction permits

In principle all construction and urbanization activities must obtain a building permit from the municipality.

The law establishes an exemption in favour of building or demolition works undertaken by public entities and concessionaires in charge of airport

administration or operations when such works are directly related to their public mission. Projects must be submitted to the municipality for a non-binding opinion.

Construction works must be in accordance with spatial planning (even though no permit is required).

Environmental permits

EIA is regulated according to EU legislation.

The “SEA” Directive 2001/42/CE has not yet been transposed into Portuguese legislation, but the decision to build a new airport in the Lisbon area was evaluated at the planning stage in order to define the best location alternative.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The Portuguese government adopted in July 2005 a document entitled “Major Plan Options 2005-2009” (*Grandes Opções do Plano 2005-2009*) defining budgeting priorities in which made the decision to go ahead with the new airport at OTA and to improve infrastructures at all other locations, at the same time as the current development programme at Lisbon airport. The document lists a series of improvements to be implemented in all airports in general.

- Airport

Airport master plans are only drafted for internal use. Master plans are not subject to any statutory planning instrument. The integration of airports into their territorial context could take place through Special Plans.

Spatial impact

- Implementation of ICAO Annex 14 requirements

In order to protect the operation of airports and air navigation facilities, the law has established “aeronautical servitudes” which define safeguarded areas where building restrictions apply. The CAA must be notified of any building permit which is issued in these areas.

- Noise Impact

Municipalities must integrate noise contours into their land use planning.

Safeguarded areas with regard to noise were contemplated at the time of establishing land reserves for future airport construction at Ota.

- Risk prevention

Safeguarded areas must take into account the protection of persons and property on the ground, even though risk calculation has not been regulated.

- Land reserve for future construction

It is possible to establish land reserves for future airport construction or enlargement. The main planning instrument for this purpose would be a Sector Plan, although until now it has been achieved by means of special Acts of Parliament. According to the land reserve Acts, many activities can not be undertaken without the prior consent of the public enterprise in charge of airport management, “*Aerportos de Portugal*” (ANA).

Construction

No building permit is required for airport-related constructions undertaken by public entities in charge of airport administration or by concessionaires acting within the purpose of their concession.

No permit has been required for airport construction until now but new legislation will require the CAA’s authorization.

Operation

All the standard environmental permits are required regardless of the ownership of the land or the nature of the person or entity undertaking the activity.

No specific environmental permit is required for airport operation.

Airport operation requires an authorization from the CAA.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport noise must be taken into account by municipalities to define land uses and must be integrated with spatial planning. The law distinguishes 2 noise zones which must be defined in all local land use plans.

There are no specific provisions regarding airport noise planning or noise abatement measures.

Noise abatement plans must be drafted in case there are conflicts between airports and adjoining land use. The plans are adopted jointly by the Ministries in charge of environment and transportation.

Operation restrictions apply at night by setting a quota count system and a maximum cap of movements per week.

Air quality

There are no specific provisions for airport-related air quality.

Air quality is monitored in order to analyse airport environmental impact, although there is no specific legislation concerning airport-related air pollution.

2. CONTEXT

Portugal occupies the central and southwest part of the Iberian Peninsula and shares borders in the north and the east with Spain, while to the south and west lies the Atlantic Ocean.

Northern Portugal is mountainous, the highest part being the Serra da Estrela. South of Lisbon stretches the vast plains of the Alentejo region. A range of mountains separates the Alentejo from the Algarve, which runs along the south coast, and is one of the most popular resort areas with wide sandy beaches and attractive bays.

As an outstanding Nation, Portugal was a world power during the 15th and 16th centuries. Portugal lost much of its wealth and status with the destruction of Lisbon in a 1755 earthquake, the occupation by France during the Napoleonic Wars, and the granting of independence to Brazil in 1822. A 1910 revolution deposed the monarchy; for most of the next six decades repressive governments ran the country. In 1974, a military coup installed broad democratic reforms. The following year Portugal granted independence to all of its African colonies.

The country is divided into 18 districts including 2 autonomous regions(*): Aveiro, Acores(*), Beja, Braga, Braganca, Castelo Branco, Coimbra, Evora, Faro, Guarda, Leiria, Lisboa, Madeira(*), Portalegre, Porto, Santarem, Setubal, Viana do Castelo, Vila Real and Viseu.

The official language is Portuguese, although Mirandese is used locally.

Portugal has become a diversified and increasingly service-based economy since joining the European Community in 1986. The country qualified for the Economic and Monetary Union in 1998 and began circulating the euro on 1 January 2002 along with 11 other EU member economies. Economic growth has been above the EU average for much of the past decade, but fell back in 2001-03. GDP per capita stands at 76% of the EU average (22,400¹).



Figure 1. Map of Portugal

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices 2004
Source: EUROSTAT

Characteristic	Description
Population	10,474,700
Latitude / Longitude	39° 30' N, 8° 00' W
Land area	91,951 sq Km
Coastline	1,793 Km
Capital City	Lisbon (2.6 million)
GDP per capita (PPS at market prices)	17,100
GDP real growth rate	1.2 %
Inflation rate	2.5 %
Unemployment rate	6.7 %

Table 1. Portugal: Main facts and figures (2004) ²

2.1. Population and statistics

Currently, the population of Portugal is around 10.5 million with an average density of 114.5 inhabitants per sq Km.

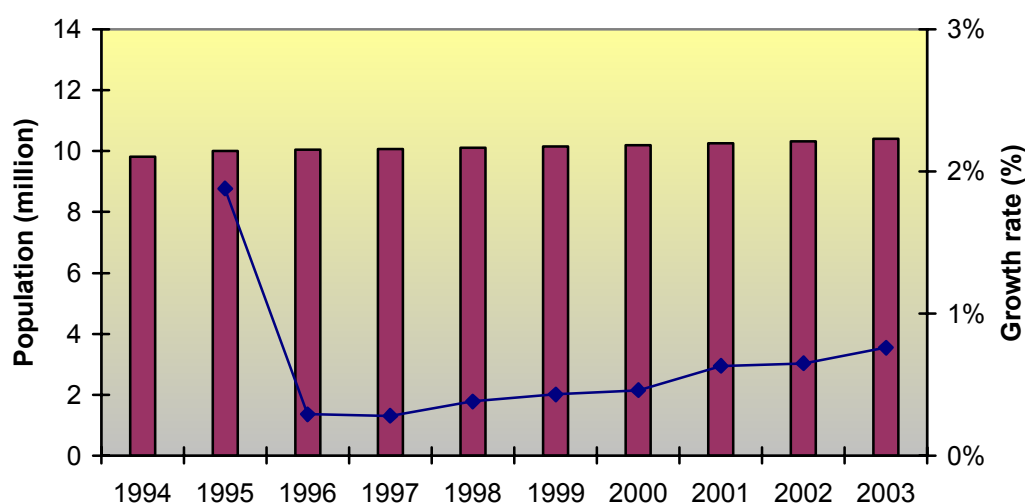


Figure 2. Population growth

During the last 10 years population trends in Portugal have been very stable, with growth rates under 1% due to a low birthrate of 10.9 births / 1,000

² Source: EUROSTAT

population (2004 est.) and net migration of 6.8 immigrants per 1,000 inhabitants (2002).

The median age in Portugal is 37.9 (2004 est.).

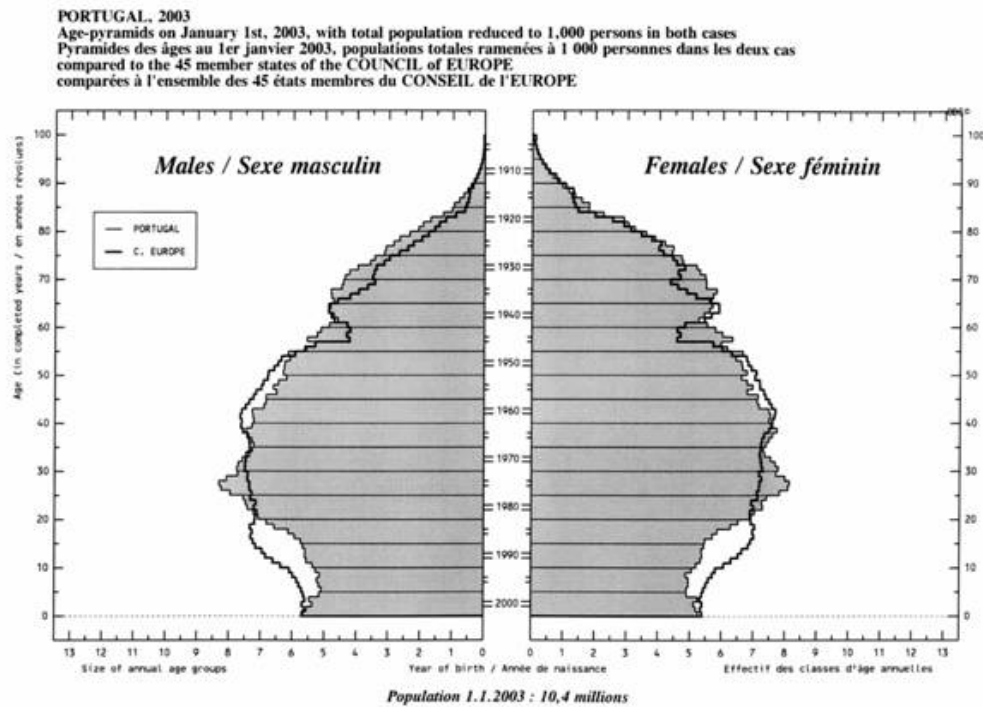
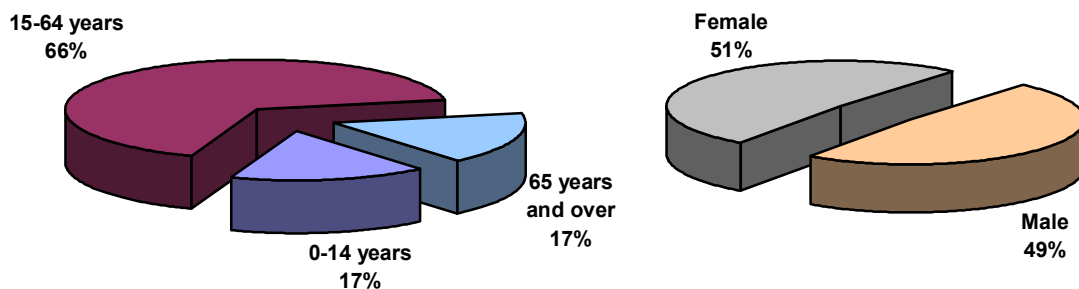


Figure 3. Age-pyramids (2003)³

The figure above shows the Portuguese birthrate recovery during the last two decades and the age structure, with the bulk of population between the age of 15 and 64 (66%).



Figures 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

The Portuguese Constitution⁴ has been amended several times since it was adopted in 1976. The last amendment dates from 24 July 2004.

Under this Constitution, the Government is divided into 3 branches: the Executive Branch with the head of state or the President Jorge Sampaio (since March 1996), the head of government or Prime Minister José Sócrates (since February 2005), and the Cabinet or Council of Ministers; the Legislative Branch composed of a unicameral assembly of the Republic with 230 members elected by popular vote to serve for four-year terms; and the Judicial Branch or Supreme Court.

The Portuguese Civil Aviation Authority (Instituto Nacional de Aviação Civil-INAC) was established under Decreto-Lei 133/98 of May 15. This public institution must supervise, regulate and inspect all issues dealing with civil aviation.

The main objective of INAC is to guarantee the correct functioning of all activities related to civil aviation. The functions of the Institute also cover the development of airport infrastructures and navigational aids, and advising the Government about land use planning and management around the Portuguese airports.

2.3. Main airports

Civil aviation in Portugal underwent a major change in 1998 with the division of the former company Empresa Publica Aeroportos e Navegação Aérea into two distinct companies, Aeroportos de Portugal (ANA) and Navegação Aérea de Portugal (NAV). ANA was made responsible for the operation of public airports (Lisbon, Porto and Faro on the mainland and João Paulo II, Santa Maria, Horta and Flores in the Azores), while NAV was put in charge of providing air navigation services.

In addition, Aeroportos e Navegação Aérea da Madeira, S.A, (ANAM) was created in 1991⁵ for the purpose of planning, developing and managing 2 airports in the autonomous region of Madeira.

There are 66 aerodromes in Portugal, but only 14 of them have paved runways with a length of over 2,400 m, and only 4 handled more than 1 million passengers during 2004.

⁴ Portuguese Constitution 1976 (last amended in 2004)

⁵ Decreto Lei n°453/91



Figure 6. Portuguese airport network

The following table shows the commercial passenger traffic and cargo for the main Portuguese airports during year 2004:

Airport	Passengers/year	Cargo (Tons)
Lisbon	10,705,000	99,700
Faro	4,644,000	1,500
Porto	2,944,000	27,300
Funchal (Madeira)	2,273,000	10,700
Joao Paulo II (Ponta Delgada)	832,000	7,300
Others	465,000	1,700
Total	21,863,000	133,900

Table 2. Main Portuguese airport data (2004) ⁶

⁶ Source: ATI (www.rati.com)

3. SPATIAL PLANNING SYSTEM

3.1. Institutions

3.1.1. National

National Government is responsible for drafting the National Program for Spatial Policy, as well as Sector Plans and Special Spatial Plans.

The National Program for Spatial Policy is approved by the National Assembly. Sector Plans and Special Spatial Plans are approved by the Council of Ministers (the Cabinet).

Regional Spatial Plans are approved by the Council of Ministers which is also in charge of ratifying all Municipal spatial planning instruments. The Government is required to ratify municipal plans until the National Program for Spatial Policy and the Regional Spatial Plans are adopted, as well as any local plans which are not in accordance with existing laws or spatial plans.

3.1.2. Regional

Portugal has only 2 Regions with some degree of autonomy at the time of writing, the Azores and the Madeira Islands. The rest of the territory is currently divided into 18 districts grouped into 5 administrative regions (Norte, Centro, Lisboa e valle do Tejo, Alentejo, and Algarve), which play an important role in spatial planning and environmental control acting as deconcentrated offices of the Central Government.

Each of the 5 regions has a “Regional Coordination and Development Commission” (Comissão de Coordenação e Desenvolvimento Regional, CCDR) which acts as a deconcentrated office of the Ministry in charge of spatial planning and development (Ministério das Cidades, Ordenamento do Território e Ambiente).

With regard to spatial planning, the CCDRs play an important role since they are responsible for drafting the Regional Spatial Plans. CCDRs must be consulted prior to the adoption of Intermunicipal and Municipal Plans and preside over the Coordination Commissions that are established to insure intergovernmental coordination in the process of drafting and adopting all spatial planning instruments.

When they issue their opinions, the CCDRs must take into account issues regarding compliance with existing legislation and coherence with objectives and regulations defined in other spatial planning instruments.

3.1.3. *Local and area wide*

Metropolitan areas are now regulated in Portugal by Law 10/2003, of 13 May 2003. Metropolitan authorities act as coordinators in the field of spatial planning, but they have no power to draft or approve spatial plans for their territory.

At local level, municipalities draft and adopt municipal spatial plans, but they still require final ratification by the Council of Ministers after the CCDR has given its opinion.

3.2. Instruments

The current spatial planning system in Portugal is defined in Decree-Law 380/99, of 22 September 1999, amended by Decree-Law 310/2003, of 10 December 2003. This legislation provides a complete set of instruments ranging from national to sub-local level, covering both general and specific purposes.

3.2.1. *Strategic plans or policy documents*

a) National

At the top of the planning hierarchy there is a National Program for Spatial Policy (*Programa Nacional da Política de Ordenamento do Território*), which sets very broad goals, including the definition of the quantitative and qualitative objectives to be attained with respect to the creation of strategic infrastructures.

National Government can adopt "Sector Plans" (*Planos sectoriais*) in order to programme or implement policies with relevant spatial impacts, including the location of large public undertakings. It has been pointed out that this instrument could clearly be used for the creation or development of airports.

The third national planning instrument are the Special Spatial Plans (*Planos Especiais de Ordenamento do Território*), designed only for nature conservation purposes or for special areas such as estuaries and coastal areas.

All these instruments are binding on public administrations (including Municipalities) but have no direct effect on private citizens. The hierarchical nature of the Portuguese planning system also implies that municipal plans must be in accordance with the provisions of the National Program or Sector Plans, and therefore they must include land reserves for the construction of infrastructures when it is required by strategic planning instruments.

b) Regional

Regional Spatial Plans (*Planos Regionais de Ordenamento do Território*) can be prepared either for an entire region or for sub-regional areas, as in the case of the metropolitan area of Lisbon.

According to the law, regional spatial plans must include:

- Definition of the regional structure of the urban system, networks, infrastructures and services of regional significance
- Location objectives and criteria for activities and large public investments
- Measures to integrate, at regional level, the policies arising from the National Program for Spatial Planning or Sector Plans with municipal and intermunicipal plans.
- Determination of the regional environmental policy
- Guidelines for areas under special statute, such as agricultural reserve areas, rivers, ecological reserves and risk zones
- Implementation of protection measures for the historic and cultural heritage.

In the case of the Regional Spatial Plan for the Metropolitan Area of Lisbon (PROTAML), there are specific provisions anticipating the accessibility requirements of the new airport, which includes the establishment of a high-speed rail connection with Lisbon, although the airport itself lies beyond the boundaries of the sub-region covered by the Plan.

Regional plans are established by the Regional Coordination and Development Commissions, and once approved by the Council of Ministers they become legally binding on all public institutions, and must be observed in the preparation of municipal spatial plans.

c) Local

At local level, the Law contemplates the possibility of adopting “Inter-municipal Spatial Plans” which can encompass all or part of 2 or more municipalities. These plans are not designed as comprehensive planning instruments, but rather aim to articulate local strategies regarding environmental protection, infrastructures, networks and public facilities as well as economic activity and land development patterns.

These plans are of a strategic nature and can be drafted and adopted by the municipalities or a common institution established by all the participating localities, but they require final ratification from the Council of Ministers.

As befits their strategic nature, these inter-municipal plans are only binding on public institutions.

3.2.2. *Local (framework) plans*

At local level, the framework for development throughout the municipality is provided by “Municipal Director Plans” (*Plano Director Municipal*, PDM) which must be adopted by all municipalities and basically fit into the comprehensive “master plan” model, although they may include both strategic elements and regulatory provisions in areas where no further planning is considered necessary.

According to article 69 of Decree Law 380/99, municipal plans shall establish general land use arrangements, and shall define options for urban development models and for the organization of networks and urban systems together with parameters for land use intensities and environmental quality.

There are no specific provisions in the law with regard to airports, since Municipal Director Plans are only required to include the identification of the transport network. In the case of future airport developments, the Municipal Plan Director is obligated to integrate them, if they have been included in a national or regional spatial planning instrument or a land reserve has been established in some other way. Airport servitudes and other protection measures established in the vicinity of these infrastructures must also be integrated into the municipal plan pursuant to paragraph n) of article 85 in Decree-Law 380/1999.

In principle, a local plan can not be approved unless it meets the above requirements, and shall not be ratified by the Council of Ministers. Nevertheless, the law has provided a certain degree of flexibility and allows municipal plans to be ratified even when they do not comply with the provisions of regional or sector plans providing the opinion of the Coordination Commission is in favour of such ratification.

Framework plans are binding on private parties.

3.2.3. *Regulatory (detailed) plans*

Apart from the regulatory content that may be included in the Municipal Director Plan, there are 2 types of regulatory land use plans, “Urbanization Plans” (*Plano de Urbanização*) and “Detailed Plans” (*Plano de Pormenor*).

The main objective of Urbanization Plans is to define the spatial organization of part of a municipality, mainly in urban areas, although they may include part of the surroundings. In some cases these plans have been used to regulate, in detail, an entire city and in others they have been the instrument chosen for the development or redevelopment of a specific area within a municipality.

Detailed Plans are intended to provide design regulations for architectural or infrastructural projects and other detailed specifications for the implementation of the Municipal Director Plan or the Urbanization Plan.

In principle, these detailed plans must be in accordance with framework plans, however, they can be ratified even though they do not comply with the plans, whenever the Regional Coordination and Development Commission issues a favourable opinion. In this case, those aspects of the framework plan which are not in conformity with the detailed plans shall automatically be abrogated.

Both Urbanization Plans and Detailed Plans are binding on private parties.

These kinds of plans have not been used for the purposes of airport development but could include land reserves for such purpose.

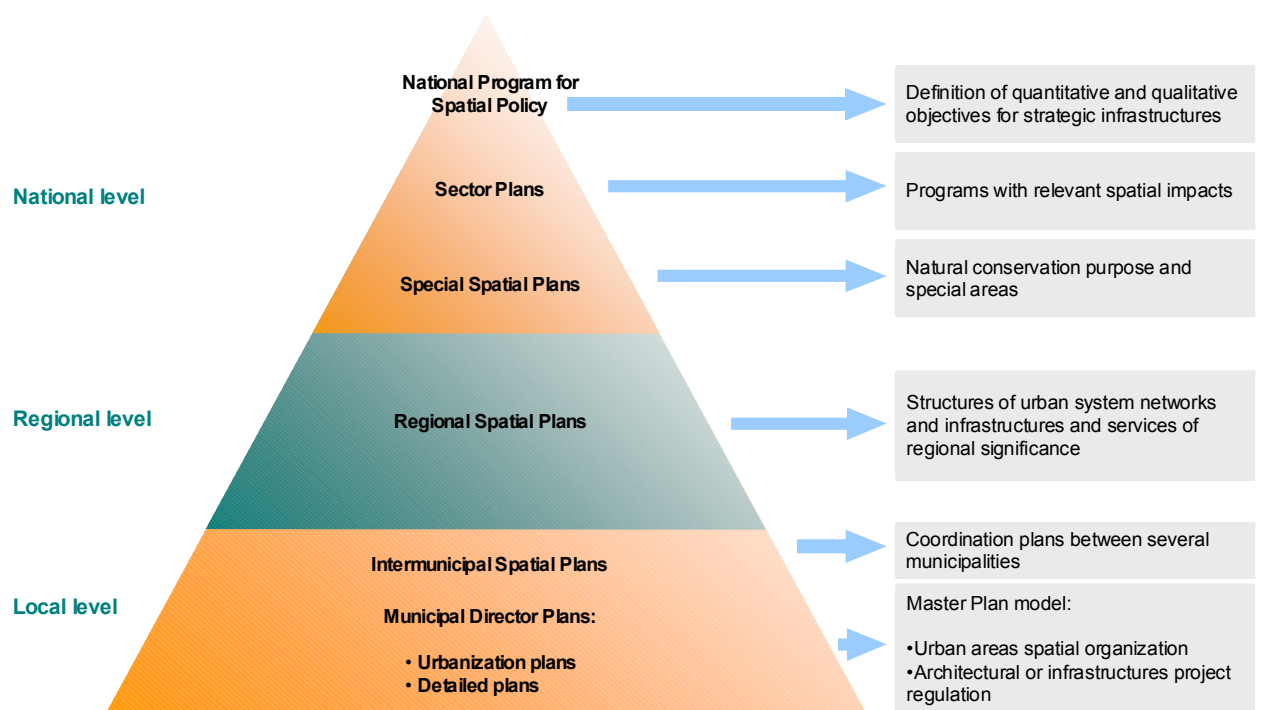


Figure 7. Planning instruments

3.3. Process

The planning process in Portugal is designed to achieve a considerable degree of consensus, or at least participation. The law establishes a set of requirements aimed at ensuring that relevant institutions are heard and that citizens also have an opportunity to express their opinions.

3.3.1. *Inter-government consultation*

Decree Law 380/1999 sets out, in articles 20, 21 and 22, the basic principle for coordination within and between the administrations in all their activities concerning spatial planning, and regulates the process to be followed so that each type of plan is adopted in a similar manner. For each planning instrument the law includes specific provisions regarding:

- Drafting process
- Coordinating Institutions established to oversee the process
- Consensus building
- Citizen participation
- Adoption
- Ratification (in the case of local plans)

For each planning instrument, the law requires that a specific coordination institution be established. In the case of the National Program for Spatial Policy, this role is assigned to a “Consultative Commission”, established by the Council of Ministers which includes representatives from the Autonomous Regions, municipalities and relevant economic, social, cultural and environmental interests. In the case of Sector Plans, all concerned municipalities have to be heard, and a coordination commission may be established with representatives from the relevant interests depending on the nature of the plan.

Regional Spatial Plans, which are drafted by the Regional Coordination and Development Commissions, require the establishment of a “Joint Coordination Commission” with representatives from Ministries, municipalities and other public entities as may be deemed advisable, according to the area covered by the plan, as well as representatives from economic, social, cultural and environmental interests.

Regional plans are sent, together with the opinion of the Joint Coordination Commission, to all administrations who have expressed their disagreement, granting them a period of 30 days in which to formalize their opinions. After receiving the opinions, the Regional Coordination and Development Commission will promote meetings in order to overcome the objections and to reach a consensus on the plan during the following 30 days.

In the case of Municipal plans, a Joint Coordination Commission is also established, with representatives from the State Administration (including defence, environment, transport, health, agriculture, heritage, etc.), Autonomous Regions, the Municipality and other public entities whose participation is considered relevant, as well as representatives from economic, social, cultural and environmental interests. The Order (Portaria) 290/2003, of April 6, mandates the participation of airports in these commissions, since it specifies that the representation of the State Administration shall include those entities that have jurisdiction over special areas, or areas subject to public servitudes or restrictions.

The purpose of these coordination commissions is to oversee the plan-making process and to facilitate coordination among administrations and other interested parties, providing a space where consensus can develop and all participants can provide information and express their points of view. At the end of the process, the commission has to issue a written opinion, signed by all the participants, expressing the views of the commission and of the different members. This opinion has to consider whether the plan is in accordance with all relevant legislation as well as the degree to which the proposed solutions are considered adequate. The opinion shall be attached to the plan when it is submitted to the consideration of the institution that has to adopt it. The opinion of these commissions is not legally binding but must be taken into consideration by the government in making the final decision.

The law also states that dissenting members of the coordination commission shall be heard by the Municipal Chamber, and the opinion of the commission shall be sent together with the plan to the Municipal Assembly for adoption.

Urbanization Plans and Detailed Plans do not require the establishment of a joint coordination commission, but the Regional Coordination and Development Commission is in charge of promoting the participation of all interested entities, which are invited to provide submissions in writing. A written opinion is issued at the end of the process.

As in the case of regional plans, all local plans are also subject to a concertation process in which those entities not in accordance with the planning proposal may express their opinions in writing and are invited to consensus-building meetings in order to seek a common ground.

Prior to the adoption of all local plans, the Regional Coordination and Development Commission shall issue an opinion in writing that they are in conformity with the law and other spatial planning instruments.



Figure 8. Coordination institutions

3.3.2. Policy Integration

There is no mandatory integration of airport policies into land use planning, other than the requirement that municipal plans must delineate areas that have been formally designated for airport development or are subject to airport servitudes.

3.3.3. Citizen participation

All spatial planning instruments are subject to citizen participation in Portugal.

The national spatial planning program is submitted to public exhibition once the consultative commission has issued its opinion. The proposal, together with all the opinions issued during the drafting and consensus processes, is to be made available to the general public for a period of not less than 60 days. During this period the Government must also request the opinion of at least 3 university or scientific institutions specialising in the field of spatial planning.

Sector Plans and regional spatial plans are treated in a similar manner, although the citizen participation period can be reduced to 30 days and there is no requirement to invite the opinion of university or scientific institutions.

In the case of local plans, citizens are invited to give their opinions both at the beginning of the planning process, when they can make suggestions or provide information on any subject pertaining to the plan, and at the end of the process, after the Regional Coordination and Development Commission has formulated its opinion and before the plan is adopted by the Municipal Assembly. The Municipality has to provide a formal reply to all the suggestions and requests submitted in writing regarding the need for conformity with other planning instruments, incompatibility with other plans, programs or projects that should be taken into consideration, non-compliance with existing legislation or infringement of personal rights.

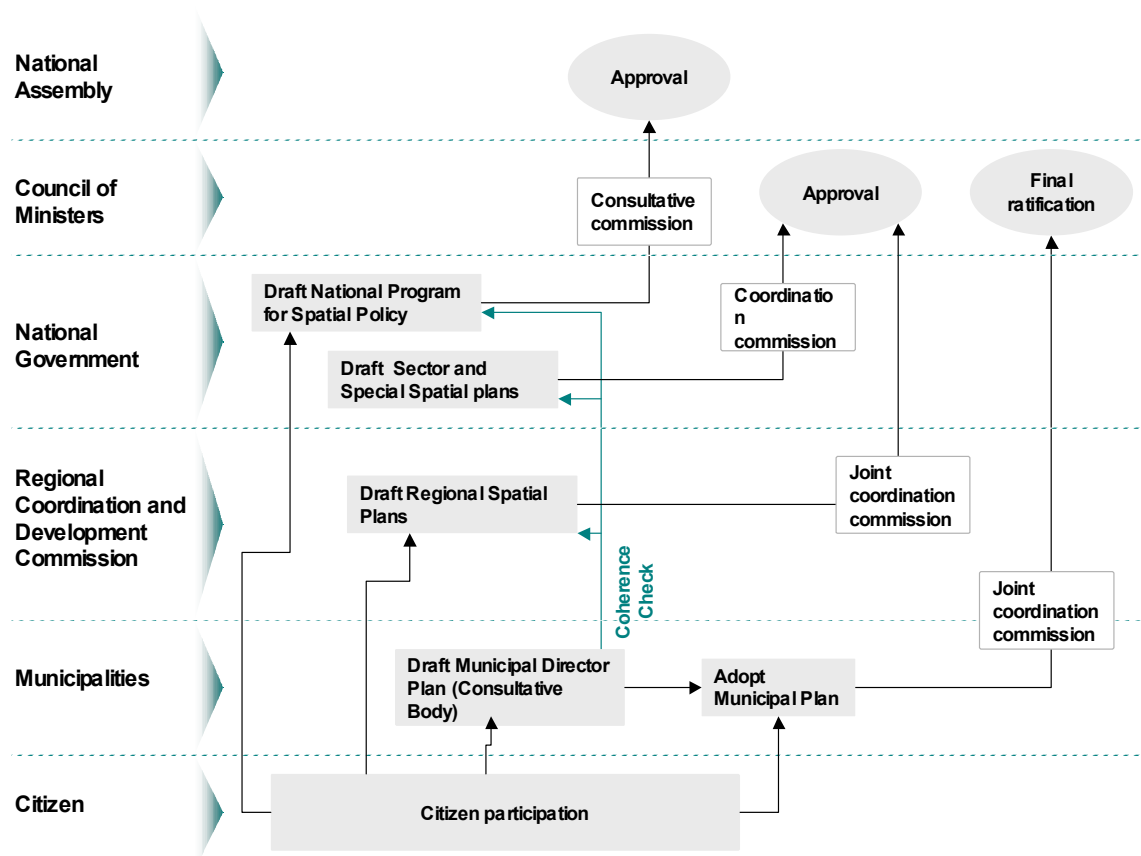


Figure 9. Spatial planning process

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. Activities subject to development control

In principle, all construction and urbanization activities must obtain a building permit according to article 4 of Decree-Law 555/99 of December 16, 1999.

4.1.2. Exceptions or exemptions

In spite of the general requirement established in article 4, the same Decree-Law establishes an exemption in favour of building or demolition works undertaken by public entities in charge of airport administration, when such works are directly related to their public mission.

Identical exemption is granted to works undertaken by concessionaires within the airport for construction related to the purpose of their concession.

4.1.3. Institutions involved: inter-government relations

Building permits are granted by municipalities, although in the case of airport construction, as well as other public infrastructures, no permit is required.

Although a building permit is not necessary in these cases, the law requires that these works are subject to the prior opinion of the municipality. The municipal opinion is not binding and must be issued within a period of 20 days.

4.1.4. Relationship with planning

A building permit can not be issued unless the proposed works are fully in accordance with the provisions of all applicable planning instruments. Although airport works do not require a building permit, they must, nevertheless, also be in accordance with existing planning instruments.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

The Environmental Impact Assessment (EIA) system in Portugal follows the requirements of EU Directives very closely, and does not include any further requirements with respect to airports.

Plans do not require environmental assessment, since Directive 2001/42/EC⁷ (the “SEA” Directive), has not yet been transposed (July 2005).

Despite the fact that plans are not yet required to undergo the environmental assessment procedure, in 1998 the Government decided that the plans for the new Lisbon airport would be subject to an EIA and established an Environmental Impact Assessment Commission for this purpose. Subsequently, at the time of establishing land reserves for the future Lisbon airport, the location studies were subjected to an evaluation process following the procedures and requirements established for Environmental Impact Assessments. The Commission was reinforced in 2002 and was made responsible for controlling the entire process, acting both as a consultative and supervisory body. It will also be considered the competent body for the evaluation of the airport project and all other related projects which also require Environmental Impact Assessment, namely those dealing with road and railway infrastructures as well as power and fuel supply facilities.

4.2.2. *Other environmental controls*

Airport operations do not require environmental permits, but activities conducted within airports are subject to the applicable legislation regarding water, waste, etc., and must obtain the specific licences required for waste management and water discharge.

4.2.3. *Institutions involved*

Environmental permits for waste management and water discharge are issued by the Regional Coordination and Development Commission.

4.2.4. *Integration with other permits*

Environmental permits are only integrated in the case of industrial activities. Decree-Law 69/2003 regulated industrial permits and established integrated procedures covering not only environmental issues but also major accident risks, and health and safety issues. Industries are classified into 4 groups, the first includes projects that are subject to EIA and those under the Integrated Pollution and Prevention Control (IPPC) legislation. Airports are not included in this legislation and, consequently, there is no integration of the different environmental permits required to operate an airport.

⁷ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

In the case of the new Lisbon airport, the Environmental Impact Assessment Commission will handle all EIA procedures, including infrastructures and facilities not included in the airport project which are subject to independent evaluation.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Airport policy and regulation in Portugal is formulated by the National Institute for Civil Aviation (INAC)⁸, which has all the regulatory functions to assist the Government in preparing airport policy as well as for the authorisation and licensing of civil aviation infrastructures.

In the case of the new Lisbon airport, the government established a public corporation under the name of NAER (Novo Aeroporto S.A.) for the purpose of undertaking the preparation and implementation of decisions made in the process of planning and building the new infrastructure.

5.1.2. Instruments

Airport development is not subject to any statutory planning instrument, but rather takes place on a project-by-project basis within the framework of the growth projections estimated by the airport management, which may be included in a master plan (plano director de desenvolvimento) drafted only for internal use.

Within the Ministry of Public Works, Transport and Housing (Ministério das Obras Públicas, Transportes e Habitação) and INAC, it has been suggested that the integration of airports in their territorial context should take place through the above mentioned Sector Plans.

5.1.3. Process

No process can be described since there are no formal airport planning documents.

5.2. Spatial impact

5.2.1. Aeronautical servitudes

In order to protect the operation of airports and air navigation facilities, Portuguese law has allowed since 1931 the establishment of aeronautical servitudes in safeguarded areas. The current regulation dates from 1964⁹ and offers the possibility of establishing either “general” or “particular” safeguards. General safeguards entail the prohibition to undertake, without the prior approval of the civil aviation authority (INAC), any construction, even if

⁸ Instituto Nacional de Aviação Civil (INAC)

⁹ Decreto-Ley nº 45987 of 22nd October 1964

underground, and to excavate; build fences; plant trees or shrubs; deposit dangerous or explosive materials; erect poles or aerial lines of any kind; install luminous devices; install electrical devices other than those purely domestic; and any other works or activities that may affect air navigation safety or hinder the efficiency of civil aviation support facilities.

In areas where these activities have been regulated, it is not necessary to obtain prior authorisation and it is sufficient to merely inform the civil aviation authority.

This general regulation must be complemented by a Decree for each airport which specifies the exact limits of the servitude with the dimensions of both the surface area and the height, and sets specific rules to apply in certain areas regarding building heights, construction materials or acceptable land uses.

The establishment of aeronautical servitudes does not necessarily lead to compensation, since the requirement to provide compensation only arises when the owner is denied the right to continue an existing activity or when a construction needs to be demolished as a result of a new servitude. In the limited number of cases where compensation is necessary, it is calculated by applying the same rules used for expropriation purposes.

5.2.2. Noise Impact

Noise impacts had already been broadly contemplated in article 15 of Decree-Law No. 45987/1964, which stated that aviation authorities shall inform land use planning services and municipalities of the areas affected by “uncomfortable” noises so that these areas can be taken into consideration in drafting spatial plans.

However, it was not until 1987 that noise pollution was regulated by means of Decree-Law 251/87 of June 24, amended by Decree-Law 292/2000 of November 14, which adopted the “Noise Regulations” (Regulamento Geral do Ruido) currently in force with some modifications.

The spatial impact of airport-related noise is represented by the noise contours that all municipalities are obligated by law to prepare and integrate into their land use planning instruments, as described later in this report. Although there are no noise safeguards in mainland Portugal, noise is a factor that is taken into account when defining specific servitudes for each airport, as well as when INAC is consulted on construction or other activities to be undertaken in servitude areas. Likewise, it should be noted that at the time of defining the boundaries of the land reserve for the future airport of Lisbon, noise was also considered in order to prevent development in the areas that would be subject to incompatible acoustic pollution.

5.2.3. *Risk prevention*

There are no specific third-party risk prevention measures, but aeronautical servitudes are established not only to ensure the safe and efficient operation of airports and air navigation facilities, but also for “the protection of persons and property on the surface” (article 2 of Decree-Law 45987/1964). Evidence of this concern may be found, for instance, in Regulatory Decree (Decreto Regulamentar) 7/83 of February 3rd, which defines the aeronautical servitudes for Porto airport and requires prior consent, in article 7, for the construction of schools, hospitals, sports centres or other facilities which may attract large numbers of people in the vicinity of the airport.

5.2.4. *Land reserve for future construction*

Establishing land reserves for future airport construction (or any other public infrastructure for that matter) can be done either by means of spatial planning, Sector Plans being the instrument of choice, or through specific legislative measures. Up to now the Portuguese Government has opted for the second possibility and has promoted legislation to reserve land for the construction of airports (Ota, Madeira, Faro, Porto) and radar facilities.

Land reserves are established by imposing “preventive measures” on areas that will eventually be encompassed by a land use plan or public project, according to the provisions of articles 7 to 9 of Decree-Law 794/76, of November 5th. The purpose of such measures is to prevent changes in existing conditions that may compromise the implementation of the plan or project or make it more difficult or expensive.

A good example of this kind of measure is the creation of a new airport in the Lisbon region, an issue that has been discussed since the early 1970s and which led the Government to adopt Decree 42/1997, of August 21st, in order to preserve land in the areas of Ota and Rio Frio which had been designated as possible candidates for the future infrastructure site.

According to this Decree, a long list of activities, including the development of new settlements, construction and reconstruction or alteration of buildings, facilities which might interfere with navigation systems, as well as land movement or tree cutting, can not be undertaken without the prior consent of the public enterprise in charge of airport management “Aerportos de Portugal” (ANA).

The reserve was established for 2 years, but in 1999 it was extended for a further year and the area around the possible site in Ota was enlarged, as the Rio Frio location was rejected after an Environmental Impact Assessment. A change was also made regarding the agency in charge of vetting proposals in the area and the Portuguese civil aviation authority (INAC) was designated for that purpose. In the year 2000, Law 3-B/2000 enabled the Government to

extend the period for another 3 years (which was done by means of Decree-Law 170/2000), and in 2003, the reserve was again extended for a further 3 years, beginning on 22 August.

Although the wording of the legislation establishing these land reserves has been rather vague in relation to the criteria to be used to define the area, the 1999 Decree (Decreto 31-A/99 of 20 August) states that the protected area was enlarged in order to preserve the situation as it was at the time of the environmental impact assessment, and specifically mentions noise and air pollution as the factors that have motivated the enlargement.

5.3. Airport construction

5.3.1. Permits and authorisations required for airport construction or development

- a) Building permit: No building permit is required for airport-related constructions undertaken by public entities in charge of airport administration or by concessionaires acting within the purpose of their concession. The wording of the law suggests that the permit would be required if the airport was developed by a private entity on private land.
- b) Environmental permits (water, waste, air, etc.): All environmental permits are required regardless of the ownership of the land or the nature of the person or entity undertaking the activity.
- c) Other permits: No specific permits are required for airport construction at this time, although there are plans to introduce new legislation that would require airport construction to be authorized by the Portuguese civil aviation authority (INAC) and would establish some general requirements, i.e. distance to existing settlements. Fuel storage facilities are subject to the ordinary requirements arising from legislation regulating the risk of major accidents.

5.3.2. Institutions and processes involved

- a) Authorisation: not applicable
- b) Supervision: not applicable

5.3.3. Integration with planning and environmental controls

Not applicable. Environmental Impact Assessment is required for construction projects.

5.4. Airport operation

5.4.1. Operating permit

In order to operate a new airport or runway it is necessary to obtain prior authorisation from INAC.

Although no legislation has yet been adopted, INAC applies the ICAO Annex 14 requirements. Environmental issues are not considered at this stage.

5.4.2. Airport certification

Airport certification is within the competence of INAC, although legislation has not yet been adopted. Environmental issues are not considered for airport certification, which adheres strictly to the ICAO requirements.

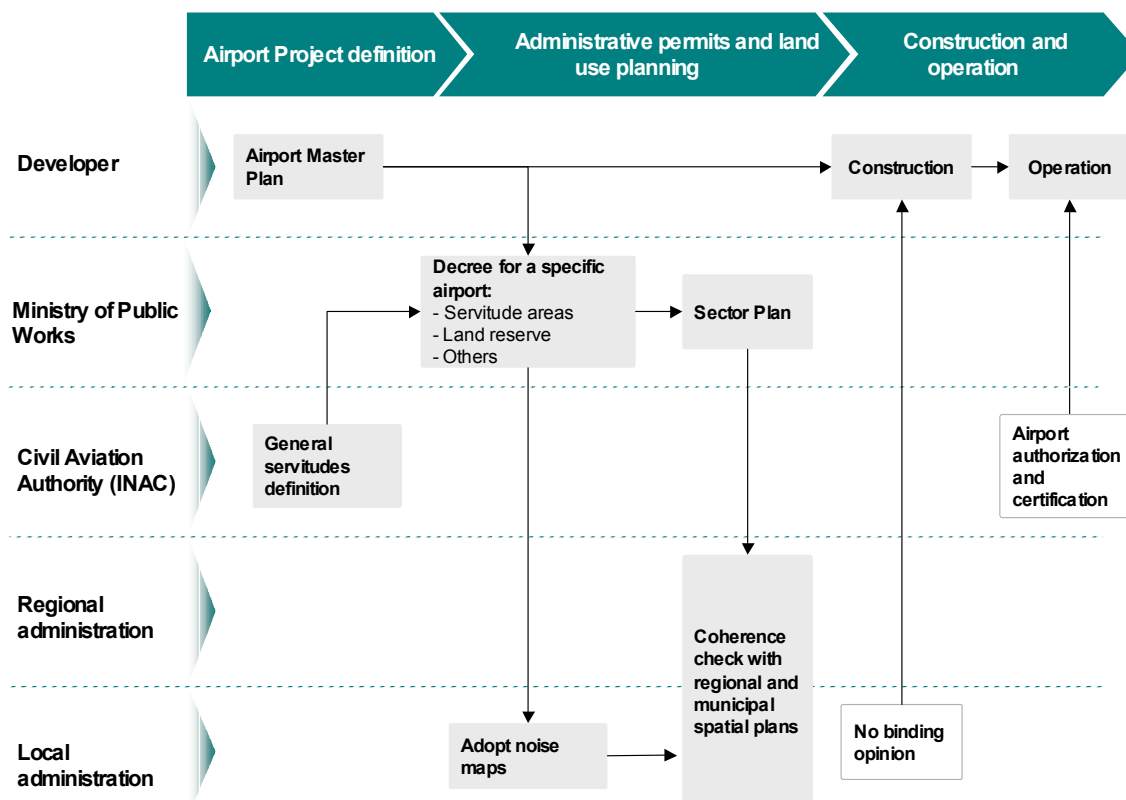


Figure 10. Airport planning and construction process (the Sector Plan and the rest of the process have only been used for the future airport in OTA)

6. AIRPORT NOISE AND AIR QUALITY

Noise has been the object of considerable attention in Portugal for the past few years and airport noise has been regulated to comply with some EU Directives, as evidenced in the following paragraphs.

Air quality, on the other hand, has not yet been considered an issue with respect to airports, and the prevailing view is that there are no special problems in this area. In Lisbon, for instance, there seems to be agreement between airport and local authorities that air quality levels within the airport are better than those in the surrounding urban areas.

6.1. Legislation

The current legislation regarding noise is contained in the “Noise Regulations” (Reglamento Geral do Ruido) adopted through Decree-Law 251/87 of 24 June, and amended by Decree-Law 292/2000 of 14 November.

Airport noise was specifically contemplated in the Noise Regulations and has been regulated in Decree-Law 293/2003, of 19 November, which transposes Directive 2002/30/EC¹⁰ (the “noise-related operating restrictions” Directive). Directive 2002/49/EC¹¹ (the “noise” Directive) has not yet (July 2005) been transposed into Portuguese legislation.

Air quality is regulated by Decree-Law 276/99, of 23 July, Decree-Law 111/2002, of 16 April, Decree-Law 193/2003, of 22 August and Decree-Law 78/2004, of 3 April. Emission limits were also established through Portaria 286/93, of 12 March, as amended in 1994, 1996 and 1997.

There is no specific legislation concerning airport air quality.

6.2. Institutions

All levels of government are involved in noise control and prevention. Municipalities play an important role by drafting noise contour maps which are subsequently integrated into land use planning instruments, and also play a general role in the implementation of noise pollution control policies through the development control system.

¹⁰ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

¹¹ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Regional Coordination and Development Commissions, as deconcentrated offices of central Government, are instrumental in the implementation of environmental law and are expressly empowered to control noise pollution.

With respect to airport noise, the main powers lie in the hands of the Portuguese civil aviation authority (INAC), since it is the civil aviation authority that is in charge of proposing all legislation regarding this matter and prosecuting all infringements of noise legislation in relation to aviation.

The ministry in charge of the environment, through the National Institute for the Environment, also plays a major role since it endorses municipal noise contour maps¹² and participates in the drafting of airport-specific noise regulations which must be jointly adopted by the two ministries in charge of environment and airports¹³.

Air quality is controlled at local level by the Regional Coordination and Development Commissions, although municipalities, as in the case of Lisbon, sometimes operate their own network of monitoring stations.

The standards for both noise and air quality are set by means of national legislation but Municipalities are enabled by article 7 of the Noise Regulations to establish more stringent noise requirements in historical centres and specific areas of the municipality where this is justified.

6.3. Instruments

a) Noise Planning

Municipalities are responsible for the adoption of “Noise Reduction Plans” whenever an area is exposed to noise levels above the limit established by the law. The law does not say much about the contents of these plans. They must include both regulations and a programme of specific measures or investments, and can be implemented in several phases, beginning when permissible noise values are exceeded by 5 dB(A). There is still limited experience with these kinds of plans, which tend to be a collection of measures, like the establishment of noise barriers.

In the case of airports, article 5 of Decree-Law 293/2003 requires that prior to the adoption of noise-related operation restrictions for a specific airport, it is necessary to prepare noise reduction and monitoring plans which are submitted to the National Institute for the Environment. These

¹² The National Institute for the Environment financed and coordinated in 2003 a study and a pilot project on noise maps for the municipalities

¹³ References to the specific names of the Ministries may not be useful since they may change over time.

plans are intended to provide the information necessary to evaluate the impact of future operations. Such plans have already been adopted for Lisbon airport, where operations were regulated in March 2004. Noise reduction and monitoring plans have also been prepared for each of the remaining ANA airports.

b) Land use restrictions:

The Noise Regulations of 2000¹⁴ established 2 types of zones for the entire country: “Sensitive Zones”, which can not be exposed to noise exceeding 55 dB(A) during the day and 45 dB(A) during the night, and “Mixed Zones” where the limits are 65 dB(A) in daytime and 55 dB(A) at night. These two zones must be integrated into spatial planning and will be used as a basis for land use zoning.

Noise-based land use restrictions are publicized by integrating them into the spatial plans. There is no special provision to bring them to the public notice separately, or to publicize the noise maps adopted by the municipalities which are the basis for the delineation of noise zones.

Air quality should also be taken into consideration at the time of establishing spatial plans, but there is no specific provision.

c) Compensation:

Noise-based zoning does not give rise to compensation, since it is integrated into spatial planning and land use regulations are not normally subject to compensation.

Mitigation measures implemented to date have involved, among other things, the erection of noise barriers and the establishment of operating restrictions at Lisbon airport, according to Portaria 303-A/2004, of 22 March 2004.

6.4. Integration with spatial planning

Noise considerations must be integrated by law into spatial planning, as the Noise Regulations require municipal plans to differentiate “sensitive” from “mixed” zones and to regulate land use accordingly.

Sensitive zones can only include uses like housing, hospitals, schools, parks or recreation facilities, while the rest are considered mixed zones, where land shall be zoned for commercial and tertiary uses. There are no specific legislative provisions which apply to industry or infrastructures.

¹⁴ Decree-Law 292/2000

In order to implement these requirements, municipalities first have to adopt noise maps, after consultation with the National Institute for the Environment, and then to divide their territory into sensitive and mixed zones taking into consideration current and projected land uses as well as noise exposure. The result is used as a basis for land use zoning in the Municipal Director Plan and is further developed in Urbanization Plans and Detailed Plans.

In localities where municipal plans have not yet been adopted or they were drafted before these requirements came into force, new development projects are required to include noise projections and must justify compliance with the limits established by the Noise Regulations.

6.5. Integration with development, construction or operation controls

Implementation of noise legislation is based on the fact that all construction or development requires prior authorisation by the municipality (with the exception of the abovementioned public infrastructures). It is, thus, the municipalities which are in charge of preventing new activities that are not in agreement with legally established noise limits.

This means that no building permit may be granted for housing in mixed zones or that no activity can be authorised in a sensitive zone, if this would result in a noise level increase above the level permitted by law.

There are no specific mechanisms to implement this legislation around airports, but municipalities must include airport noise in their noise maps and establish land use zoning accordingly.

However, all airport projects subject to Environmental Impact Assessment shall have to take into consideration projected noise levels and land use planning in the surrounding area.

Operations in Lisbon airport have been regulated for the purpose of reducing noise impacts by means of Order 303-A/2004 (Portaria nº 303-A/2004, of March 22) which sets limits to the number of operations during the night period (0 h. to 6 h.) both by fixing a total maximum cap (91 movements/week) and by determining quotas according to the type of aircraft.

This has been accompanied by the adoption of a monitoring plan and the creation of a network of monitoring stations in and around the airport.

Air quality in the airport is also monitored and the results of the monitoring campaigns in 2003 (winter) and 2004 (summer and winter periods) with 2 monitoring stations, have been published. For instance, the results gathered in 2003 showed that particles in suspension exceeded the legal limits on 2 occasions at station 1 and on 6 occasions at station 2. A large part of this pollution, nevertheless, came from road traffic and not aviation activity. For

carbon monoxide, measured levels were always well below legal standards. The measurements for SO₂ were also below daily and hourly legal standards, but at station 1 they exceeded the standard set for the protection of ecosystems. NO_x was also found to be below hourly standards but above the level set for the protection of vegetation. A large part of this pollution is considered to come from outside the airport, although motor vehicles and aircraft within airport grounds have also contributed to some degree. Benzene levels are also lower than the legal standard. Nm³O₃ levels were exceeded during summer 2003 at station 2.¹⁵

¹⁵ Instituto do Ambiente e Desenvolvimento. IMA 10.04-03/05/05. Monitorização da Qualidade do Air no Aeroporto de Lisboa. Relatório Anual. February 2004

7. CASE STUDY – LISBON AIRPORT (NOVO AEROPORTO)

An example of the spatial planning system in Portugal is the creation of a new airport in the Lisbon region.

This idea has been discussed since the early 1970s, and the government established a public corporation under the name of NAER (Novo Aeroporto S.A.) for the purpose of undertaking the preparation and implementation of decisions made in the process of planning and building the new infrastructure.

Different studies were carried out and 5 possible locations were identified for the new airport infrastructure: Fonte da Telha, Montijo, Alcochete, Porto Alto and Rio Frio. An investigation into the possibility of expanding the current facilities at Portela was also carried out.

In 1997, the Portuguese Government adopted Decree 42/1997, of August 21, in order to preserve land in the areas of Ota and Rio Frio which had been designated as possible candidates for the future infrastructure site. According to this Decree a long list of activities and land uses can not be undertaken without the consent of the public entity in charge of airport management “Aeroportos de Portugal” (ANA). These activities included: development of new settlements, construction and reconstruction or alteration of buildings, facilities which might interfere with navigation systems, as well as land movement or tree cutting.

The reserve was established for 2 years, but in 1999 it was extended for another year and the area around the possible site in Ota was enlarged. The Rio Frio location was abandoned after the analysis of the Environmental Impact Assessment. A change was also introduced regarding the agency in charge of vetting any proposals in the area. The new agency was the Portuguese civil aviation authority (INAC) after ANA was split into two entities.

In 2000, Law 3-B/2000 enabled the Government to extend the period for another 3 years (Decree-Law 170/2000), and in 2003, the reserve was yet again extended for a further 3 years, beginning on 22 August.

With this land reserve, the Portuguese government guaranteed the appropriate land use of the area and avoided any possible constraints on the new airport. The spatial impact of airport-related noise is represented by the noise contours that all municipalities are compelled by law to prepare and integrate into their land use planning instruments. It should be noted that when the boundaries of the land reserve for the future airport were defined, noise was also taken into consideration in order to prevent development of areas that would be subject to incompatible acoustic pollution.

At the same time, and despite the fact that airport plans were not yet required to undergo the environmental assessment procedure, in 1998 the Government

decided that the plans for the new Lisbon airport would be subject to EIA and established an Environmental Impact Assessment Commission for this purpose. Subsequently, at the time of establishing land reserves for the future Lisbon airport, the location studies were subject to an evaluation process in accordance with the procedures and the requirements established for Environmental Impact Assessments.

In 2002, the Commission was reinforced and made responsible for controlling the entire process, acting both as a consultative and supervisory body. The Commission is also considered to be the competent body for the evaluation of the airport project and all other related projects which also require Environmental Impact Statement (EIS).

Due to a new political situation, the airport project has seen new momentum in 2005.

COUNTRY CONTACTS

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁶)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁶ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

Programa Nacional da Política de Ordenamento do Território) National Program for Spatial Policy

Planos sectoriais Sector Plans

Planos Especiais de Ordenamento do Território Special Spatial Plans

Planos Regionais de Ordenamento do Território Regional Spatial Plans

Plano Director Municipal, PDM Municipal Director Plan

Plano de Urbanização Urbanization Plan

Plano de Pormenor Detailed Plan

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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

SLOVAK REPUBLIC

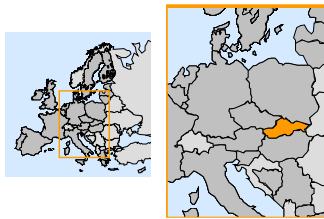


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SLOVAKIA		Location Map	
Population	5.4 mill. (111 inhabitant per sq. Km)		
Airports network	Six international airports owned and managed by a different Joint Stock Company whose shares belong to the State and the local governments around each airport.		
Spatial planning system			
<p>Centralised spatial planning system, although some powers have been given to the local governments in the last amendments made to the 1976 Building Act.</p> <ul style="list-style-type: none"> • Institutions <ul style="list-style-type: none"> National level: Ministry of Construction and Regional Development Regional level: Regional offices Local level: Municipalities • Instruments <ul style="list-style-type: none"> Strategic plans: Territorial Development Conceptions of Slovakia. Regional territorial plans Framework plans: Municipal territorial plan Regulatory plans: Zonal territorial plan • Process: Common process defined by the Building Act, no matter the type of plan or the authority in charge. assignment => concept => proposal => approval. High level of citizen participation. 			
Regulation and permits			
<p>A decision on construction siting or on the use of the territory (territorial decision) and building permission are required for every construction activity. The district offices are the ordinary building offices. The CAA is the special building office responsible for granting building permits for airport constructions.</p>			
Airport planning			
<ul style="list-style-type: none"> • Policy and planning: Non statutory airport plans; only internal documents developed by the operators and sent to the municipalities for their integration into local plans. (There are no examples of airport plans prepared by the different Joint Stock Companies since their creation) • Spatial impact: Safeguard maps subject to citizen participation and approved by the CAA by decree. Noise contours are submitted to the municipalities for integration into local plans • Construction: A positive territorial decision obtained from the district office and a building permit obtained from the CAA are required. • Operation: Operating license for new infrastructures granted by CAA. Airport certification under development. 			
Airport noise and air quality			
<ul style="list-style-type: none"> • Noise: No maximum noise levels defined by legislation. Noise contours may be integrated into local plans, but building permissions can be granted within those areas. Noise protective zones imposing land-use restrictions have been recently proposed in Bratislava, delimited by polygonal lines on the basis of the noise contours and negotiations. • Air quality: no land-use restrictions based on air quality considerations 			

1. SUMMARY

SPATIAL PLANNING SYSTEM

The “Territorial Development Conception”, or National Development Plan, is oriented towards socio-economic development, aimed at reducing disparities among the different areas of the country.

Regional plans define the basic structure of the territory, i.e. urban areas, infrastructure, transportation network and protected areas.

Municipal plans designate the areas to be developed and those where construction is restricted or forbidden, and locate transportation infrastructures, public utilities, and protected areas.

Areas designated for development as well as for public use or construction require the development of a “Zonal Territorial Plan”, regulating in detail land uses, building conditions, links with public utility networks, etc.

These plans are organized in a hierarchical structure where lower levels must always be in conformity with higher levels. All spatial plans have a binding part applying both to public and private parties.

Airport planning must be integrated into the spatial planning system.

REGULATIONS AND PERMITS

Construction permits

Construction activities need to obtain first a “territorial decision” which could be either a “decision on construction siting” or a “decision on the use of territory”, and then “building permission” from a competent “building office”. Both permits must be obtained separately, following independent procedures. The “construction siting” decision is not required when the spatial plan includes sufficient detail on the building plot, the exact location of the building and the construction conditions. “Use of territory” decisions are always required when the project involves changes in land use.

There are no exceptions or exemptions for large infrastructures or public projects, but in some instances building permits are issued by special authorities. In the case of airports this is the Civil Aviation Authority. The “decision on the use of the territory” must, nevertheless, be taken by the district authorities.

Environmental permits

EIA is regulated in accordance with EU Directives. The procedure includes a preliminary assessment, or “screening”, which may lead to a full evaluation or to the approval of the project. A full EIA may also be required at any time if during the project’s implementation the Ministry of the Environment considers that the possible impacts so require.

The evaluation of plans and programmes is regulated in somewhat ambiguous terms, and the “SEA” Directive 2001/42/EC, has not yet been transposed.

Other environmental permits required for water discharge or waste management must be obtained separately from the municipality.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The Slovak Government has been implementing an airport decentralization and privatisation policy, but there is no planning document analysing the future requirements of the system.

- Airport

There are no officially approved statutory airport development plans. Each airport company is responsible for preparing an internal General or Master Plan as a working document, where future developments of the airport are analysed. The last General Plan for Bratislava Airport was developed by the Slovak Airport Administration in 2000. The plan was not officially approved but was sent to the City of Bratislava for its inclusion and consideration in the municipal spatial plan.

Municipal plans are the only official spatial planning documents where airport planning takes place.

Spatial impact

- Implementation of ICAO Annex 14 requirements

Airport companies are responsible for preparing maps with “obstacle protection zones” based on the ICAO obstacle limitation surfaces, although they are more restrictive than Annex 14 surfaces in some cases, in order to prevent illegal development. The maps are made available for citizen participation in the surrounding communities before being sent to the CAA for approval by Decree. The maps are binding on municipalities, which should include them into their

spatial plans, and on “building offices”, which must take them into account when granting building permissions.

- Noise Impact

Noise protection instruments have not yet been developed in Slovak legislation. Noise contours were calculated in the past for Bratislava airport but were not taken into account in spatial planning. In August 2005 new contours were sent to the municipality for inclusion in the local plan to create a “noise protection zone”.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

Land reserves must be included in spatial plans. Airport master plans are only internal documents and lack the power to establish such reserves.

Construction

Construction activities within airport grounds require a “territorial decision” from the district’s “building office” if there is any change in land use or the spatial plans did not regulate plot and building conditions in sufficient detail. A building permit issued by the CAA is also needed.

Most environmental permits would be included in the approval following an EIA process. Otherwise, the permits for waste management and water treatment should be obtained from the municipality.

Operation

Airports require an operating license from the CAA. Certification is not yet regulated but Slovak aviation authorities are already requesting airport companies to meet some of ICAO’s requirements.

AIRPORT NOISE AND AIR QUALITY

Noise

Aviation noise has not been the object of specific legislation. The “noise” Directive 2002/49/EC has been transposed but there are no major airports in the country.

No land-use restrictions have been applied to date and there are no noise abatement plans.

Air quality

There are no specific provisions on airport related air pollution.

2. CONTEXT

Slovakia (or the Slovak Republic) is a landlocked country of central Europe. It was under Hungarian rule until 1918, when it became part of Czechoslovakia. After the end of Communist rule in 1989, government leaders reached an agreement to separate the country into two fully independent republics. The Republic of Slovakia came into existence on 1 January 1993. Slovakia joined both NATO and the European Union in the spring of 2004.

As for territorial division and the definition of self-governing entities, Slovakia is divided into 8 Greater Territorial Units ("vyššie územné celky" -VÚC) called "samosprávne kraje" (Self-governing Regions). Each "kraje" is named after its principal city: Banskobystrický, Bratislavský, Košický, Nitriansky, Prešovský, Trenčiansky, Trnavský, and Žilinský.

2,891 municipalities are the local self-governing bodies.



Figure 1. Map of Slovakia

Slovakia has mastered much of the difficult transition from a centrally planned economy to a modern market economy. Major privatisations are nearly complete and Slovakia's economic growth has exceeded expectations. However, Slovakia's GDP per capita is still well below the European Union average (22,400¹)

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	5,380,100
Latitude / Longitude	48°40' N, 19°30' E
Land area	48,800 sq Km
Coastline	0 Km
Capital City	Bratislava
GDP per capita (PPS at market prices)	11,600
GDP real growth rate	5.5 %
Inflation rate	7.5 %
Unemployment rate	18.2 %

Table 1. Slovakia: main facts and figures (2004)²

2.1. Population and statistics

Currently, the Slovak population is 5.4 million, with an average density of 111.3 inhabitants per sq Km. This means Slovakia is very close to the European average (EU-15 population density: 115 inhabitants per sq Km).

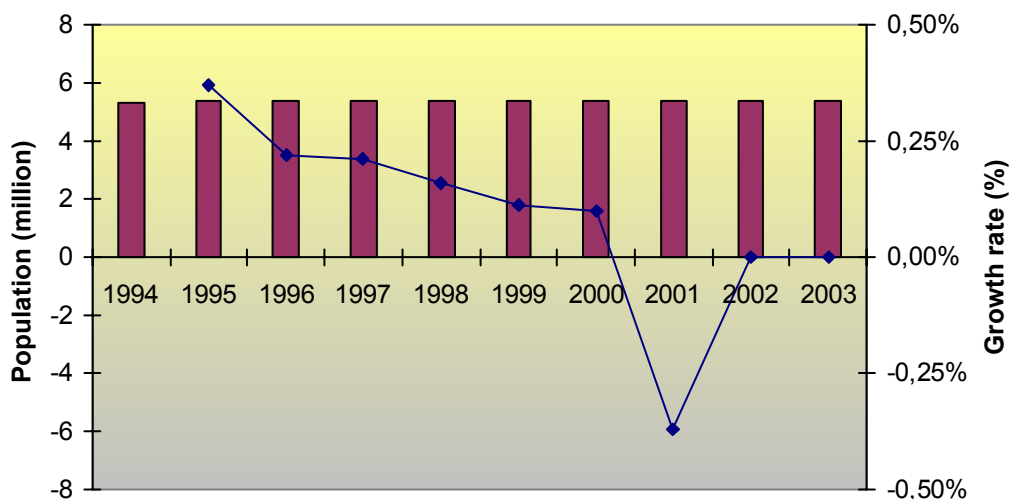


Figure 2. Slovak population evolution

² Source: EUROSTAT

In recent years the population has been stagnant with poor and even negative growth rates. The Slovak median age is 35.4 years, but population growth is threatened by a very low birth rate, with 10.62 births/1,000 population (2004 est.).

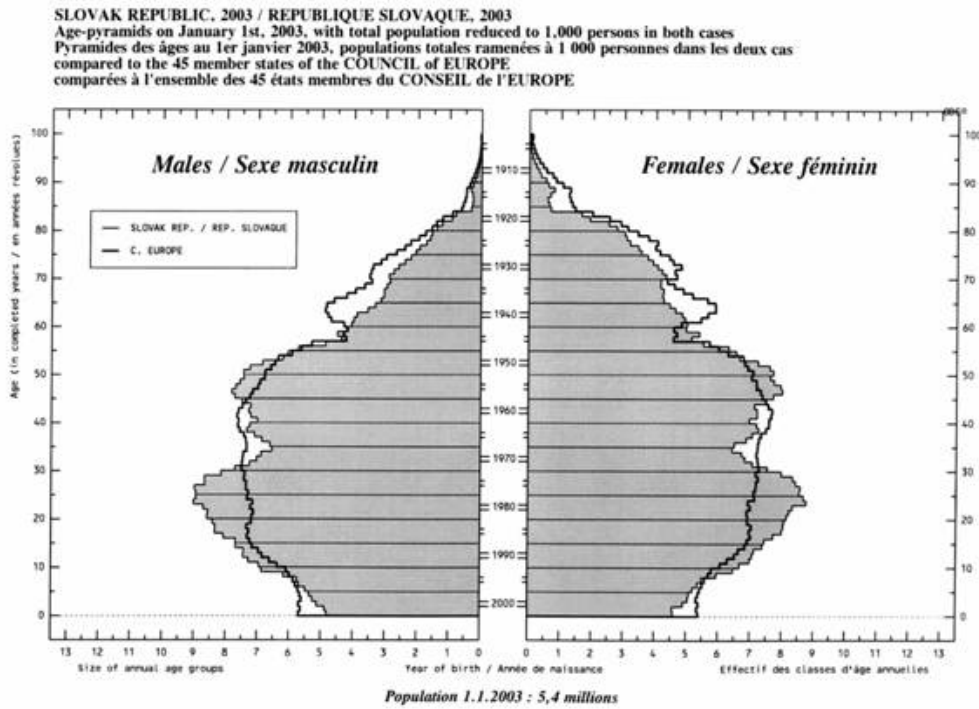
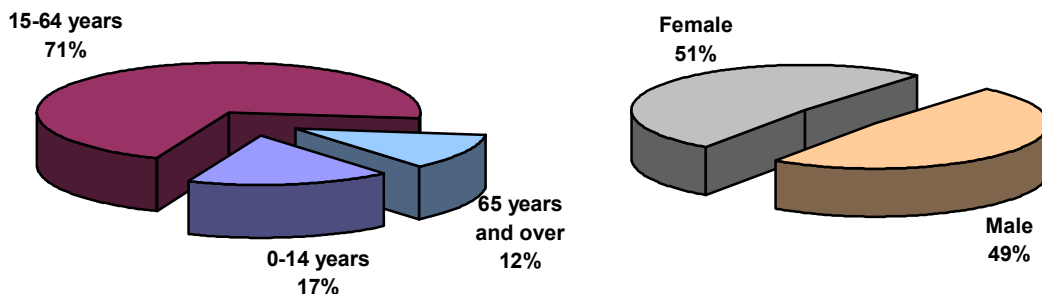


Figure 3. Slovak age-pyramids (2003)³

The figure above shows the Slovak population trend with a continuous birth decrease since 1980.



Figures 4 and 5. Slovak population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Slovakia is a parliamentary democracy. It has a unicameral legislature, the 150-seat National Council, whose members are popularly elected by proportional representation for four-year terms. The president is elected by popular vote for a five-year term. Following legislative elections, the leader of the majority party or the majority coalition is usually appointed Prime Minister by the president. The cabinet is appointed by the president on the recommendation of the Prime Minister.

With regard to aviation and airports, the Civil Aviation Division of the Ministry of Transport, Posts and Telecommunications is the regulatory body and the Civil Aviation Authority, under the same Ministry, is the supervisory body dealing with day-to-day operation.

In the environmental field, the Ministry of the Environment is the central government body, although noise and its effect on public health is a matter for the Ministry of Health and the Public Health Institute.

With respect to land-use planning, the Ministry of Construction and Regional Development is the central body responsible for spatial planning in terms of general regulations and strategies, while the regions (greater territorial units) and the municipalities are responsible for the spatial development of their territories.

2.3. Main airports

Until 2005 the six international airports were owned by the state and managed by the Slovak Airports Authority (SSL), a state subsidised organization.

Today each airport is owned and managed by a different Joint Stock Company whose shares belong to the State and the local governments around each airport.

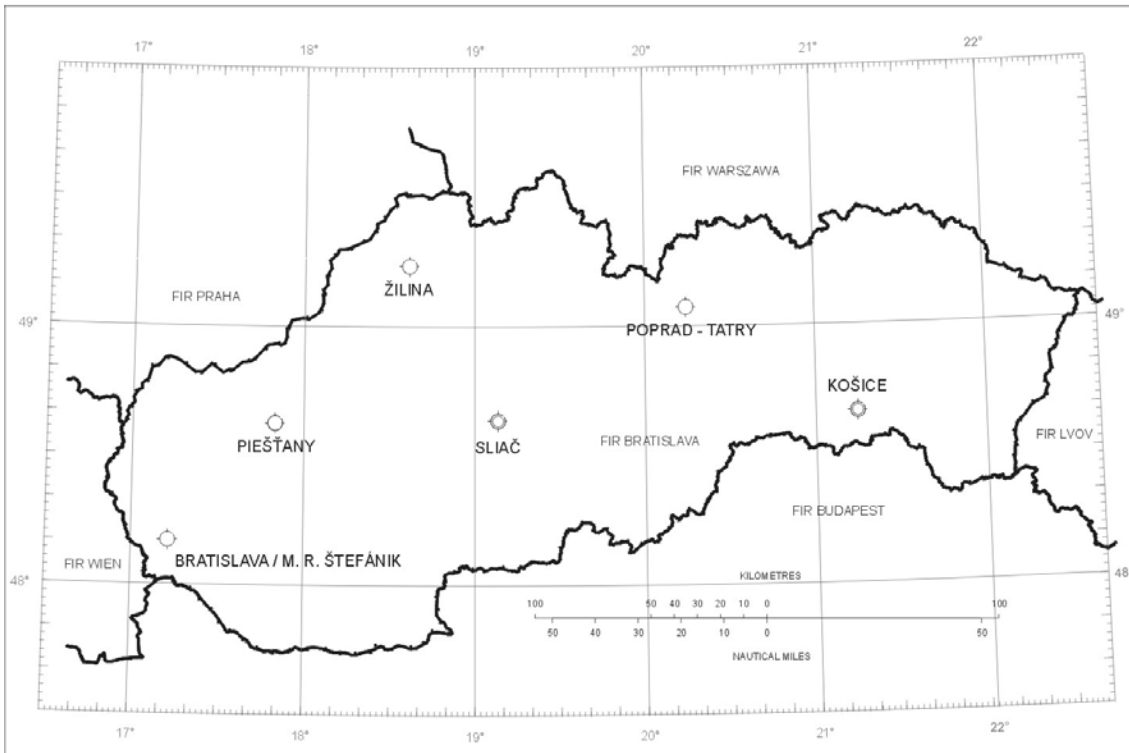


Figure 6. Slovak international airports

Table 2 shows the commercial passenger traffic and cargo of the main airports during 2004:

Airport	Passengers	Cargo (Tons)
Bratislava	893,614	6971
Kosice	231,410	368
Sliac	15,046	100
Poprad	14,749	26
Piestany	6,587	0
Total	1,161,406	7,465

Table 2. Main Slovak airport data⁴

⁴ Ministry of Transport, Posts and Telecommunications SR (Annual report 2004)

3. SPATIAL PLANNING SYSTEM

Slovak spatial planning system is defined by “Act 50/1976 on Land Use Planning and Building Order (Building Act)”, as last amended in 2003.

3.1. Institutions

3.1.1. National

The central authority of spatial planning is the Ministry of Construction and Regional Development, through the Section of Territorial Planning and the Construction Code. This Ministry establishes the guidelines for the spatial planning activities, which are binding on all land use planning authorities.

The Ministry is also in charge of the preparation of the “territorial development conception” of the country.

Other state administration bodies participate in spatial planning and have some spatial planning competences within airport boundaries.

3.1.2. Regional

According to Act 237/2000, amending the Building Act of 1976, the regional offices are the land use planning authorities for greater territorial units.

They are responsible for developing the territorial planning documentation at that level, although the Ministry may also develop these plans when justified.

3.1.3. Local and area wide

According to Act 237/2000, amending the Building Act of 1976, municipalities are the spatial planning authorities at the local level.

They are in charge of territorial planning documentation for their territories.

3.2. Instruments

According to the Building Act, the basic tools for spatial planning are “territorial planning materials”, “territorial planning documentation” and “territorial decision”⁵.

⁵ Terms in quotes are those found in the English translation of the Slovak legislation provided by Slovak national authorities. No attempt has been made to equate them with terms used in other countries in order to facilitate possible references to such legislation.

These tools should regulate the location of developments and define technical, urban, architectural and environmental requirements for their planning and execution.

Only the “territorial planning documentations” constitute official spatial planning instruments as such, but the “territorial planning materials”, comprising all kind of urban studies, forecasts and technical requirements, are also important as initial preparatory works for the development of the territory.

“Territorial planning documentation” is divided into an obligatory part and a guiding part, in accordance with the decision of the authority approving the plan. Public constructions and protected parts of the territory always come under the obligatory part.

3.2.1. *Strategic plans or policy documents*

Territorial Development Conception of Slovakia

The “Territorial Development Conception”, or national development plan, of Slovakia is the spatial planning instrument for the development of the territory of the whole country, drafted by the Ministry of Construction and Regional Development.

This instrument sets out the general guidelines and strategies for the spatial development of the territory of the Slovak Republic, which are binding on all plans and documentation adopted at lower levels. In particular, it should establish the framework for national social, economic, environmental and cultural requirements for the spatial development of Slovakia.

According to the Building Act:

“The principles and regulations governing the requirements, particularly of sector conceptions, regarding the spatial arrangement and functional use of the territory of the Slovak republic and its regions in compliance with principles of sustainable development, protection of the environment, natural and cultural heritage, are defined in the Territorial Development Conception of Slovakia as obligatory.”

The “Territorial planning materials” for this documentation will form a territorial development strategy for the country.

The Territorial Development Conception of Slovakia must be approved by the Government. The last National Development Plan (for 2004-2006) was approved by the Government in 2003, identifying balanced regional development as one of its specific objectives. This objective is a reaction to the needs of the Slovak Republic to remove or reduce disparities in the levels of

development for individual regions in terms of regional transport, environment, and local infrastructure.

Regional territorial plan

Regional territorial plans are the “territorial planning documentation” to be prepared by the regional offices (or by the Ministry of Construction and Regional Development, if justified) for the territory of the regions which cover several municipalities.

They will define the development plans for areas where different activities with a significant impact on the spatial arrangement and functional use of the territory should be carried out.

The regional territorial plan must take into account both the obligatory part of the Territorial Development Conception of Slovakia and the guiding part.

According to the Building Act:

“The following regulations and principles shall be approved in the obligatory part of territorial planning documentation:

a) in the region of settlement structure, spatial arrangement and functional use of the region territory, the territorial system of ecological stability, care for environment, landscape creation, protection and protective use of natural resources, protection of historical monuments, monument reservations, monument zones and significant landscape items, arrangement of public transport and technical facilities, establishment of areas for public constructions and protected parts of the landscape; ...”

Regional territorial plans are approved by the regional administration.

3.2.2. *Local (framework) plans*

Municipal territorial plan

Municipal territorial plans are the “territorial planning documentation” to be prepared by the municipalities to define the principles and regulations of the spatial arrangement of their territories.

They determine the areas for development and those where development is restricted or forbidden, taking into account cultural, environmental or social requirements.

According to the Building Act:

“The following regulations and principles shall be approved in the obligatory part of territorial planning documentation:

...

b) in the municipality, spatial arrangement and functional use of the municipal territory, the boundaries of developed municipality territory, public transport, civil and technical facilities, establishment of areas for public constructions, carrying out of the sanitation and for protected parts of the landscape, protection and use of natural resources, cultural and historical values and significant landscape items, territorial system of ecological stability, care for environment, landscape creation including greenery areas; ...”

A municipal plan can be prepared for the territories of two or more municipalities if they reach an agreement and decide which of them is coordinating the plan.

Municipal territorial plans establish the parts of the municipality or municipalities requiring a “zonal territorial plan” for their detailed development.

Municipal territorial plans are approved by the municipalities.

3.2.3. *Regulatory (detailed) plans*

Zonal territorial plan

“Zonal territorial plans” are prepared for specific parts of a municipality when the municipal territorial plan so determines, and in cases when an area is to be dedicated to land or constructions for public purposes.

These plans should include details on the construction requirements, equipment, materials, etc.

According to the Building Act:

“The following regulations and principles shall be approved in the obligatory part of territorial planning documentation:

...

c) in the zone, detailed spatial arrangement and functional use of lands, buildings and public transport and technical facilities, siting of constructions on particular lands, into urban areas and developing conditions for particular building plots, essential equipment for constructions and the connection to public transport and technical facilities of the territory, integrating of the buildings into surrounding developed area, monument reservations, monument zones and into the remaining landscape.”

Zonal territorial plans are approved by the municipality.

3.3. Process

The Building Act defines a common process for the preparation and approval of any territorial planning documentation, no matter the type of plan or the authority in charge of it.

3.3.1. Inter-government consultation

The respective territorial planning authorities decide to prepare new territorial planning documentation for their area of interest based on their own judgment or after an application from other authorities or individuals. In these later cases, the applicants should finance any cost connected with the preparation of the documentation.

“Vertical” and “horizontal” coordination is ensured through the requirements of the Building Act. The Ministry of Construction and Regional Development provides technical assistance to other authorities in their land-use planning activities and in the resolution of conflicts. Different regional offices or municipalities must agree which of them will be responsible for the development of territorial planning documentation for a common area affecting all of them.

The first step for the preparation of a territorial planning documentation will be an “assignment” prepared by the planning authority in each case. The “assignment” should contain the main goals and requirements to be considered by the plan. It must be discussed with any affected municipality, legal person or state administration authority. An agreement on the “assignment” must be obtained from the superior planning authority (the Ministry for the “assignment” of a regional territorial plan, the regional office for the “assignment” of the municipal territorial plan and the district office for the “assignment” of the zoning territorial plan). They will check for compliance with obligatory parts of any approved territorial planning documentation at a higher level.

This “assignment” must be subject to public consultation.

The “assignment”, following the resolution of conflict and consideration of comments and objections, must be approved by the Government if it is an “assignment” for the elaboration of the Territorial Development Conception of Slovakia, or a regional territorial plan. If it is a municipal or zoning territorial plan it must be approved by the municipality. The municipality may not approve an “assignment” contrary to the opinion of a district or regional office.

In the next step, the planning authority prepares a “concept” of the plan, on the basis of the objectives and requirements contained in the approved “assignment”, with the same structure and scope of the plan. A concept is not

necessary for zonal territorial plans and municipal territorial plans of small communities.

This “concept” must be subject to a public discussion with affected municipalities, state administration authorities and the citizens. A summary opinion based on the results of the discussion must be prepared, and further discussions will take place if necessary.

Then the final “proposal” is prepared, taking into account all the information collected during the discussions of the concept.

This “proposal” must also be subject to public consultation and discussion with affected municipalities and State administration authorities.

Finally, the “proposal” is submitted to the approval authority, together with an assessment of the opinions received during the consultation, and a draft of the regulation declaring the obligatory parts of the plan.

Prior to final approval the “proposal” is checked for conformity with the binding parts of any approved land-use planning documentation of a higher level and if the overall process conforms to legal regulations.

3.3.2. *Policy Integration*

The binding nature of territorial planning documentation (the obligatory parts of each approved plan must be made public by the relevant authority through a Binding Order) ensures vertical coordination and integration of policies set at higher levels of government. This is also accomplished through the revision for conformity of every draft with other approved plans and legal regulations.

If any plan is approved despite non-conformity with other plans approved at higher levels, the approval will be invalid.

With regards to airports, their planned development must be analysed and defined in an ordinary spatial plan, with the same process described for other plans, although the airport company and the CAA are responsible for its preparation. This general process ensures both integration of airport planning into general spatial planning, and consideration of spatial planning policies in airport plans.

3.3.3. *Citizen participation*

Citizen participation is guaranteed before the adoption of any spatial plan in Slovakia. All the preparatory works, including “assignments”, “concepts” and draft proposals of regional, municipal and zonal territorial plans are published and explained to all affected citizens during public meetings, and time for comments and objections is provided. The assessment reports must take into account all comments and state the reasons for their acceptance or rejection.

4. REGULATIONS AND PERMITS

4.1. Development control system

According to the Building Act, each construction activity needs to obtain:

1. a “decision on construction siting” or a “decision on the use of territory”,
and
2. “building permission”

from a competent “building office”. Both permits must be obtained separately, following independent procedures.

4.1.1. *Activities subject to development control*

The first step for the construction of new buildings, the change of a determined land use or the protection of a certain area is to obtain a positive “decision on the use of territory” (territorial decision) from a competent building office. If there is no change in land use it may only be necessary to obtain a “construction siting” decision defining the building plot, the exact location of the building and the construction conditions. This requirement is not necessary when siting conditions have already been set in detail in the binding part of a zonal territorial plan.

The application for the territorial decision must include information justifying compliance with planning documentation in force and assessing the impacts on the environment.

A positive territorial decision defines the conditions for the development of the proposed activity regarding protection of public priorities, public health and the environment. If it is a decision on the protection of a certain area, it defines the method of protection, particularly the prohibitions or restrictions applied to developments in that area.

By contrast, “building permission” from a building office is required, in accordance with the Building Act, for all kinds of built structures, regardless of the technical nature of their construction, purpose or duration. Building permission is also required for changes or modifications of buildings and structures.

In some special cases, such as small structures or modifications to buildings, a notice from the building office is sufficient.

With building permission, the building office will specify the conditions binding on the construction and use of the building.

According to these principles, any construction at an airport requires both a territorial decision and building permission from the responsible building office.

4.1.2. *Exceptions or exemptions*

The Building Act defines in detail a short list of small construction works requiring neither building permission nor notice. This list does not include anything related to airports.

4.1.3. *Institutions involved: inter-government relations*

The building office is, according to “National Council Act 595/1990 Col. on the state administration for the environment (as amended by later regulations)”, the district office.

However, some of the powers of a building office can be exercised by a municipality, as stated in the Building Act, particularly for small structures requiring only notice from the building office or small constructions not requiring building permission.

The Building Act also defines the concept of “Special Building Offices”. With regard to airports, it states

“The functions of a building office shall be carried out by bodies exercising state administration for construction of airports, constructions in territories of airports and constructions of flight ground facilities, constructions of runways and on the runways, constructions of surface roads, constructions of water management, with the exception of power in matters of territorial decision-making and expropriation, according to special regulations”

This means in effect that the Civil Aviation Authority is responsible for granting building permission for any construction within the airport boundaries. However, it must be noted that, in these cases, the positive territorial decision must be obtained from the general building office (the district office), which should also analyse compliance of the building permission with the conditions imposed by the territorial decision.

Once the competent building office has received the application for building permission, it should notify the commencement of the “building proceedings” to the relevant state authorities, municipalities and owners of the land around the proposed activity who would be affected by its construction. It should also order a public hearing and a local enquiry.

In practice, this means that at least 18 agencies are consulted before granting building permission, even when the CAA is the competent building office.

The building permission includes conditions and binding terms for the execution and use of the building, in accordance with the comments and objections received during the building proceedings. It will cease to be valid if construction has not commenced within two years from the day it was granted.

4.1.4. Relationship with planning

All the documentation supporting the application for a territorial decision or building permission, including conformity with adopted territorial plans, shall be submitted to the building office to begin the territorial or building proceedings, respectively. Permits can not be granted unless they are in conformity with spatial planning.

In later stages, municipalities monitor all construction activities and ensure they take place in conformity with the objectives of territorial plans.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Although the current regulations on Environmental Impact Assessment in the Slovak Republic were already in force ten years before joining the EU (Act 127/1994 of the National Council of the Slovak Republic on Environmental Impact Assessment, which entered into force on 1 September 1994) and have been only slightly amended by Acts 391/2000 and 553/2001, they very much follow the guidelines set by the EU Directive 85/337/EEC⁶ (the “EIA” Directive) as amended by Directive 97/11/EC⁷.

This Act 127/1994 includes, as an annex, a list of the activities requiring the assessment of their effects on the environment. This list has been amended by Act 391/2000, which now includes the activities that require a compulsory assessment and those which only require a screening, according to the criteria mentioned after the list.

According to that list, any construction activity at an airport where the main runway is longer than 2,100 m will require a compulsory assessment, while the same activities at airports where the main runway is shorter than 2,100 m will require screening.

During the screening process, the nature and scope of the proposed activity will be analysed, along with the proposed location and the importance of the expected impacts on the environment (in terms of probability, extent, size,

⁶ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁷ Council Directive 97/11/EC of 3 March 1997 amending Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment

complexity, duration, frequency and reversibility of the impact). The Ministry of the Environment can decide at any stage that a proposed activity should be subject to the full process of an EIA.

Even though Directive 2001/42/EC⁸ (the “SEA” Directive) has not yet been transposed into Slovak legislation, Act 127/1994 already included the need for a previous analysis of the impacts on the environment of several plans, strategies and policies, including every proposal for “...*substantial development policy, especially in the areas of ... transport...*” and every “*land use plan of greater territorial region and residential settlement...*”

Unfortunately, as the Act does not lay down a standard procedure, there is room for very broad interpretations of this necessity, including no strategic assessment at all, as it has happened with several national plans.

4.2.2. *Other environmental controls*

There are still other permits, such as those required for water discharge and sewage treatment, which must be obtained separately.

In the case of airports, these permits are not granted by the CAA together with the building permission, but must be obtained from the municipalities.

4.2.3. *Institutions involved*

An Environmental Impact Assessment, prepared by the developer of the activity in accordance with the provisions of Act 127/1994, must be submitted to the Ministry of the Environment.

This Ministry will deliver it to the central authority of the state administration within whose competence the activity falls (in the case of an airport, the Civil Aviation Division of the Ministry of Transport, Posts and Telecommunications), to the authority of the state administration that is competent to grant the permission of the activity (the CAA again in the case of airports) and to all the affected municipalities, for their comments and suggestions.

The affected municipalities are responsible for informing the citizens about the proposed activity and for arranging a public hearing (in co-operation with the developer). They also prepare a record from the public hearing for the Ministry of the Environment.

The Ministry of the Environment, following an expert review, is responsible for preparing the “final record” of the EIA process, deciding on the consent or rejection of the proposed activity, recommending the most suitable alternative

⁸ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

and establishing conditions for construction and implementation and for monitoring and evaluation.

4.2.4. Integration with other permits

The final statement of the EIA process shall be sent to the authority responsible for granting permission for the activity. In the case of airports, this body is the Civil Aviation Authority. They cannot take a decision, under the special regulations mentioned by the Building Act, concerning the building permission for a construction activity within the airport boundaries without taking into account the final EIA statement.

5. AIRPORT PLANNING AND CONSTRUCTION

Until April 2004, airports were managed by the Slovak Airports Administration, a state administration agency responsible for airport management and operation in accordance with “Act 143/1998 on Civil Aviation”.

On 1 April 2004, “Act 136/2004 on Airport Companies” entered into force, with the aim of restructuring, decentralising and optimising the operation of the six international airports in Slovakia. It amends the Civil Aviation Act on these matters.

The Airport Companies Act provides the regulatory framework for the transformation of the Slovak Airport Administration into independent airport companies with the participation, in some cases, of the regional or local authorities. Each joint stock company, in principle wholly owned and funded by the state, runs one airport on a commercial basis.

Airport infrastructure was transferred to those companies on the day on which each was registered. The Act defined the concept of “priority infrastructure assets” as those parts of the airport necessary for securing the functioning of air transport in Slovakia. These assets can not be sold or transferred by the airport company and should remain under state control.

The Act defined as a “minor airport” any other than Bratislava and Kosice, and allows for the transfer of the airport infrastructure to the regional authorities or to the municipalities where these minor airports are located, subsequent to a written agreement with the state on the terms and conditions for the operation of the airport.

Joint stock companies wholly owned by the state were registered for Bratislava and Kosice airports, as a first step towards a potential privatisation. On the other hand, the same kind of companies were registered for the other four airports while contacts between central, regional and local authorities were taking place.

On 21 June 2005, the Government adopted two Resolutions approving the inclusion of 66% of the state property interest in Bratislava and Kosice airports in the list of companies intended for privatisation, and the plan for the transfer of state assets of small airport companies to municipalities and regional authorities by the end of 2005.

Bratislava and Kosice regional and local authorities have also showed an interest in participating in 34% of the shares of their respective airport companies which will remain under state control, arguing that they will be responsible for integrating airport projects into their land use plans. Finally, there has been an agreement to transfer part of the shares under state control

to the regional authorities and to the local municipalities of Bratislava and Kosice by 2006.

5.1. Policy and planning

5.1.1. Institutions

The institutions currently involved in airport planning in the Slovak Republic are the aerodrome operators (individual airport companies), the Civil Aviation Authority and the municipalities where the airports are located.

Decisions for new airports or new infrastructures, such as a new runway, would need approval by the Ministry of Transport.

5.1.2. Instruments

There are no officially approved statutory airport development plans in the Slovak Republic. Each airport company is responsible for preparing an internal General or Master Plan as a working document, where future developments of the airport are analysed. These airport plans could also include the noise contours forecasted for the future airport development.

There are no examples of such a plan since the individual airport companies were registered. The last General Plan for Bratislava Airport was developed by the Slovak Airport Administration in 2000, when the airport was still part of the whole airports network managed by the state agency. That plan was not officially approved; however, it was sent to the City of Bratislava for its inclusion and consideration in the territorial planning documentation of the town.

The territorial plans of the municipalities are the only official spatial planning documents where airport planning is contained. As explained in Chapter 3, these plans are subject to a complex process of review before their adoption. There is only one moment when other authorities not directly involved in aviation and citizens can have access to information on airport developments and have the opportunity to express their opinions.

5.1.3. Process

Aerodrome operators are responsible for drawing up airport development plans in coordination with the Civil Aviation Authority, which must approve and submit them to the affected municipalities for integration into their territorial plans.

Subsequently, they should follow the same process explained in Chapter 3 as part of a general territorial planning documentation. During that process, they are subject to citizen participation.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The Civil Aviation Authority is responsible, in accordance with the Aviation Act, for implementing ICAO requirements in Slovak airports.

The airport companies are responsible for preparing maps with “obstacle protection zones” based on the ICAO obstacle limitation surfaces, although they are more restrictive than Annex 14 surfaces in some cases, in order to prevent illegal developments. They should be available for citizen participation in the surrounding communities before being sent to the CAA for approval by Decree.

Subsequently, they become binding on municipalities, which should include them in their territorial planning documentation, and on the building offices, which should take them into account when granting building permissions.

5.2.2. Noise Impact

Noise contours can be included in airport plans prepared by the airport companies and sent to the municipalities, so that these can integrate them into their territorial planning documentation and take them into account when preparing their urban development strategies.

However, the noise contours included in the general plan for Bratislava Airport, prepared in 2000 and sent to the City of Bratislava, are not considered in the municipal territorial plan currently in force. This has resulted in the development of urban areas very close to the airport.

Recently, the CAA has submitted to the City of Bratislava, which is reviewing its territorial plan, a proposal for a “noise protection zone” to be integrated into the future plan. It is based on the noise contours forecast for 2020 (around 8 million passengers/year) calculated through INM simulations and measurements taken during the last few years. The proposed “noise protection zone” comprises two different areas, delimited by polygonal lines following the limits of the terrains “touched” by the noise contour, where no construction whatsoever (zone 1) or no new residential developments (zone 2) would be allowed. The overall draft territorial plan, including this proposal, has already been subject to public hearing at the time of writing (August 2005)

5.2.3. Risk prevention

There are no third party risk considerations in the Slovak Republic.

5.2.4. Land reserve for future construction

A decision to expand airport infrastructure in such a way that new terrain would be required, could only be taken after approval by the Ministry of Transport.

Following this, the general plan for the airport should be developed by the airport company and sent by the CAA to the affected municipality.

The only way to reserve land for future airport development is its consideration in a territorial plan of the affected municipality.

Expropriation is considered by the different Acts, but only for “public” airports. Owing to the scope of powers of the regional and local authorities, in terms of spatial planning, this would be a difficult process.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: any construction activity within the airport boundaries requires a positive territorial decision from the district office and building permission granted by the CAA, acting, in this event, as building office.

If the development takes place outside the current airport boundaries, it must be included in the territorial plan of the municipality. This will be checked by the district office before taking a positive territorial decision on the location, followed by the building permission from the CAA once the terrain falls under its control.

- b) Environmental permits: Most of the environmental permits would be included in the approval following an EIA process. Even if such permits are not necessary, permits for waste management and water treatment must be obtained from the affected municipality.

5.3.2. Institutions and processes involved

- a) Authorization: Any airport development must be approved by the CAA, which is also the building office, and, in the case of large infrastructure projects, by the Ministry of Transport. Local and regional authorities must be informed (through the plans already sent to them) as they must also grant the environmental permits. Where an EIA is necessary, the Ministry of the Environment is responsible for granting the environmental approval prior to the building permission.
- b) Supervision: According to the Building Act, the building offices (the CAA in the case of airports) and the affected municipalities are responsible for supervising construction activities and compliance with the conditions stated in the building permission.

5.3.3. *Integration with planning and environmental controls*

In accordance with the Building Act, the municipalities must monitor all construction activities to ensure they take place in compliance with the objectives of territorial planning.

Where an EIA is necessary, this must be carried out before building permission is granted, and the conditions deriving from the EIA analysis will be included in said permission. The supervision of the construction will therefore also consider environmental issues.

Full integration with planning and environmental conditions is also checked once the construction is finished, when the developer applies for the “building approval”, ie. permission to use the infrastructure granted by the same building office that granted building permission. In the case of airports, the CAA checks compliance with the terms and conditions determined in the territorial plans and the building permissions.

5.4. Airport operation

5.4.1. *Operating permit*

Besides the above-mentioned building approval required for any construction activity within the airport boundaries, granted by the CAA, acting as building office, airports also require an operating license from the CAA, in accordance with the Act on Civil Aviation.

5.4.2. *Airport certification*

Airport certification is not yet fully regulated in the Slovak Republic. However, the CAA is now taking into account ICAO requirements on this matter when granting the operating license to the airports. They are now asking airport companies for the aerodrome manuals.

There is already an Aerodrome Manual for Bratislava Airport.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

As a general regulatory framework, “Act 17/1992 on the environment” introduced the notion of sustainable development into the Slovak legal system, while “Act 127/1994 on Environmental Impact Assessment” established the necessity for and contents of an EIA.

In 2001 the Ministry of the Environment prepared a “National Strategy for Sustainable Development” (NSSD) which was adopted by the National Council through its Resolution 1989/2002 of 3 April.

There was also a reference to the “right to a quiet area for living” in the Slovak Constitution, but noise was not subject to specific regulations in the Slovak Republic for some years. There was no reference to noise in the list of binding regulations in the field of environment, as updated in February 2003. It is mentioned by Act 127/1994 as one of the impacts on the environment to be analysed, together with vibrations, in EIA.

In 2000, the Ministry of the Environment prepared a draft Aviation Noise Act, but it was never adopted due to disagreements with other ministries, such as the Ministry of Defence on questions related to military airports.

In 2002, the Government adopted “Regulation 40/2002 on health protection against noise and vibrations” as a general regulatory framework in that area.

More recently, a package of new regulations on environmental noise has been passed by the Government as a result of joining the EU. “Act 2/2004, of 2 December 2004, on noise assessment and control in external environment and on amendments to Act on human health protection” transposes into Slovak legislation Directive 2002/49/EC⁹ (the “noise” Directive). This Act entered into force on 1 February 2005. Then, “Regulation of the Government 43/2005, of 2 February 2005, laying down details of strategic noise maps and noise protection action plans” and “Regulation of the Government 44/2005, of 2 February 2005, which amends and supplements regulations on health protection against noise and vibrations” develop slightly the “noise” Directive and clarify several definitions and its future application to the Slovak case. Directive 2002/30/EC¹⁰ (the “noise-related operating restrictions” Directive) is also already transposed into Slovak legislation.

⁹ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

¹⁰ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

With regard to air quality, this is mainly regulated by “Act 478/2002 on Air Protection” and “Decree 705/2002 of the Ministry of the Environment on air quality”. This shall also be analysed during that process.

6.2. Institutions

According to Act 127/1994 on EIA, the Ministry of the Environment is the central authority for the potential impacts of any activity on the environment, including noise and air quality. It coordinates the participation of other actors involved in any EIA process, whose roles are also defined by the same Act.

In the case of airports, the actors would be the CAA, as the authority of the state administration responsible for granting the building permission for the proposed activity once the EIA has been approved, the Ministry of Transport (Civil Aviation Division), as the central authority of the state administration within whose competence the assessed activity falls, and the airport companies as proponents of the analysed activity.

Moreover, according to the National Strategy for Sustainable Development (NSSD), the Ministry of Health is responsible for working out goals and priorities for the National Action Plans for environment and health and the State health policy. In particular, the Public Health Institute, under the Ministry of Health, is responsible for protecting citizens against noise and vibrations.

Regional and local authorities perform very limited state administration tasks in the area of environmental protection. Local environmental independent offices were cancelled by “Act 222/1996 on organization of local state administration”:

The Slovak Meteorological Institute, under the Ministry of the Environment, is responsible for monitoring air quality at towns and cities, but not strictly focusing on airport areas.

Lastly, the Slovak Environmental Inspection is a professional expert control body, with an inspectorate dedicated to air quality protection, responsible, among others, for state health supervision.

6.3. Instruments

- a) Planning: Noise contours are only available for Bratislava Airport. Current noise contours were calculated, on the basis of measurements and mathematical modelling, for the general plan for the airport prepared by the Slovak Airports Authority (SSL) in 2000. This plan was sent to the City of Bratislava for its integration into the municipal territorial plan of the City.

However, even when the airport noise contours are included in the territorial plan, there is no legal power to restrict urban development

within those contours if they obtain building permission from the City. This has happened in the last few years and, as a result, there are residential areas closer to the airport now.

At the date of writing (August 2005) a new territorial plan for the City of Bratislava is under development. The Bratislava Airport company (BTS), together with the Slovak University of Technology in Bratislava, has prepared and submitted to the City a proposal for a “noise protection zone” to be integrated into the new spatial plan. This plan is subject to citizen participation and affected inhabitants will be able to submit comments and opinions on this new protection zone.

b) Land-use restrictions:

The recently proposed new “noise protection zone” is designed on the basis of noise contours calculated through measurements and simulations for the 2020 forecasted traffic at the airport (around 8 million passengers/year), including a future parallel runway.

The protection zone would comprise two areas, defined by polygonal lines close to the noise contours but following the limits of the different plots of land touched by the contour and the natural obstacles. In the inner area, any construction activity would be forbidden, while in the outer area no new residential developments would be permitted.

Unfortunately, there are already recent residential developments, both illegal and legal (with building permission), close to the airport and located within the proposed noise protection zone.

c) Compensation:

No compensation schemes are regulated or expected to be applied in the near future in the Slovak Republic.

6.4. Integration with spatial planning

Spatial planning should integrate noise zoning by including in the territorial plans for the municipalities the noise contours sent by the airport authorities as part of the general airport plans submitted to the local governments.

The municipalities are the only bodies responsible for regulating the use of land in accordance with those plans.

There is no specific consideration for air pollution due to airport activities in the territorial plans, although it is definitely considered as a general issue.

6.5. Integration with development, construction or operation controls

Although the noise contours are included in territorial plans, at least in Bratislava, unfortunately they have not been used to restrict residential developments around airports.

There is no legal power to forbid urban developments once they have obtained the building permission from the building office. Therefore, the only solution is to reach an agreement with the municipality to impose land-use restrictions based on noise in the territorial plan. This will be the situation in Bratislava if the “noise protection zone” recently proposed is finally adopted.

The issues of noise and air quality during the construction could be dealt with during the EIA process, where the specific measures to be taken will be contemplated as conditions for the environmental approval and subsequent building permission, if necessary.

With regard to airport operation, the Slovak University of Technology in Bratislava, together with a private consultant, monitor noise around Bratislava and four other international airports. They use the information as the basis for mathematical prediction of future noise exposure.

There are 2 fixed and 1 mobile noise monitoring stations around Bratislava airport, which have been measuring noise 24 hours a day since 1994. They are also connected to a radar system to monitor compliance with flight paths, as a source of information for municipalities and district offices. No fines are imposed for non-compliance with assigned routes. Nor is there a noise abatement plan/procedure published in the AIP (Aeronautical Information Publication).

7. CASE STUDY – BRATISLAVA AIRPORT

The project for the transformation of the budgetary organisation Slovenská správa letísk (SSL) into six independent joint stock companies, adopted by Resolution 130/2003, was implemented in December 2004.

The transformation was executed in 2004 under Act 136/2004 on Airport Companies and on amendment of Act 143/1998 on Civil Aviation.

In May 2004, two joint stock companies with 100% state capital interest were established from part of the assets of SSL: Letisko M. R. Štefánika – Airport Bratislava, a.s. (BTS) and Letisko Košice – Airport, a.s.

From the remaining assets of SSL four other joint stock companies with 100% state capital interest were founded on 1 January 2005: Letisko Sliač, a.s., Letisko Piešťany a.s., Letisko Poprad – Tatry, a.s. and Letisková spoločnosť Žilina, a.s., and SSL was dissolved on 31 December 2004.

The M.R. Štefánik Airport Bratislava is the principal international airport of the Slovak Republic. It is located 9 km to the north-east of the city centre, in an area of 477 hectares. BTS is now the owner of the airport infrastructure and other movable and immovable property of the international airport in Bratislava and operates this airport.



Recognizing its growth potential, the Ministry of Transport, Telecommunications and Postal services has come up with a plan for privatisation.

A draft paper was discussed with an advisory consortium and released for public review in May 2005. According to the proposal, strategic investors would receive a majority of Bratislava airport (there is a similar process for Kosice airport), while the remaining 34% would stay in state hands (a compulsory blocking minority is required by the Airport Companies Act). Following pressure from the City and Region of Bratislava, there are plans to cede 10% of the company shares to the regional council and 10% to the city council by the end of 2006.

Finally, on 21 June 2005 the Government of the Slovak Republic adopted Resolution n°. 484 approving "The proposed privatisation concept for Letisko M.R. Štefánika – Airport Bratislava, a.s. (BTS) and Letisko Košice – Airport Košice, a.s." thereby approving the inclusion of 66% of the state property interest in these companies in the list of companies intended for privatisation.

The recommended winner of the airport sale tender, called consortium TwoOne, (comprising Austria's Flughafen Wien and Raiffeisen Zentralbank and Slovak finance company Penta) has said Bratislava airport would benefit from access to the Vienna market, and that the alliance between the two airports would boost competitiveness of the region. The final decision is still pending at the time of this writing.

COUNTRY CONTACTS

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Ludovit Gabris, Head of the Aerodrome Section

- **BTS – Airport Bratislava**

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- **Slovak University of Technology in Bratislava**

Milan Kamenický

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹¹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹¹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

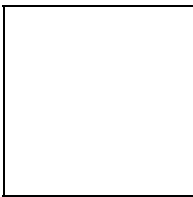
<i>Vyššie územné celky(samosprávne kraje)</i>	VÚC – Greater Territorial Units (self-governing regions)
<i>Slovenská správa letísk</i>	SSL – Slovak Airports Authority

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 - Building Act
 - Environmental legislation:

<http://www.enviro.gov.sk/minis/>

- Act on EIA
- Act on noise assessment
- Act on Clean Air



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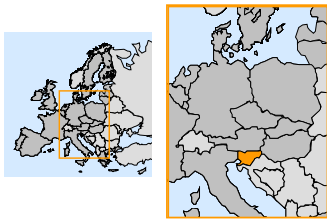


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SLOVENIA		Location Map	
Population	2 mill. (100 inhabitants per km ²)		
Airports network	There are 3 international airports in Slovenia (Ljubljana, Maribor and Portoroz). The most important is Ljubljana, with more than 1 mill. passengers/year. It is managed by a joint-stock company, Ljubljana Aerodrom.		
Spatial planning system			
Hierarchical system with strong State participation through the Ministry of the Environment and Spatial Planning, which can adopt Land Use Plans and grant building permits for specific areas of national interest.			
<ul style="list-style-type: none"> Institutions <ul style="list-style-type: none"> National level: The Ministry of the Environment and Spatial Planning is responsible for developing national strategies, adopting national plans and coordinating the participation of the remaining central bodies. Regional level: No regional administrative level. Regional instruments designed to facilitate coordination between the national and local levels. Local level: Municipalities can draw up and adopt their plans according to national regulations or plans. Building permits are, with some exceptions, granted by the municipalities. Instruments <ul style="list-style-type: none"> Strategic plans "Spatial Development Strategy of Slovenia" "Municipal Spatial Development Strategy" Framework plans "Spatial Order of Slovenia" "Regional Conception of Spatial Development" Regulatory plans "Detailed Plans of National Importance" "Local Detailed Plans" Process: SEA and EIA are integrated into the planning process, so citizen participation always takes place before the adoption of Detailed Plans. Good coordination between the different ministries and local level of government is guaranteed. 			
Regulation and permits			
Building permits are required for almost every construction activity, and are granted either by the municipality or by the Ministry of the Environment and Spatial Planning, depending on the type of project.			
Airport planning			
<ul style="list-style-type: none"> Policy and planning: Airport developments should be defined through ordinary spatial planning instruments, such as the Detailed Plan of National Importance. Spatial impact: Obstacle limitation surfaces and noise contours should be contained in Detailed Plans. Construction: Subject to ordinary building and environmental permits requirements. Operation: Operating permits from the Ministry of the Environment and Spatial Planning and from the CAA are required for any new infrastructure. Certification regulations are under preparation. 			
Airport noise and air quality			
<ul style="list-style-type: none"> Noise: regulations on airport noise are contained in the Environmental Protection Act, which includes the transposition of the EU "noise" Directive 2002/49/EEC. Air quality: No specific legislation referring to air pollution caused by air traffic. 			

1. SUMMARY

SPATIAL PLANNING SYSTEM

The Spatial Development Strategy of Slovenia (SDSS), adopted in 2004, provides the framework for spatial development across the entire national territory.

Municipalities must prepare a Conception of Urban Development, setting out in detail their spatial development strategy. This includes the designation of new development and renewal areas, the general distribution of land uses and public facilities, and the strategy for the location of infrastructures, green areas, sport facilities, as well as disaster protection and spatially relevant developments.

Local Detailed Plans are municipal implementation documents, which plan in detail individual areas and spatial arrangements with known investors. For spatial arrangements of national significance, such as airports, the same type of document must be drawn up by the relevant ministry. Airport planning must be integrated into the spatial planning system through those Detailed Plans of National Importance.

These plans are organized in a hierarchical structure where lower levels must always be in conformity with higher levels.

REGULATIONS AND PERMITS

Construction permits

Every construction activity in Slovenia requires a building permit granted by the building authority. Only small individual buildings are exempted. Airports, like other infrastructures, also require permits for all construction.

Building permits are generally granted by the local authority, but permits for spatial arrangements of national significance, such as airports, are issued at the State level.

Environmental permits

EIA and SEA are regulated according to EU Directives. The procedures are integrated into the process for the preparation and adoption of the Detailed Plans of National Importance.

In the case of airports, an operating permit is also required once the construction activity is finalised, to check compliance with the conditions stated in the approval of the SEA or EIA reports.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

According to the Aviation Act 2001, the Ministry of Transport is responsible for preparing the “national civil aviation development program”, to be adopted by the National Assembly at the proposal of the Government, although this has not yet been prepared.

- Airport

The Ministry of Transport is also responsible for initiating the preparation of the Detailed Plans of National Importance for every airport of “national significance”. No such a plan has yet been prepared.

Once plans are prepared, they will have to be adopted by the government through a decree, and will be binding on municipalities, which will have to integrate them into their spatial plans.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The CAA is responsible for preparing maps with “obstacle protection zones” based on the ICAO obstacle limitation surfaces. Affected municipalities are informed of the requirement to consult the CAA before granting building permits in those areas.

- Noise Impact

There are no noise contours for any of the international airports in Slovenia. According to the Aviation Act, the CAA is responsible for tasks related to the “protection from noise and other aircraft emissions”.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports. The Spatial Development Strategy of Slovenia refers to the need for risk prevention to be taken into account when deciding the location of a new airport.

- Land reserve for future construction

Land reserves will have to be included in Detailed Plans of National Importance for airports.

Construction

Construction activities within airport boundaries require a building permit from the Ministry of the Environment and Spatial Planning. Environmental permits would be included in the approval following an EIA process. The prior consent of the CAA is also required.

Operation

The Ministry of the Environment and Spatial Planning must grant an operating permit, after checking compliance with the conditions set by the environmental approval, and the building permit. The CAA shall, after checking safety and compliance with regulations, grant operating permits for everything related to aviation.. Airport certification is not yet regulated.

AIRPORT NOISE AND AIR QUALITY

Noise

Aviation noise has not been the object of specific legislation. The “noise” Directive 2002/49/EC has been transposed but there are no “major airports” in the country. Land use restrictions could be applied once Detailed Plans of National Importance are prepared and adopted.

Air quality

There are no specific provisions for airport-related air pollution.

2. CONTEXT

Slovenia is a republic in the northwest Balkan Peninsula. Slovenia came under Austrian control after 1335 and joined the Kingdom of Serbs, Croats, and Slovenes (later Yugoslavia) in 1918. During World War II Slovenia was divided between Germany, Italy, and Hungary, but returned to Yugoslavia after the war. Slovenia declared its independence from Yugoslavia in June 1991 and has been a member of the European Union since May 2004.

For administrative purposes, Slovenia is divided into 182 municipalities and 11 urban municipalities.



Figure 1. Map of Slovenia

Slovenia continues to enjoy the highest GDP per capita of the transitioning economies of the region. Slovenia's GDP per capita is 17,600¹ (European Union average 22,400 €)

The country is experiencing an increased, yet manageable, rate of inflation. Since 2000, privatisations have taken place in the banking, telecommunications, and public utility sectors.

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	1,996,400
Latitude / Longitude	46°07' N, 14°49' E
Land area	20,151 km ²
Coastline	46.6 km
Capital City	Ljubljana
GDP per capita (PPS at market prices)	17,600
GDP real growth rate	4.2 %
Inflation rate	3.6 %
Unemployment rate	6 %

Table 1. Slovenia: Main facts and figures (2004)²

2.1. Population and statistics

Currently, the Slovenian population is close to 2 million, with an average density of 99.8 inhabitants per sq. Km. This means that the population density is below the European average (115 inhabitants per sq. Km – EU15).

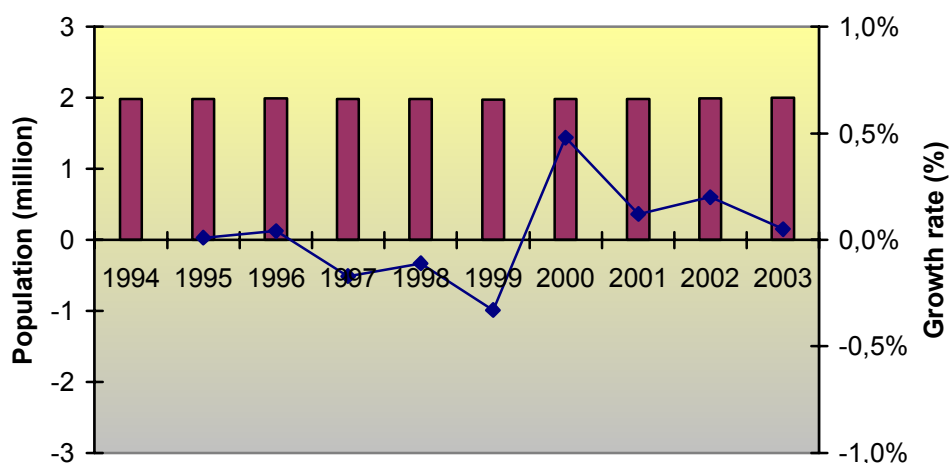


Figure 2. Slovenian population evolution

² Source: EUROSTAT

During the second half of the 1990s, the population in Slovenia decreased due to emigration, although during recent years population levels have been recovering, with growth rates that are positive but remain under the 0.5%.

The Slovenian median age is 40.23 years and birth rate is 10.22 births/1,000 population (2004 est), below the EU average.

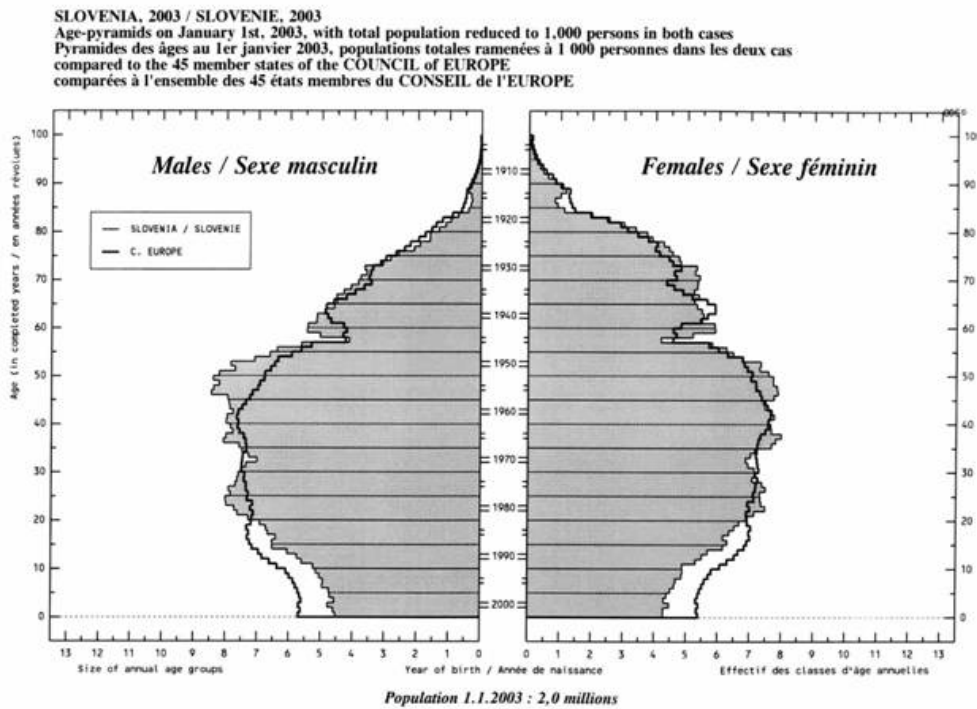
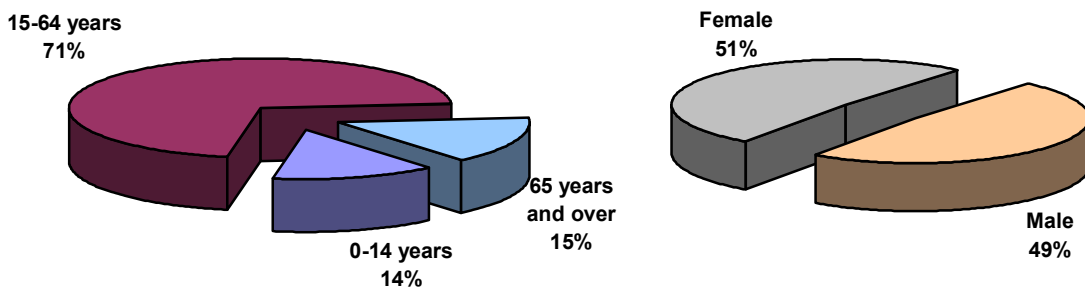


Figure 3. Slovenian age-pyramids (2003)³

The figure above shows the low Slovenian birth rate and the age structure, with the bulk of the population aged between 15 and 64 years (70.6%).



Figures 4 and 5. Slovenian population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Slovenia is a parliamentary democratic republic. The executive consists of an elected president, a council of ministers, and a prime minister. It has a bicameral legislature, the *Skupščina Slovenije* (Slovenian Assembly), consisting of the 90-member *Državni Zbor* (State Chamber) and the 40-member, advisory *Državni Svet* (State Council).

The basic self-governing local communities are the municipalities, which are autonomous and independent in performing tasks within their jurisdiction. National bodies only supervise the legality of the work of local communities.

The Civil Aviation Authority, under the Ministry of Transport, is the regulatory and supervisory body for aviation and airports. The three international airports of Ljubljana, Maribor, and Portoroz are owned and managed by different types of companies, with public and private participation.

In the environmental field, the Ministry of the Environment and Spatial Planning is the central government body, assisted by the Environmental Agency (ARSO).

The Ministry of the Environment and Spatial Planning, is the central body responsible for orchestrating land use planning in Slovenia.

2.3. Main airports

There are 13 aerodromes in Slovenia, of which only three are international airports: Ljubljana (LJU 3300 m x 45 m), Maribor (MBX 2500 m x 45 m), and Portoroz (POW 1200 m x 30 m)



Figure 6. Slovenian airport network

Ljubljana airport is the largest and the busiest. This airport is managed by Ljubljana Aerodrom, a joint-stock company. Ljubljana Aerodrom has been registered as a public limited company since 28 January 1997, with the following ownership structure:

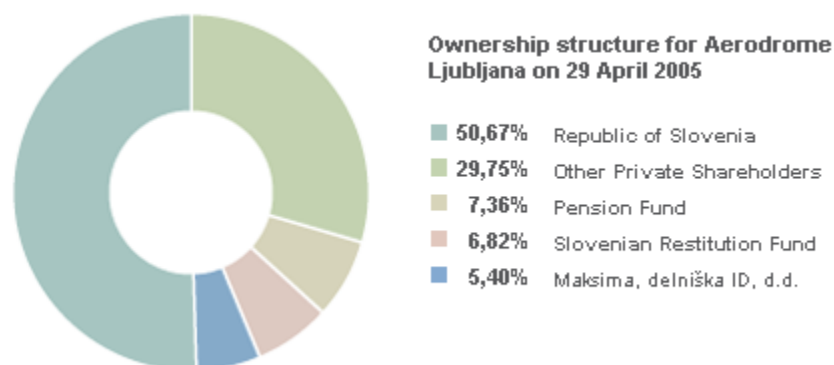


Figure 7. Ownership structure for Aerodrome Ljubljana (April 05)

Maribor airport is managed by Maribor Aerodrom, which has been registered as a public limited company since 2002. It is owned by a local private company.

Portoroz airport belongs to the Community of Piran, where it is located, although Ljubljana Aerodrom and other local private companies have also invested in its future development.

The following table shows the commercial passenger traffic and cargo of the main Slovenian airports during 2004:

Airport	Passengers	Cargo (Tons)
Ljubljana	1,041,000	6,100
Portoroz (<i>Traffic 2003</i>)	18,600	-
Maribor	7,000	-

Table 2. Main Slovenian airport data (2004)

3. SPATIAL PLANNING SYSTEM

A new Spatial Planning Act came into force on 1 January 2003. The new Act defines the types, contents, and hierarchy of spatial planning instruments at national and municipal levels.

The Spatial Planning Act is complemented by the Construction Act (which defines the methods and procedures for obtaining building permits), the Environmental Protection Act (April 2004), and various decrees to develop and implement the Acts.

3.1. Institutions

3.1.1. National

National government prepares laws, policies and other strategic documents to define the spatial planning system and provide strategic spatial development objectives and guidelines. The State also provides the framework for regional and local spatial planning and has the authority to monitor the legality of spatial planning at these levels.

The Ministry of the Environment and Spatial Planning is the central body responsible for the preparation and adoption of national spatial planning instruments and documents. Nevertheless, all ministries are involved in the spatial planning process in relation to their respective areas of interest.

In addition to the spatial development laws and strategic documents adopted by the National Assembly or the Government, the State also has the authority to adopt specific measures and make decisions concerning activities and infrastructures considered of “national significance”.

According to the Spatial Planning Act, “spatial arrangements of national significance” are *“arrangements consisting of facilities and networks which are intended directly for the performance of national public utilities in the areas of energy, transport, communications, water management, natural resources management, environmental protection, and other areas, as well as networks and facilities intended for the fulfilment of common needs in accordance with the law, and also includes facilities and equipment intended for the defence and protection against natural and other disasters in the Republic of Slovenia. Spatial arrangements of national significance are also arrangements extending over the territories of several municipalities, the impact of which extends over the territories of several municipalities, which are, because of their economic,*

*social, cultural, environmental and conservational features, important for the spatial development in the entire territory of the Republic of Slovenia*⁴.

Government Decree No. 54/03, "Spatial arrangements of national significance" of 6 June 2003 listed a number of infrastructures and facilities which fall into this category, including the three international airports (Ljubljana, Maribor and Portoroz) and a military airport.

3.1.2. *Regional*

Although there is no regional administrative level, instruments exist to coordinate initiatives of the State and the municipalities according to the principle of partnership. There are also "spatial arrangements of regional significance" defined by the Spatial Planning Act.

3.1.3. *Local and area wide*

The municipalities are responsible for spatial planning and management within their territories, with the exception of activities and infrastructures under the direct jurisdiction of the State (spatial arrangements of national significance).

There are currently 193 municipalities in Slovenia. Their basic task in this field is to represent public interests pursuant to the law and the spatial planning documents adopted at a higher level. In decision-making procedures, they are responsible for the direct participation of all involved and interested parties.

The Municipal Council is the local planning authority responsible for the preparation and adoption of municipal spatial planning documents. Several municipalities may mutually agree to produce common municipal spatial planning documents.

There are no metropolitan plans at present in Slovenia.

⁴ Spatial Planning Act, article 14

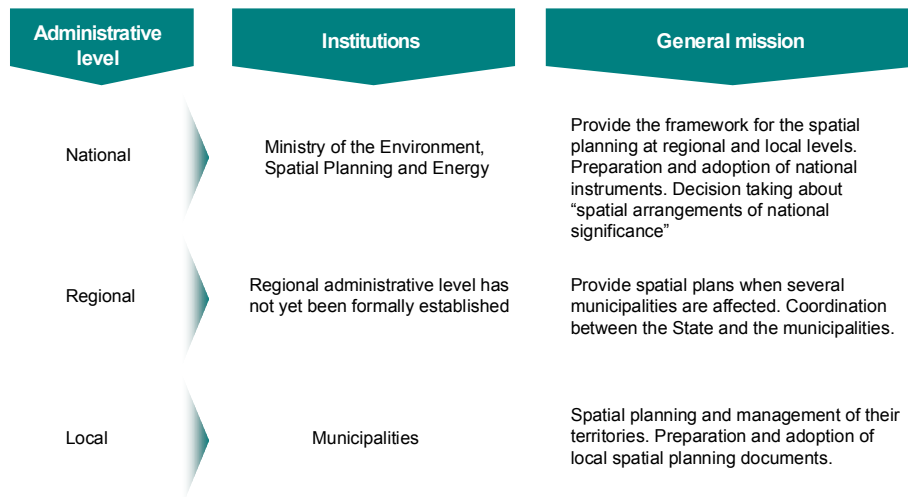


Figure 8. Main mission of spatial planning institutions

3.2. Instruments

The spatial planning system is organised hierarchically at the national, regional and local levels, so that instruments adopted at lower levels do not conflict with those adopted at higher levels.

The Spatial Planning Act defines the contents of each document and establishes the timeframe for the adoption of those to be drawn up at the national level.

3.2.1. Strategic plans or policy documents

National - The "Spatial Development Strategy of Slovenia" (SDSS) was adopted by the National Assembly of the Republic of Slovenia and published in the Official Gazette No. 76/2004.

The preparation of the document was coordinated by the National Office for Spatial Development under the Ministry of the Environment and Spatial Planning. It is based on the Spatial Management Policy of the Republic of Slovenia and the Assessment of Spatial Development in Slovenia, previously adopted by the Government. It has been in force since 20 July 2004 and is the basic document which provides spatial development guidance and the framework for spatial development across the entire national territory.

The SDSS defines the basic premises and goals for spatial development, setting priorities and providing guidelines for settlements, infrastructures and landscape. It includes a list of measures for implementation of the Strategy.

Local - According to the Spatial Planning Act, a Municipal Spatial Development Strategy "shall define the guidelines for spatial development of activities and land use so as to ensure the conditions for sustainable and balanced development in the territory of the municipality".

The municipalities should use this spatial planning document to determine the long-term goals of spatial development in their territories, and particularly the guidelines for the location of activities, development of settlements, infrastructures and landscape.

Municipalities should begin the preparation of the Municipal Spatial Development Strategy after the National SDSS comes into force, and the municipal councils should adopt it no later than three years after 20 July 2004 (the date the SDSS came into force after it was adopted by the National Assembly)

3.2.2. *Local (framework) plans*

National - According to the Spatial Planning Act, the “Spatial Order of Slovenia” should “lay down the basic rules for spatial planning and management at the national, regional and local levels” in accordance with the SDSS.

These rules represent the mandatory contents to be taken into consideration when preparing detailed spatial planning documents. By means of these spatial rules, the Spatial Order may also define criteria and detailed conditions for planning and construction within “spatial arrangements of national significance” when part of them has been accomplished.

The Ministry of the Environment and Spatial Planning was the central body responsible for the preparation of this document, which was adopted by the Government in November 2004.

Regional - Pursuant to the Spatial Planning Act, the state and the municipalities may agree to prepare a “Regional Conception of Spatial Development” which defines the framework for the development of the “spatial arrangements of regional significance”, taking into account the guidelines of the SDSS.

If the state and the interested municipalities agree, this can also be used for the “spatial arrangements of national significance” as the basis for protection under other regulations or instruments.

The Act must include guidelines and lay down the basic premises for the preparation of municipal spatial planning documents or “Detailed Plans of National Importance”. If it is prepared with sufficient detail, it could even substitute the Municipal Spatial Development Strategy.

The central body responsible for the preparation of the document, together with all the interested municipalities and other affected ministries, is the Ministry of the Environment and Spatial Planning.

Once the “Regional Conception of Spatial Development” is adopted by each Municipal Council involved and by the Government, the State is bound to

prepare a “Detailed Plan of National Importance” in accordance with its guidelines, while the municipalities are bound to harmonise their spatial planning instruments with this framework instrument.

This instrument has not yet been used for airport construction or development.

Local - In cities and urban communities, or areas where new expansion or renewal areas are being designated, municipalities must prepare a “Conception of Urban Development” setting out in detail the spatial development strategy. This includes the designation of the new development and renewal areas, the general distribution of land uses and public facilities, and the strategy for the location of infrastructures, green areas, sport facilities, as well as disaster protection and spatially relevant developments. These documents must also stipulate detailed guidelines for the protection of the environment, nature and cultural heritage.

3.2.3. *Regulatory (detailed) plans*

National - The “Detailed Plan of National Importance” is an implementation document which defines the development of a “spatial arrangement of national significance”. It must not conflict with the Spatial Development Strategy of Slovenia or with any Regional Conception of Spatial Development adopted for the area where it is located.

The Detailed Plan will set out the location for the development of the activity or infrastructure considered as “spatial arrangement of national significance”, the impact on and links with surrounding areas, land uses, solutions for transport, power, water supply as well as environmental protection measures to be taken and the conditions for land acquisition, where necessary.

It must also lay down the planning conditions and designs required to obtain building permits and include information showing how the plan will be financed.

The Ministry of the Environment and Spatial Planning is the central body responsible for the preparation of this document, once an initiative explaining and documenting its convenience is submitted by the ministry concerned.

While the detailed plan is being prepared, a Provisional Implementation Measure may be adopted by the Government to protect the activity or infrastructure by prohibiting real estate trading in the area.

The Detailed Plan of National Importance shall be adopted by the Government by issuing a decree, in which those parts of the municipal spatial planning documents which are in conflict with the adopted plan must be identified.

Local - The Municipal Spatial Order is the basic document of the municipality in order to implement spatial planning, to be adopted by the Municipal Council.

It defines, in accordance with the Municipal Spatial Development Strategy and taking into account the guidelines and rules set out by the Spatial Order of Slovenia, the basic land use areas for the entire territory of the municipality, which may be further subdivided into detailed land uses specifying what uses are to be considered predominant, compatible or complementary. Detailed land use areas must include the land designated for public use.

The Municipal Spatial Development Strategy is the basis for the preparation of a Local Detailed Plan and provides planning conditions for the preparation of designs in order to obtain the necessary building permits for facilities not regulated by detailed plans. It may include detailed regulations for building alignment and height, design criteria and infrastructures for specific zones.

It must also show the areas covered by a Detailed Plan of National Importance.

The Local Detailed Plan is also a municipal implementation document, planning in detail individual areas and spatial arrangements with known investors.

Like the Municipal Spatial Order, the Local Detailed Plan determines planning conditions for the preparation of designs in order to obtain building permits, but it must also include the impact on and links with the surrounding areas, land uses, solutions for transport, power, water supply as well as environmental protection measures to be taken.

It must also lay down how the plan is to be financed and specify the obligation of signing a contract (Urban Planning Contract) between the investor and the municipality.

If the development proposed by the plan requires the expropriation of land, a Conditional Detailed Plan may be adopted. Its validity would be suspended until the fulfilment of the conditions specified in relation to the acquisition of the property needed for the execution of the plan. A deadline for obtaining all real estate required shall be established, the maximum being four years. When a Conditional Detailed Plan is adopted, the municipality may also adopt measures to prohibit land parcelling and trading in real state in the area covered by the plan until it comes into force or the deadline expires.

Both the Local Detailed Plan and the Conditional Detailed Plan are adopted by the Municipal Council.

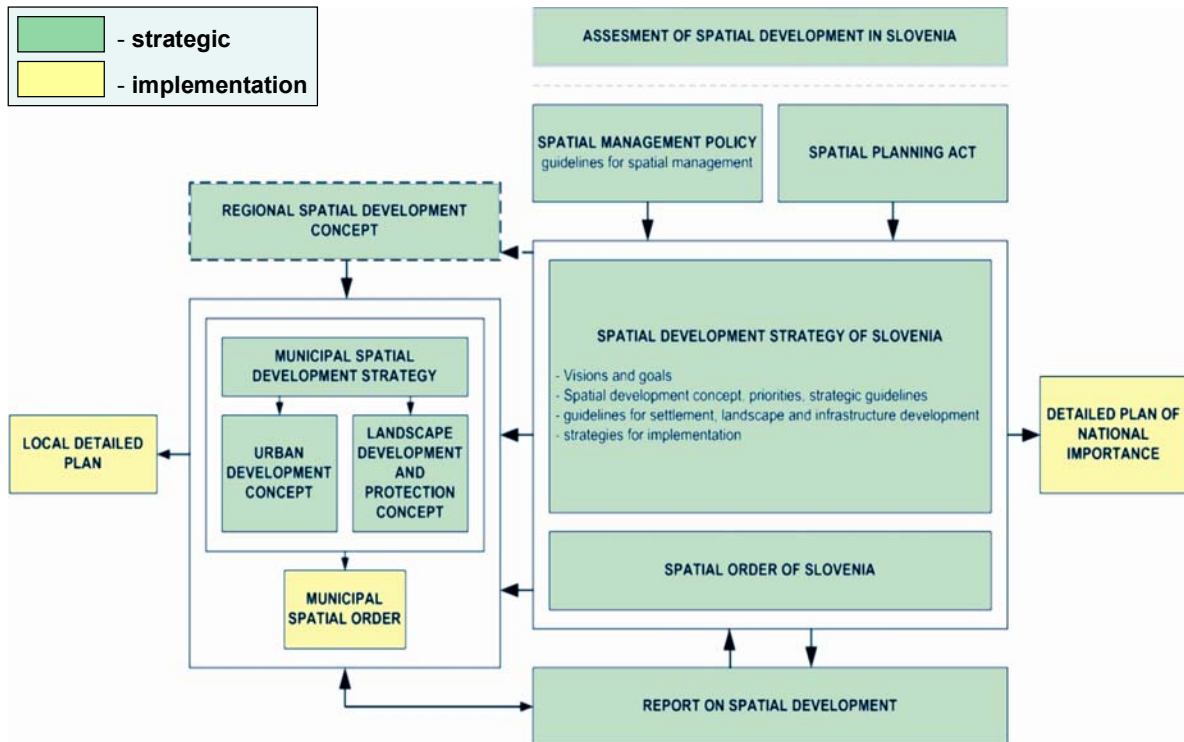


Figure 9. Spatial planning instruments

Source: Ministry of the Environment and Spatial Planning

3.3. Process

All spatial planning instruments in Slovenia are subject to both inter-government consultation and citizen participation, in accordance with the Spatial Planning Act.

3.3.1. Inter-government consultation

As a general rule, the Ministry of the Environment and Spatial Planning is responsible for defining the preparation process for the spatial planning instruments, as well as for defining the types of experts required to prepare them. However, the Spatial Planning Act establishes some common provisions in relation to the preparation and adoption of the spatial planning documents.

In general, the preparation of any instrument shall be financed by the producer, with the exception of detailed plans, which shall be at least co-financed by the initiator. The initiator is the government body, company or citizen who has detected the need to prepare or amend a spatial planning instrument. In the case of a Detailed Plan of National Importance, the initiator will be the Minister responsible for the spatial arrangement of national significance.

The preparation of any spatial planning instrument or any amendments related thereto shall be based on a “spatial planning document preparation programme”. This programme shall include information on the reasons and

legal basis for the preparation of the plan, a list of authorities and organizations to be involved, a timeframe for the preparation process and obligations with regard to the financing of the document.

The preparation programme must be adopted by the Ministry of the Environment and Spatial Planning, in agreement with the initiator, for the national spatial planning documents and by the Mayor for the municipal spatial planning documents. It must be published in the Official Gazette of the Republic of Slovenia or in the municipal official gazette, respectively.

Once the programme has been adopted, it must be sent to all the interested parties (spatial planning stakeholders) involved, asking for their contribution in the form of planning guidelines. In the case of detailed plans, different alternatives and solutions for the spatial arrangement object of the document shall be requested from different experts and assessed, even through a public tender (with the exception of a public infrastructure). The producer shall make the selection of the final solution to be proposed in the plan.

After the planning document has been subject to citizen participation, as described in the following pages, a final proposal, with annexes, will be sent to the national or municipal body responsible for its adoption. The annexes shall include a summary of the plan, an explanation of the solution proposed, the materials provided by the experts consulted and the record of the document preparation.

The validity of spatial planning documents shall not be subject to a time limit, with the exception of the Municipal Spatial Development Strategy, which needs to be updated every four years, and the detailed plans which shall cease to be valid when they have been executed.

For example, the whole process of preparing the Spatial Development Strategy of Slovenia, including inter-government coordination, lasted two and a half years, approximately.

3.3.2. *Policy integration*

The Slovenian planning system is clearly hierarchic, so every spatial planning document must be in accordance with plans adopted at higher levels and must be integrated with the framework established through the Spatial Development Strategy of Slovenia by the Ministry of the Environment and Spatial Planning.

A clear example of policy integration set out by the Spatial Planning Act is the decree of adoption of a Detailed Plan of National Importance. That Decree shall specify which parts of the municipal spatial planning documents are in conflict with the adopted plan, obliging the municipalities to change those documents so that they are in accordance with the national plan.

The functioning of the whole spatial planning system is monitored through the preparation of Reports on Spatial Development, both at the national and the municipal level. These reports, which are updated every four years, are sent to the National Assembly or the Municipal Council, respectively, for their adoption.

3.3.3. *Citizen participation*

Two or three spatial planning conferences shall be held during the preparation of the spatial planning documents for the purpose of obtaining and co-ordinating the recommendations, policies, and interests of local communities, the private sector, interest groups and the public concerned regarding the preparation of any spatial planning document.

The producer shall attach the recommendations from the conferences to the materials of the spatial planning document submitted for adoption.

Prior to the submission of the proposed spatial planning document to be adopted, it shall be exhibited publicly for at least 30 days. During the spatial planning document public exhibition period, the producer shall also organize a public debate on its contents. Public exhibition and debates usually take place in the affected municipalities.

Recommendations and opinions received during public exhibition will be taken into consideration by the producer. According to the Spatial Planning Act,

“The producer shall keep a record of the remarks and proposals presented during the period of public exhibition, take a stand on these comments and proposals, and make sure that the spatial planning document is amended in accordance with their views of the remarks and proposals. The producer shall attach these views together with the comments and proposals to the proposed spatial planning document, when it is submitted for adoption...”

...If a spatial planning document is amended on the basis of comments and proposals from the original public exhibition and debate so that the new solutions are no longer in conformity with the principles of the spatial planning document preparation programme, it shall be exhibited and debated again.”

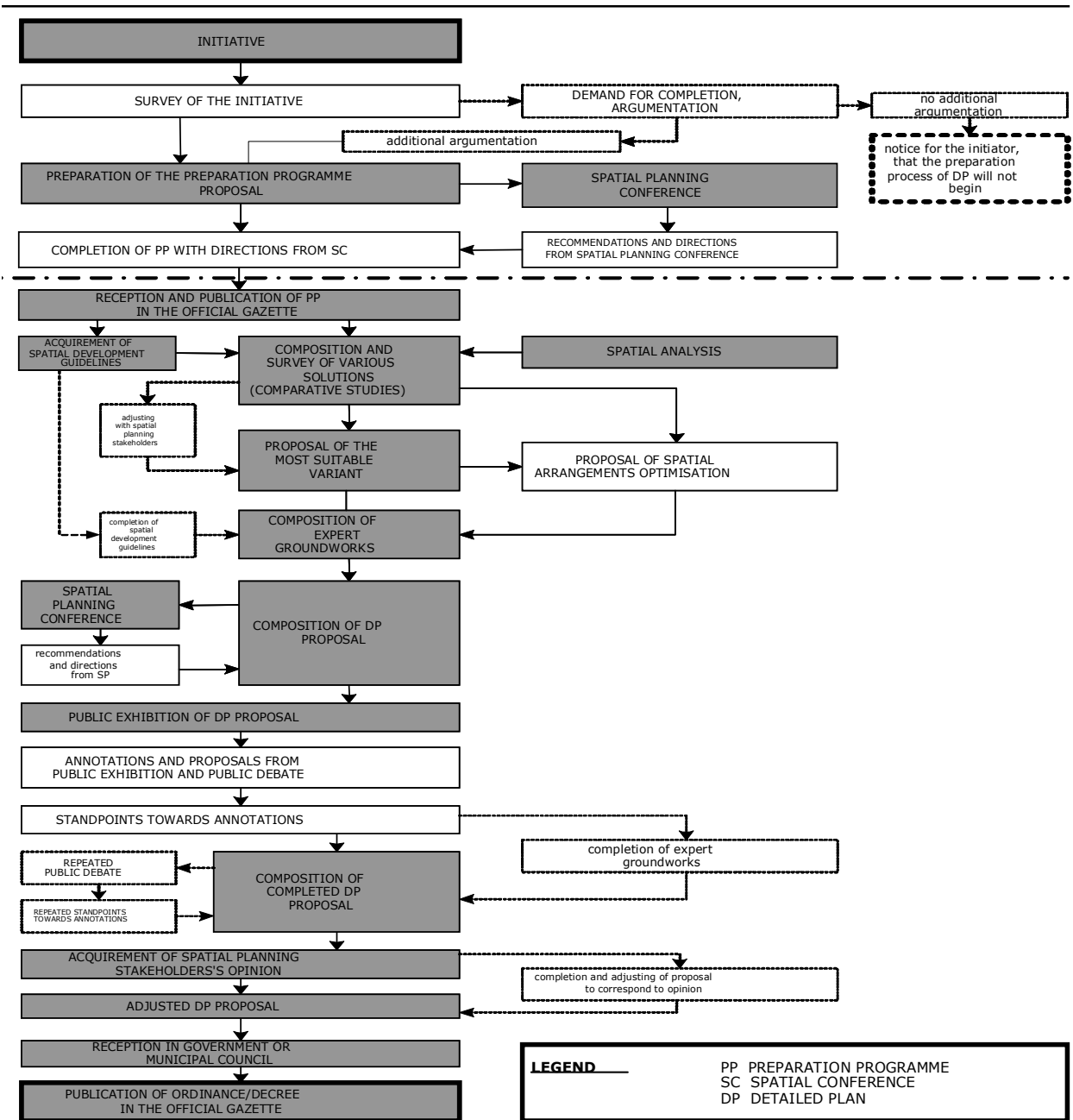


Figure 10. Process of preparation and approval of a detailed plan

Source: Ministry of the Environment and Spatial Planning

4. REGULATIONS AND PERMITS

4.1. Development control system

4.1.1. *Activities subject to development control*

Pursuant to the Building Act No. 102/04, every construction activity in Slovenia requires a building permit granted by the building authority.

Airports, just like other infrastructures, also require a permit for every construction.

In general, permits are issued for the activities and buildings included or in accordance with a Detailed Plan.

4.1.2. *Exceptions or exemptions*

Regulation No. 114/03 (amended by Reg. No. 137/04) classifies buildings according to the type of building permit required for their construction:

- those requiring a complex building permit
- those requiring a typical permit
- simple buildings which do not require a permit.

The last category of the above list refers to individual buildings with a surface up to 30 m² (200 m² if they are used for agriculture). The Regulation includes a reference to airports, which are exempted from applying for a permit for “*temporary objects for monitoring, signalling necessary for the airport activity and approved by the aviation authorities*” in existing airports.

4.1.3. *Institutions involved: inter-government relations*

In general, building permits are granted by the administrative unit (there are 58 administrative units which form part of the public administration all over the country) where the activity or building is to be located.

For “spatial arrangements of national significance”, Governmental Decree No. 33/03 defines certain types of national importance objects which require a building permit from the state. In those cases, the Ministry of the Environment and Spatial Planning is responsible for granting the permit. That Decree states that the four airports (the three international airports and the military one) are considered as “spatial arrangements of national significance” and are among those objects for which permits are issued at the State level.

The EIA is integrated into the planning system (as part of the preparation of the Detailed Plan of National Importance”) and does not have to be repeated when granting the building permit.

4.1.4. Relationship with planning

The approval of a Detailed Plan implies the right to build anything included in that plan, provided that it complies with other regulations in force, such as the Construction Act.

It is not possible to obtain a building permit for a project not covered by a Detailed Plan in force.

For those projects with a potential impact on the environment, which are subject to an EIA during the planning process, the building permit is granted only for the constructions to be developed exactly in accordance with the environmental approval.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Pursuant to the Environmental Protection Act No. 41/04 and the Decree on the types of activities for which an environmental impact assessment is mandatory, any project with a potential impact on the environment, including airport development, requires an Environmental Impact Assessment.

This new Environmental Protection Act 2004 also includes the transposition into the Slovenian legislation of Directive 2001/42/EC⁵ (the “SEA” Directive).

Prior to the adoption of the 2004 Act, a “Comparative analysis procedure”, which took into account environmental issues, was already conducted in the process of preparation of Detailed Plans since 1993.

SEA and EIA are now integrated into the process of preparation of Detailed Plans of National Importance. The Ministry of the Environment and Spatial Planning should coordinate that process, which includes the formulation of alternatives. The best alternative is chosen taking into account, among others, environmental issues (SEA). The documentation generated as the basis for that decision is subject to public hearing.

After the strategic evaluation, an EIA is developed for the alternative to be proposed in the Detailed Plan, which is already subject to public participation.

⁵ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

In that way, the Decree where the Plan is adopted includes the environmental approval.

4.2.2. Other environmental controls

In the case of airports, an operating permit is granted by the Ministry of the Environment and Spatial Planning when the construction activities are finalised, checking compliance with the conditions stated in the environmental approval.

4.2.3. Institutions involved

The Ministry of the Environment and Spatial Planning and the Environmental Agency (ARSO) are the bodies responsible for coordinating the EIA process and granting the approvals and permits.

4.2.4. Integration with other permits

The application for the building permit, which must be completed separately, does not require a new environmental assessment.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

There are three international airports in Slovenia, each of them managed by an independent company with different ownership. These airport companies are responsible for the “day-to-day” management of the airport and for preparing development projects to adapt the infrastructures to the air traffic demand.

According to the Aviation Act 2001, the Civil Aviation Authority, under the Ministry of Transport is responsible for “...airports and aerodromes, protection from noise and other aircraft emissions, ..., administrative-professional supervision of the implementation of regulations in the area of aviation and other matters in connection with civil aviation.”

The CAA must also be consulted by the airport companies to obtain a “prior consent” on the location and construction of any airport facility.

The CAA was responsible for developing long term development plans for all the Slovenian airports until the Spatial Planning Act came into force.

The Ministry of Transport is now responsible for initiating the preparation of the Detailed Plans of National Importance for every airport of “national significance”. It is also responsible, according to the Aviation Act 2001, for preparing the “national civil aviation development program”, to be adopted by the National Assembly at the proposal of the Government.

The Ministry of the Environment and Spatial Planning is responsible for coordinating the preparation of the detailed plans of national importance. These plans are subject to citizen participation and will be integrated into the local plans adopted by the municipalities.

5.1.2. Instruments

In the past, the CAA prepared long and short term development plans for every airport in Slovenia.

According to the Aviation Act 2001, the “national civil aviation development program” should set up the “guidelines for the sustainable development of civil aviation”. This strategic instrument is still being prepared.

Since the Spatial Planning Act entered into force in 2003, the three international airports require a detailed plan of national importance, as they are considered “spatial arrangements of national significance”. However, as these detailed

plans have not yet been developed, there are currently no official airport plans in Slovenia.

The airport companies have developed their own projects, but they are only internal documents and can not be used as the basis for granting a building permit.

The CAA has not discarded the long term development plans which had been prepared prior to the new Act.

5.1.3. *Process*

According to the Spatial Planning Act, the detailed plans of national importance will follow the same process as described above.

The preparation of the plans should be proposed by means of a reasoned statement from the Ministry of Transport to the Ministry of the Environment and Spatial Planning, who would coordinate the process.

All the affected ministries would participate in the process and public exhibition and conferences would take place. Depending on the kind of proposals put forward in the plan, Strategic Environmental Appraisal and Environmental Impact Assessment would also form part of the planning process.

5.2. **Spatial impact**

5.2.1. *Implementation of ICAO Annex 14 requirements*

According to the Aviation Act, the Ministry of Transport is responsible for “ensuring undisturbed and safe air traffic and airport operations”.

In principle, any building or facility within a radius of 10 km from an airport reference point could represent an obstacle and must be notified to the CAA.

The CAA prepares airport maps with the Annex 14 surfaces, even for planned future runways. The Environmental Agency ARSO is responsible for notifying each of the municipalities affected by those surfaces, informing them that the CAA should be consulted in relation to building permit processes within those areas.

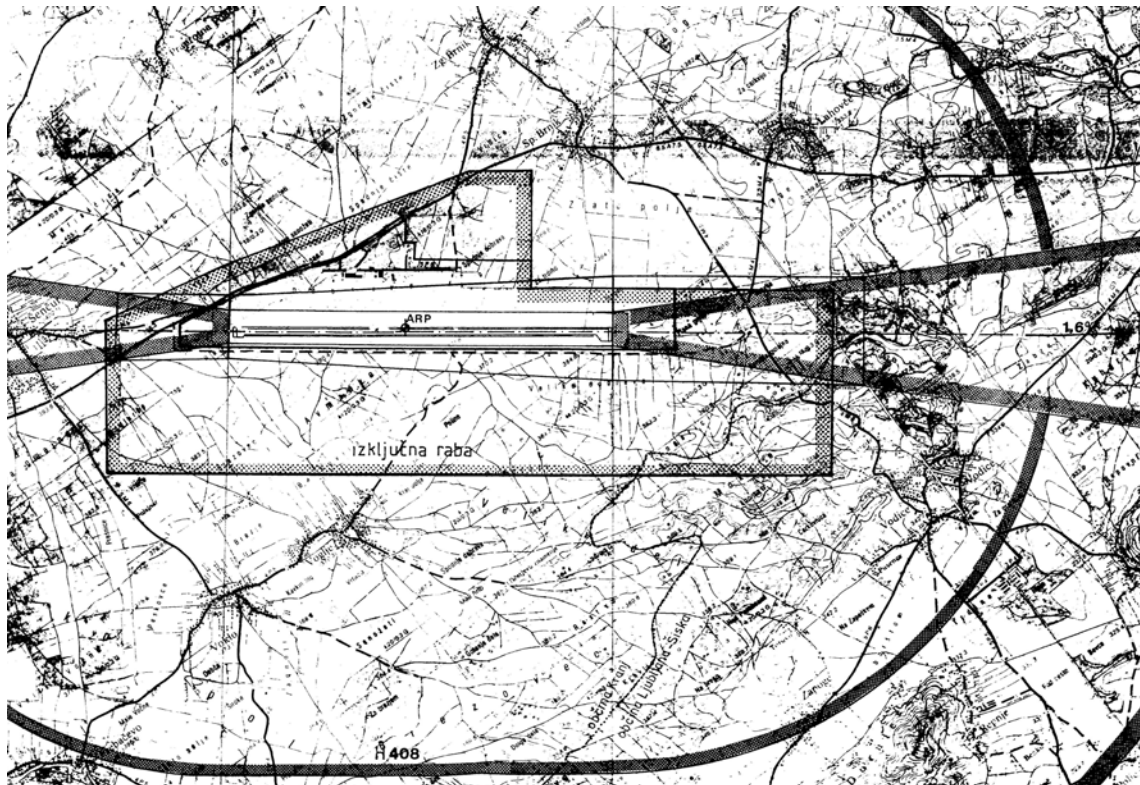


Figure 11. Obstacle limitation surfaces for Ljubljana Airport

Source: CAA

5.2.2. Noise Impact

According to the Aviation Act, the CAA is responsible for issues related to “*protection from noise and other aircraft emissions*”.

In practice, there are no noise contours for any of the international airports in Slovenia.

Noise impacts were only considered in the case of the apron extension at Ljubljana airport, but only limited measurements were carried out.

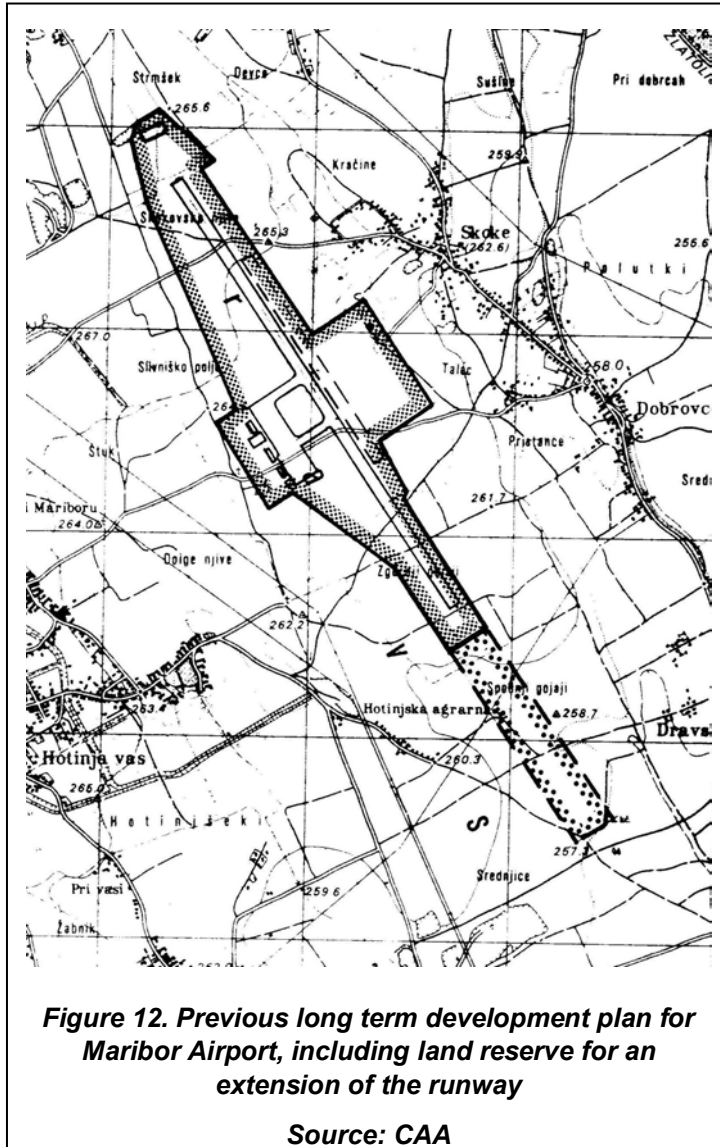
There are no complaints coming from the surrounding areas of the airports. A proposal to install a noise barrier in Sencur, close to Ljubljana airport, was agreed, but finally it was not considered necessary.

5.2.3. Risk prevention

There are no safety zones considered for this purpose. Only a note at the Spatial Development Strategy of Slovenia refers to the potential risk prevention to be taken into account when deciding the location of a new airport.

5.2.4. Land reserve for future construction

Land reserved for future airport developments were defined by the CAA in the long term development plans of the municipalities prepared prior to the Spatial Planning Act.



These plans were binding on the municipalities, which must take those reserves into consideration when developing their local plans.

These plans were abrogated by the Spatial Development Strategy of Slovenia. According to Spatial Planning Act the municipalities shall prepare new spatial development documents in which they will include also airport areas.

A detailed plan of national importance must be prepared for any extension of the existing airports or for any new airport defined as a spatial arrangement of national significance. The plans will also be binding on the municipalities, which will consider them when drawing up the local detailed plans.

In the meantime, the provisions of the Spatial Planning Act allow the Government to adopt “provisional measures” to protect future developments of the spatial arrangements of national significance, such as the international airports.

These measures can be taken to “*prohibit land parcelling and trading in real estate*” in the area to be developed by a detailed plan of national importance in the future. They may remain in force for up to four years.

In practice, airport companies are negotiating and buying the terrain for the future development of the airports, even though they are not the owners of the existing infrastructures, which belong to the State.

5.3. Airport construction

5.3.1. Permits and authorizations required for airport construction or development

- a) Building permit: The “Governmental Decree 33/03 on the spatial arrangements of national significance requiring a permit from the State” includes the three international airports, as well as the military one, among those infrastructures for which the Ministry of the Environment and Spatial Planning is responsible for granting building permits.
- b) Environmental permits: For major projects with a potential impact on the environment, such as most of the airport developments, the environmental approval integrates all the permits regarding water, waste management, etc. It may be obtained before the building permit is granted as soon as the Environmental Impact Assessment has been carried out.
- c) Civil aviation: Pursuant to the Aviation Act, a “prior consent” from the CAA must be obtained before any decision on the location or the construction of any airport facility is taken.

5.3.2. Institutions and processes involved

- d) Authorization: Ministry of the Environment and Spatial Planning. A technical inspection is carried out by the CAA after the construction.
- e) Supervision: Not applicable

5.3.3. Integration with planning and environmental controls

The EIA is part of the preparation of the detailed plans and the environmental approval is required before the building permit can be obtained. Full integration of planning, environmental controls and construction is thereby guaranteed.

5.4. Airport operation

5.4.1. Operating permit

Two operating permits are required once the construction of any airport facility has finished.

The Ministry of the Environment and Spatial Planning must grant an operating permit after checking compliance with the conditions established in the environmental approval and the building permit.

The CAA shall grant an operating permit for all aviation-related matters, after checking safety and compliance with regulations.

Both permits are permanent today, but in accordance with the future regulations on airport certification (under development) they will only be granted for five years and have to be updated after that period.

5.4.2. Airport certification

The CAA and the Ministry of Transport are preparing specific regulations on airport certification, according to ICAO documents.

Ljubljana airport has already submitted the aerodrome manual in accordance with international regulations, and the rest of the international airports should be already preparing them.

According to the Aviation Act, in Slovenia all the ICAO recommendations are binding, including all the Annexes to the Chicago Convention.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

There is no specific legislation about noise around airports in Slovenia. The framework legislation is the Environmental Protection Act No. 41/04, which includes general regulations on noise and air quality.

Directive 2002/49/EC⁶ (the “noise” Directive), has been already transposed into Slovenian legislation through the Environmental Protection Act (October 2004).

Directive 2002/30/EC⁷ (the “noise-related operating restrictions” Directive) has also been incorporated into the national regulations.

The Aviation Act 2001 includes an article on environmental protection focused on noise and air quality.

In 1996, the Minister of the Environment and Spatial Planning issued a Regulation on “Initial Measurement of Noise and Operational Noise Monitoring for Sources of Noise and on Conditions for Their Execution” in relation to some noise sources, including rail and roads but excluding airports. These regulations will remain in force until the new regulations implementing the Environmental Protection Act of 2004 are adopted.

6.2. Institutions

The Aviation Act 2001 states that the Ministry of Transport and the Ministry of the Environment and Spatial Planning:

“...shall issue regulations on permitted total noise and engine emissions of aircraft at an airport and in an airport zone and determine the level of levy for rectifying damaging effects on the environment if noise and emissions exceed a permitted level.

The levy referred to in the previous paragraph shall be collected by the airport operator and shall be income to the national budget. Funds from levies shall be used for reducing the impact and rectifying the effects of engine noise in the affected area in compliance with measures determined in airport development programmes. At least one quarter of the funds of levies collected in

⁶ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

⁷ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

an individual year shall be devoted to compensation for worsened living conditions of the population with permanent residence in affected areas. The government shall determine by decree affected areas on the basis of measurements carried out.”

Such regulations and compensation schemes have not yet been implemented.

6.3. Instruments

- a) Planning: There are currently no noise contours defined for any of the international airports in Slovenia. The operator at Ljubljana airport, “Ljubljana aerodrom”, is planning to install a noise monitoring system in order to take some measurements to be used in their projects. Noise contours should be included in detailed plans of national importance, as well as air quality considerations.
- b) Land use restrictions: Urban development restrictions could be implemented through the adoption of detailed plans of national importance, which are binding on municipalities.
- c) Compensation: According to the Aviation Act, measures can be taken with regard to compensation. They should be financed, at least in part, by airport noise charges. However, none of these provisions have been implemented yet.

6.4. Integration with spatial planning

Perfect integration of noise contours and any restrictions to urban development will be guaranteed when a detailed plan of national importance for an airport area is adopted, , as it is an ordinary spatial planning instrument which establishes land uses.

However, as these plans have not yet been prepared for any of the international airports in Slovenia, there is currently no integration of noise or air quality into the spatial planning system. Noise and air quality are not used as a basis to determine land uses.

6.5. Integration with development, construction or operation controls

In Slovenia, noise has only been considered for specific projects around Ljubljana airport.

Some measurements were taken (with movable stations rented by the airport company) before an expansion of the taxiways was executed and were included in that report, but never as noise contours. Finally, as mentioned above, a noise barrier was supposed to be built at the end of the runway to protect Sencur inhabitants, but it was never erected.

The airport company Aerodrom Ljubljana is now planning to install a noise monitoring system with 3 or 4 fixed stations.

There are no noise abatement procedures or operating restrictions based on noise at the AIP Slovenia.

7. CASE STUDY – LJUBLJANA AIRPORT

Ljubljana Airport has been managed and operated by a joint-stock company, Aerodrom Ljubljana SA since 1997. It is still controlled by the Government of the Republic of Slovenia, which holds almost 51% of the shares, while another 30% of the shares are traded on the stock market.

Shareholders are represented on a ten-member Supervisory Board, which must approve the decisions and proposals of a two-member Executive Management Board.

The land where the airport is located is owned by the State, although the company has recently acquired 13,5 Ha for terminal and car parking developments.

At present, there is no airport plan in force for Ljubljana, as has also been the case with the other international airports in Slovenia as the Spatial Planning Act revoked all previous “long-term airport development plans” prepared by the Civil Aviation Authority.

The previous development plan, shown in the figure below, included a land reserve for a future parallel runway (at only 800 m due to the presence of a highway), new aprons and passenger terminal and a new access to the airport. It can also be observed that obstacle limitation surfaces for the future runway were taken into account to restrict urban developments that could interfere with the future operation of the airport.

There was no citizen participation or intergovernmental consultation during the preparation of those long-term development plans, which were drawn up internally by the CAA.

However, the land reserve was agreed with the surrounding municipalities and included in their local plans. In some cases, it will be valid until a new detailed plan is adopted by each municipality in accordance with the Spatial Planning Act.

At present, as the detailed plan of national importance has not been drawn up for the airport area, the airport company is carrying different projects in a piecemeal fashion, without citizen participation or intergovernmental consultation. In any case, the state is aware of these developments as 4 members of the Supervisory Board are appointed by the Government (the Ministry of Transport).

The most important of these projects in the medium-term will be the development of the new passenger terminal, which will enable the airport to meet future traffic growth, and the requirements to implement the "Schengen agreement" by 2007. This project has been approved by the airport Management but still requires governmental approval.

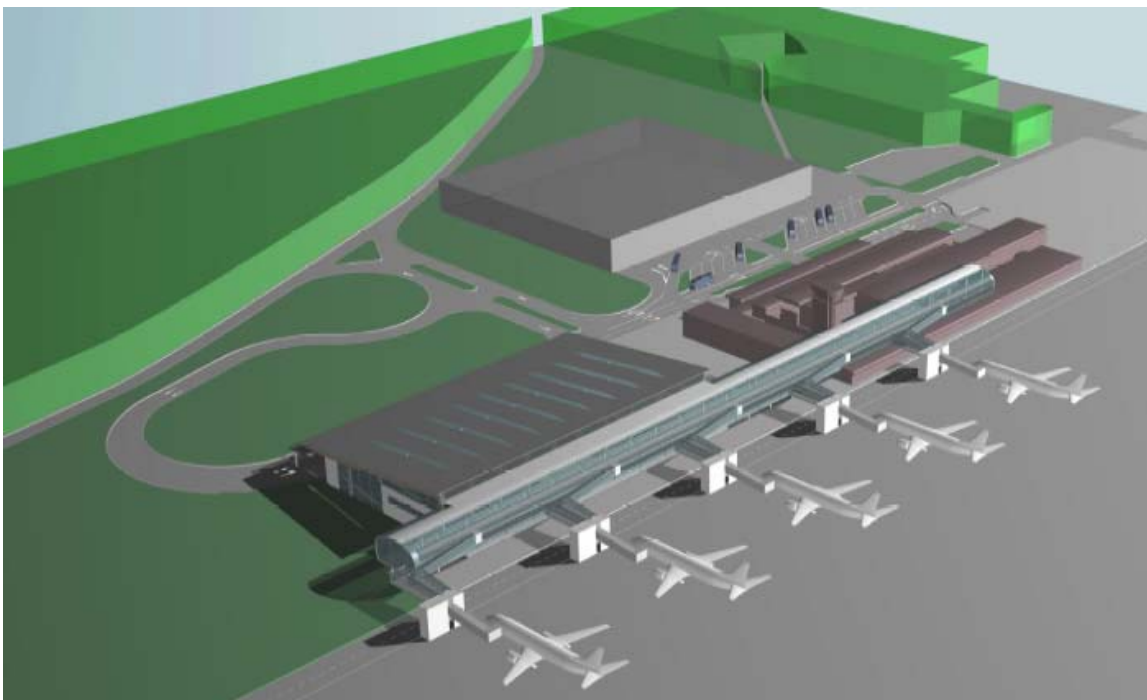


Figure 14. Future passenger terminal at Ljubljana airport

Source: Aerodrom Ljubljana SA

COUNTRY CONTACTS

- **Ljubljana aerodrome company**
Milan Primožic, Head of Airport Technology
Primož Primožic, Environmental Affairs
- **Civil Aviation Authority**
Bojan Babic, Director
Predrag Sekulic, Head of Airports
- **Ministry of the Environment and Spatial Planning**
Blanka Bartol
Barbara Radovan
Marko Peterlin
Jelka Habjan
- **Environmental Agency ARSO**
Tanja Dolenc

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”⁸)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to address social and economic disparities

⁸ European Commission, 1997. HT395 E85E9

between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Skupščina Slovenije</i>	Slovenian Assembly
<i>Državni Zbor</i>	State Chamber
<i>Državni Svet</i>	Advisory State Council

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- Slovenian laws:
 - Slovenian Constitution

- Aviation Act 2001
- Spatial Planning Act
http://www.gov.si/upr/doc/ZUreP-1_eng.pdf
- Spatial Development Strategy of Slovenia
http://www.gov.si/upr/doc/SPRS_eng.pdf
- Environmental Protection Act 2004
- Construction Act 2004



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Country Report

SPAIN

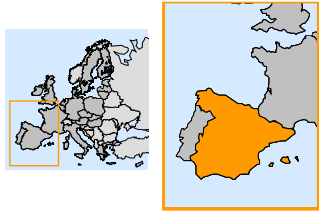


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SPAIN		Location Map													
Population	40.3 mill. (80.6 inhabitant per sq. Km)														
Airport network	The public airport network (forty-seven airports) are managed by AENA, the public entity that also manages air navigation services.														
Spatial planning system															
Spatial planning has been devolved to the Regions which have adopted their own legislation on this matter.															
<ul style="list-style-type: none"> • Institutions <table border="0" style="width: 100%;"> <tr> <td style="padding-left: 20px;">National level:</td> <td>Adopt framework legislation. No national planning instruments.</td> </tr> <tr> <td style="padding-left: 20px;">Regional level:</td> <td>Approve and control regional and local spatial planning.</td> </tr> <tr> <td style="padding-left: 20px;">Local level:</td> <td>Draft and adopt municipal plans.</td> </tr> </table> • Instruments <table border="0" style="width: 100%;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>Developed at regional level to provide coverage for large infrastructures and public services development and to protect environmentally sensitive areas.</td> </tr> <tr> <td style="padding-left: 20px;">Framework plans (General Plans)</td> <td>Cover the entire municipality. Legally binding, but “national or regional interest” projects could be developed contrary to general plans.</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans: Partial and special plans</td> <td>Detailed planning at local level which must conform to the General Plan.</td> </tr> </table> • Process: Spatial plans are always subject to inter-governmental consultation and citizen participation. In the case of airports, the opinion of Spanish Civil Aviation Authority (DGAC) is binding on regional and local plans. 				National level:	Adopt framework legislation. No national planning instruments.	Regional level:	Approve and control regional and local spatial planning.	Local level:	Draft and adopt municipal plans.	Strategic plans	Developed at regional level to provide coverage for large infrastructures and public services development and to protect environmentally sensitive areas.	Framework plans (General Plans)	Cover the entire municipality. Legally binding, but “national or regional interest” projects could be developed contrary to general plans.	Regulatory plans: Partial and special plans	Detailed planning at local level which must conform to the General Plan.
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Regulation and permits															
“General interest” airports can override regional and local plans, and are exempted from local control. Airport construction needs an Environmental Impact Assessment (EIA).															
Airport planning															
<ul style="list-style-type: none"> • Instruments <table border="0" style="width: 100%;"> <tr> <td style="padding-left: 20px;">Airport Master Plan</td> <td>“Plan Director” (General interest airports)</td> </tr> <tr> <td style="padding-left: 20px;">Special plans</td> <td>Development of different activities within the airport</td> </tr> </table> • Spatial impact: Aeronautical servitudes are defined and established by law according to ICAO Annex 14. Areas designated for future growth must be integrated into municipal plans. • Construction: Central Government is responsible for airport construction authorisation and EIA approval. • Operation: Airports are required to obtain prior authorization from the civil aviation authority. Municipal licenses may be required for airports not considered of general interest. No airport certification is required as yet. 				Airport Master Plan	“Plan Director” (General interest airports)	Special plans	Development of different activities within the airport								
Airport Master Plan	“Plan Director” (General interest airports)														
Special plans	Development of different activities within the airport														
Airport noise and air quality															
<ul style="list-style-type: none"> • Noise: Noise contours have been integrated into Airport Master Plans, but not yet implemented in the spatial planning system • Air quality: Not taken into consideration for land use regulation or spatial planning. Only emissions are controlled. 															

1. SUMMARY

SPATIAL PLANNING SYSTEM

Spatial planning has been completely devolved to the Regions, so the national government only retains the power to adopt framework legislation setting the principles to be followed by the regional and local governments. There are no spatial plans at the national level.

Regional strategic plans can cover the entire region or concentrate on a specific area. In many cases there are provisions for plans or programs that provide coverage for large infrastructural developments of regional interest. In all cases, regional governments maintain a high degree of control over local plans which are drafted at the local level.

The archetypical local planning instrument in Spain is the general plan which can be considered a framework plan because it establishes the general pattern of development for the entire municipality and determines the location and characteristics of all major infrastructures and services. Detailed planning is conducted primarily through partial and special plans.

Airport planning is a competence of the national government, and must be integrated into the general spatial planning system, through local special plans.

REGULATIONS AND PERMITS

Construction permits

In principle, all building and construction activities require a building permit issued by the Municipality regardless of purpose or ownership. However, specific sector legislation has established a general exemption that “general interest” infrastructures, such as airports built by national authorities should not be subject to any control by local governments. The same occurs with specific projects considered “of regional interest” which are subject to the control of the regional government but not to the development control system managed by the municipalities.

Environmental permits

Spanish legislation and practice on EIA follows the dictates of EU Directives in this area closely. However, as regards the evaluation of plans and programs, Spain has not yet fulfilled the obligations imposed by the “SEA” Directive 2001/42/CE which will probably be transposed during the first half of 2006. In some Regions, land use plans and other planning and programming documents are already subject to environmental evaluation, but such requirements cannot be applied in the case of plans adopted by the national government.

Other environmental permits required for water treatment and waste management must be obtained separately from the municipalities.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

Recently a new “Transport Infrastructure Strategic Plan” has been approved by the Government. It includes general guidelines as well as specific measures and investments to be executed in the period 2005-2020.

- Airport

All “general interest” airports are required by law to prepare a Master Plan which shall include not only the infrastructure, buildings and facilities required for operation of the airport in the short term, but also the area required for maximum development in the future. This Plan is binding on all subsequent spatial planning, and local spatial plans will have to include the entire area marked for future development within a specific “infrastructure zone” which prevents any development from taking place in such area.

Spatial impact

- Implementation of ICAO Annex 14 requirements

The implementation of safety requirements recently takes place in Spain by means of “aeronautical servitudes” established for each airport by decree on the basis of the surfaces and restrictions defined by a specific law. It prevents the owners of adjoining land from building or surpassing certain height restrictions. The DGAC (CAA) is responsible for keeping those maps and decrees updated.

- Noise Impact

Aeronautical servitudes were recently enlarged with the establishment of acoustical servitudes”, aimed at preventing land uses which are not compatible with airport operations. However, the extent of these servitudes is yet to be legally determined.

Noise contours are included in the airport Master Plans approved by decree.

- Risk prevention

There are no provisions for third party risk in the vicinity of airports.

- Land reserve for future construction

Each airport Master Plan establishes the boundaries for future growth based on maximum projected development. This area, which can be extensive, should be considered a special infrastructure zone by the local plans, and become unavailable for any other purpose except uses such as agriculture which can be easily eliminated when construction of the development begins. This restriction does not give rise to any compensation: the owners will receive the price of the land when it is acquired for public use in the future. Such land reserves are, nevertheless, subject to certain time constraints. Land use planning legislation establishes almost invariably a maximum period of time, usually four or five years, during which land reserves can be maintained. After this period, the owner can request that the land either be acquired via compulsory purchase or that the restrictions be lifted.

Construction

No building permit is required at “general interest” airports for work undertaken by the State operator (Aena). Work for commercial or industrial purposes not directly related to airport operations or undertaken by other developers will be subject to the usual municipal building permit requirements.

Most environmental permits are included in the approval following an EIA process. Permits for waste management and water treatment must be obtained separately from the municipality.

Operation

Airports are required to obtain prior authorization from civil aviation authorities before they can begin operations. Some facilities, like fuel storage or sewage treatment, may require a specific permit in order to begin operation.

Airport certification has not yet been regulated in Spain.

AIRPORT NOISE AND AIR QUALITY

Noise

As a general rule, environmental competence lies within the same level of government that is responsible for the construction or authorisation of any project. This means that airport noise control is left to the national authorities, and is conducted according to national legislation.

“Noise” Directive 2002/49/EC has already been transposed, but noise levels for specific activities or areas have not yet been set.

Land use restrictions are imposed by the DGAC on the basis of the noise contours included in airport Master Plans or the environmental approvals following specific EIA processes in which compensation measures are also defined.

Air quality

Although the impact of airports on air quality can be considered as one of the factors contributing to air pollution, it is not specifically taken into consideration for the regulation of land uses.

2. CONTEXT

Spain is located in south-western Europe, geographically separated from continental Europe by the Pyrenees and dominated by a central elevated plateau.

Spain is divided into seventeen autonomous communities (regions) and two autonomous cities(*): Andalusia, Aragon, Asturias, Balearic Islands, Ceuta*, Canary Islands, Cantabria, Castilla-La Mancha, Castilla y Leon, Catalonia, Comunidad Valenciana, Extremadura, Galicia, La Rioja, Madrid, Melilla*, Murcia, Navarra, and the Basque Country.



Figure 1. Map of Spain

Spain's GDP per capita is 98% of the European Union average (22,400¹). Spain, which has been a member of the European Community since 1986, joined the Euro zone at its inception on 1 January 1999, and the Euro became the sole currency on 1 January 2002.

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	42,345,300
Latitude / Longitude	40°00' N, 4°00' W
Land area	499,400 sq Km
Coastline	4,964 Km
Capital City	Madrid (5.13 million)
GDP per capita (PPS at market prices)	22,000
GDP real growth rate	3.1 %
Inflation rate	3.1 %
Unemployment rate	11 %

Table 1. Spain: Principal facts and figures (2004)²

2.1. Population and statistics

The Spanish population currently exceeds the 40 million threshold with an average density of 80.6 inhabitants per sq Km. This means that Spain is below the European average density (EU-15 population density: 115 inhabitants per sq Km).

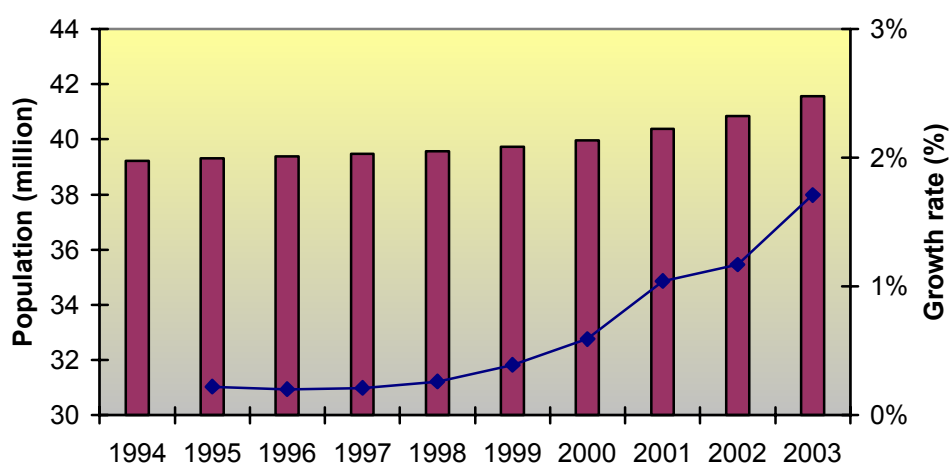


Figure 2. Population evolution

² Source: EUROSTAT

After several years of stagnation, the population trend in Spain has experienced a gentle increase in the last three years, with growth rates above 1%.. The main cause of this rise is immigration. Spain has the highest net migration in the EU: 15.8 immigrants per 1,000 inhabitants (2002).

The Spanish median age is 39.1 years, but population growth is threatened by a very low birth rate:10.11 births/1,000 population (2004 est.).

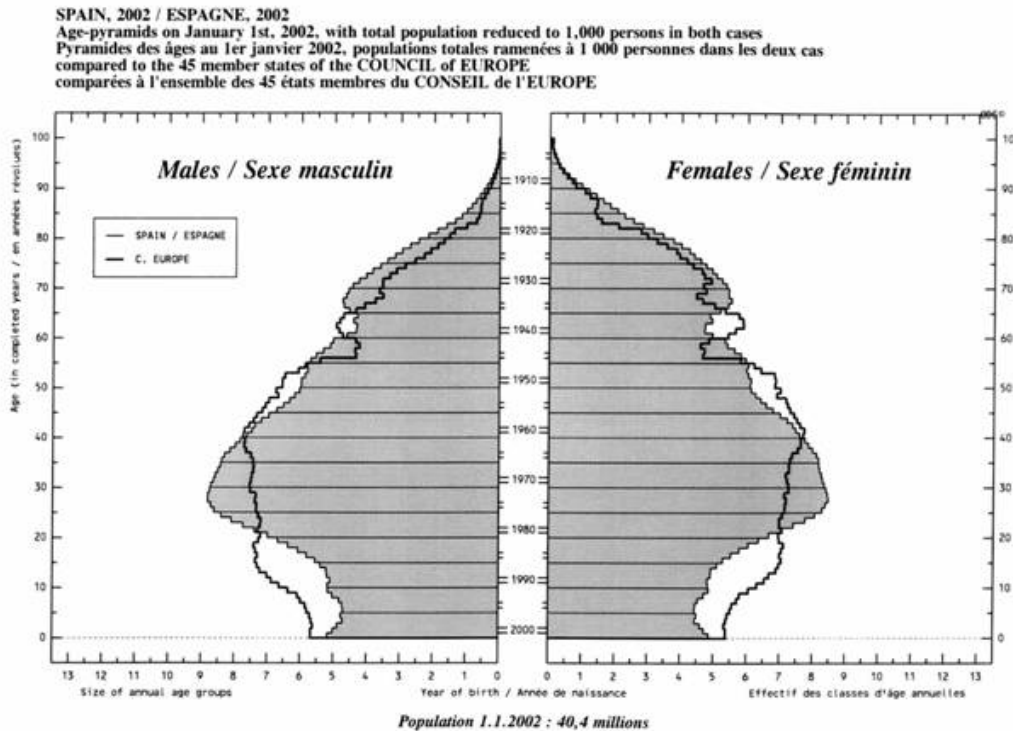


Figure 3. Age-pyramids (2002)³

Figure 3 above shows the low Spanish birth rate and the Spanish age structure in which the bulk of the population is between 15 and 64 years (68%).

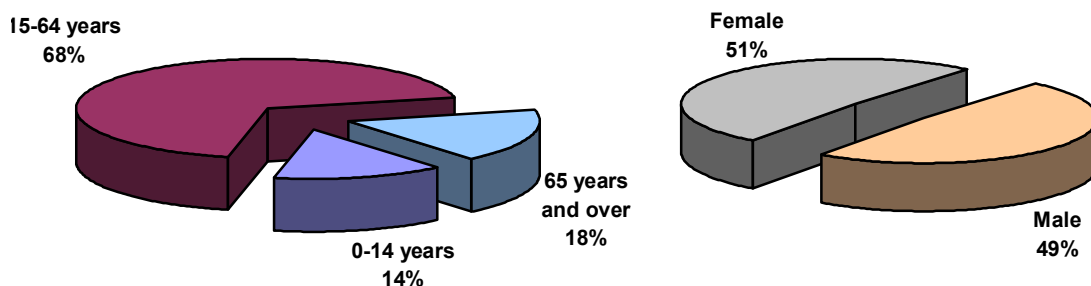


Figure 4 and 5. Population split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

The Spanish government system is a parliamentary monarchy supported by the Spanish Constitution adopted on 6 December 1978 by popular referendum.

In the Executive branch, the chief of state is King Juan Carlos I, and the head of the government as of April, 2004 is José Luis Rodríguez Zapatero who designates the cabinet or Council of Ministers. The legislative branch is constituted by two cameras, the Senate with two hundred and fifty-nine members and the Congress of Deputies with three hundred and fifty. The Judicial branch is partially decentralized. The highest institutions are the Supreme Court and the Constitutional Court.

Spain can be described as a politically decentralized country in which the distribution of functions and the governance system, in general, are very close to those of a federal state. The Spanish State is divided into seventeen "*Comunidades Autónomas*" ("Self-Governing Communities", hereinafter referred to as "Regions"), fifty provinces and approximately eight thousand municipalities.

The distribution of powers among State and Regions is based on the use of two separate listings of functions: one, contained in article 148 of the Spanish Constitution⁴, lists the powers that may be adopted by the Regions; the other, included in article 149, lists the powers which are the exclusive competence of the State.

With regards to aviation and airports, the State has reserved exclusive powers over air navigation and air traffic as well as "general interest airports". This means that only the National Parliament can legislate on such matters.

Although there are some differences as regards the powers of different Regions, the majority have exclusive competence, including legislation and implementation, over airports that are not considered "of general interest". Many of them also have some implementation powers over "general interest airports" when the State does not execute its right to manage such airports directly. Until now only the Region of Catalonia has made use of its power to legislate in relation to airports.

⁴ Spanish Constitution 1978

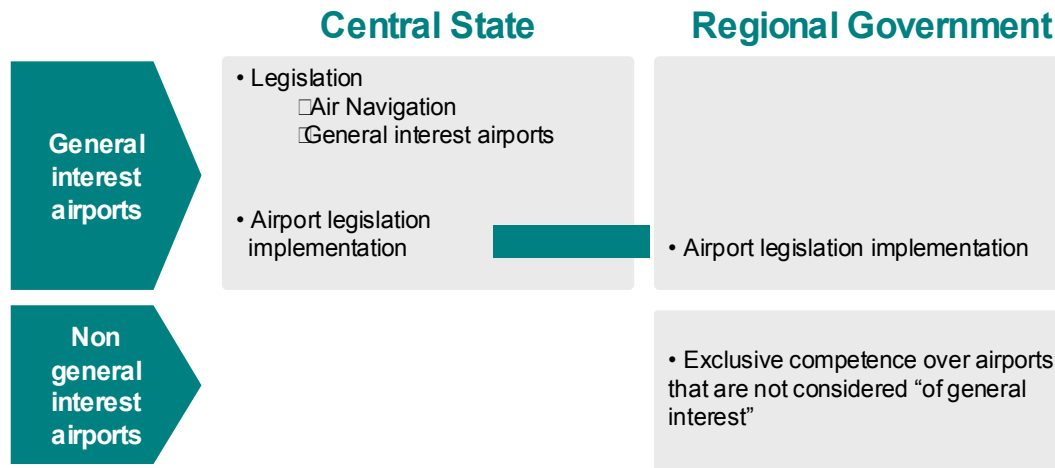


Figure 6. Distribution of government functions

In the field of environment, the State only has exclusive competence to adopt basic legislation. The bulk of the powers are in the hands of the Regions who can pass their own laws, and are in charge of implementation.

With respect to spatial planning, the State has very limited legislative competences and no implementation power. As a result, the National Land Use Act⁵ only sets out broad principles, and most Regions have adopted their own laws.

2.3. Main airports

In Spain, there are forty-seven public "general interest" airports and fifty-five private aerodromes.

AENA ("Aeropuertos Españoles y Navegación Aérea") is a state entity in charge of providing airport and air navigation services. AENA currently manages forty-seven airports and passenger traffic of more than 163 millions.

At present, there are currently three private airport projects in different stages of development:

- Don Quijote (Ciudad Real). Scheduled opening: 2006
- Castellón – Costa Azahar (Castellón). Scheduled opening: 2007
- Murcia (Murcia). Scheduled opening: 2006

These three private airports were declared of "general interest" which raises some questions about the need to modify the current legislative framework. In principle, all airports of this kind should be managed by AENA. The issue has

⁵ Ley 6/1998, de 13 de abril, sobre régimen del suelo y valoraciones

not yet been resolved, and some new regulations are being drafted to address the issue.

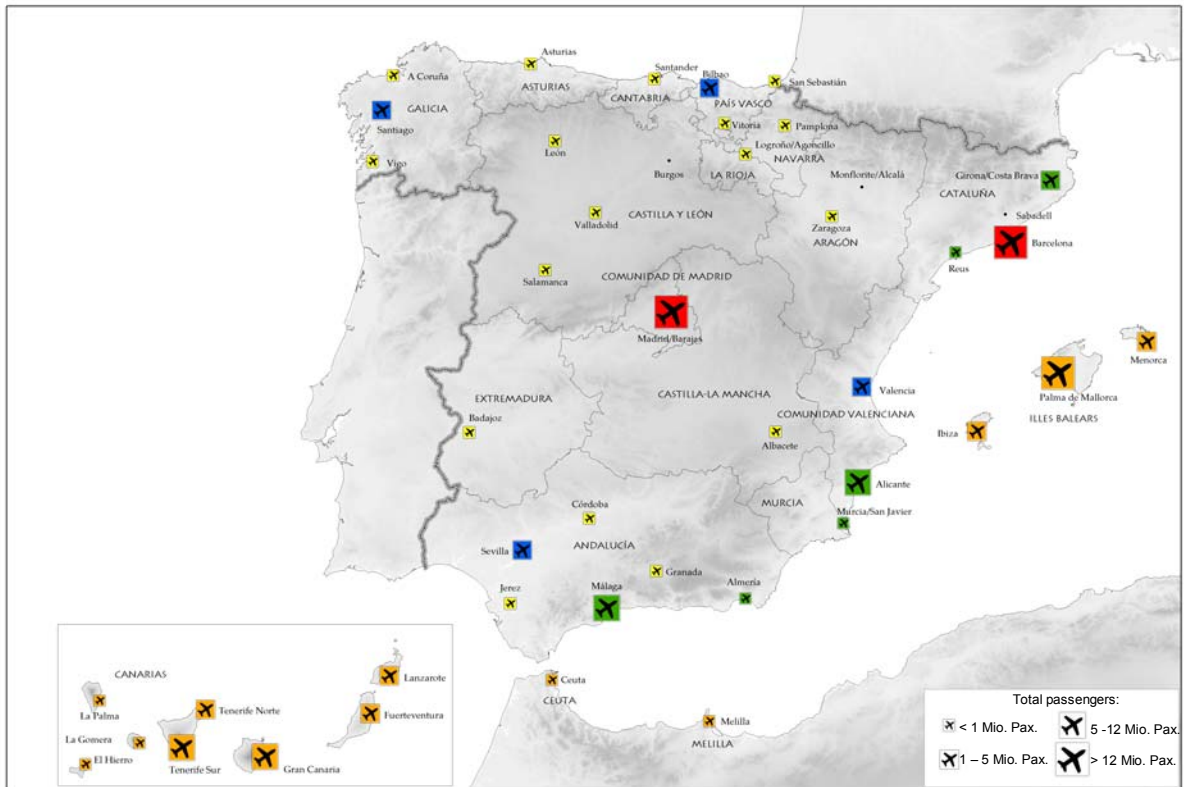


Figure 7. Airport network (general interest airports)

Table 2 shows commercial passenger traffic and cargo at the main Spanish airports in 2004:

Airport	Passengers	Cargo (Tons)
Madrid-Barajas	38,718,614	341,177
Barcelona	24,558,138	84,985
Palma de Mallorca	20,416,083	20,408
Málaga	12,046,277	6,811
Gran Canaria	9,467,494	40,935
Tenerife Sur	8,632,178	9,218
Alicante	8,571,144	6,037
Lanzarote	5,517,136	7,997
Ibiza	4,171,580	4,510
Fuerteventura	3,917,109	3,640
Bilbao	3,395,773	4,153
Tenerife Norte	3,368,988	23,647
Valencia	3,111,951	12,169
Girona	2,962,988	143
Sevilla	2,678,595	5,053
Menorca	2,631,334	3,975
Santiago	1,580,675	4,939
Reus	1,138,009	11
Jerez	1,117,447	98
Others	7,129,018	56,711
Total	166,146,198	638,121

Table 2. Principal airport data (2004)

3. SPATIAL PLANNING SYSTEM

3.1. Institutions

3.1.1. National

Spatial planning has been completely devolved to the Regions so the National Government only retains the power to adopt framework legislation establishing the principles to be followed by regional and local governments.

At present, there are no spatial plans at the national level. Land use planning legislation has included a National Plan among the spatial planning instruments since the first Law of 1956, but such a plan has never been prepared and, in all probability, never will be because the central government has no competences in this field.

3.1.2. Regional

All seventeen regional governments have received identical powers with respect to spatial planning and most of them have adopted their own legislation on this matter. Regional spatial planning acts are relatively homogeneous as far as planning instruments are concerned, but there are increasing differences in implementation instruments.

All Regions have reserved the right to adopt regional spatial plans, but few have made use of this option. In all cases, regional governments maintain a high degree of control over local plans, which are drafted at local level. In most cases, local plans cannot be adopted without the approval or formal assent of the regional administration.

3.1.3. Local and area wide

Local governments have the power to draft and adopt municipal plans covering their entire territory as well as detailed (regulatory) plans and special purpose plans. When adopting municipal plans, however, they are subject to regional review, which may take the form of a formal approval or of a binding opinion before the plan is finally adopted by the Municipal Council.

At present, there are no metropolitan plans in Spain.

3.2. Instruments

3.2.1. Strategic plans or policy documents

Most Regions in Spain have passed legislation enabling the regional government to adopt strategic plans of some sort or submit them to the Regional Parliament. The names may vary from region to region; in some

cases, they are called Guidelines (*Directrices*), while in others they may be called “Territorial Plans” or “Strategies”.

Regional strategic plans can cover the entire region or focus on a specific area. In many cases there are provisions for plans or programs that provide coverage for large infrastructural developments of regional interest. There is one instance in which this type of strategic instrument has been used. In the Region of Castilla-La Mancha the regional government declared that the development of a new airport, Don Quijote Airport, was a project of “regional interest” which meant that all spatial planning and permits would be dealt with at the regional level and that the necessary land could be acquired through compulsory purchase. It is interesting to note that the airport is being developed by the private sector.

In other regions similar instruments exist that could be used for the purpose of airport development, but the fact that such plans and programs are controlled by regional governments has not made them attractive for this purpose because almost all airports are operated by an agency of the central government, AENA⁶.

When regional plans exist, they are usually binding on local governments, but in many cases they do not apply directly to private citizens since the level of detail they contain is not sufficient to regulate development in specific parcels of land.

In practice, most regions have made little use of their strategic planning powers, and regional plans are relatively rare.

3.2.2. *Local (framework) plans*

The archetypical local planning instrument in Spain is the “General Plan”, (*Plan General de Ordenación Urbana*) common to all Regional planning acts and direct heir to the planning system established in 1956. General Plans, or “Municipal Plans” as they are also called, must be comprehensive and cover the entire municipal territory. In many Regions, all the municipalities are required to adopt such plans. In practice, most of the Spanish territory is now covered by municipal plans.

Municipal plans can be considered as “framework” plans in as much as they establish the general pattern of development for the entire municipality and determine the location and characteristics of all major infrastructures and services. Nevertheless, they must also be considered detailed or regulatory plans in built up areas where they include all the regulations needed to allow development to take place without need for any further planning.

⁶ AENA (*Aeropuertos Españoles y Navegación Aérea*) – State Entity whose objective is to manage civil airports of general interest and the air navigation system.

Municipal plans must differentiate among three categories of land: “non developable land” (*suelo no urbanizable*) which is to be preserved from the development process for environmental, productive or historical reasons; “developable land” (*suelo urbanizable*) which can be newly developed under certain conditions after a detailed plan is adopted; and “urban land” (*suelo urbano*) where development can often take place without requiring any further planning.

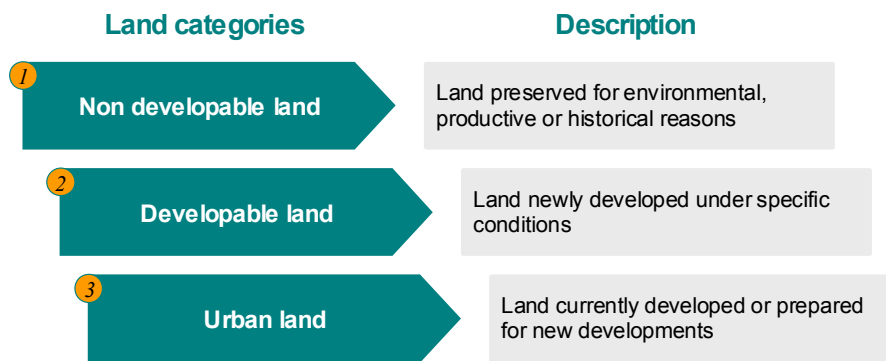


Figure 8. Land categories

These comprehensive plans are legally binding both on government and on private parties. However, regional and Central Governments can prevail in matters of “regional” or “national interest”, and develop their own projects even if they are not in accord with local planning. This means that a publicly owned airport could be developed even if it went against the provisions of the local plan.

Municipal plans are drafted and adopted by municipalities, but, as indicated above, they are always subject to some sort of the final approval or binding opinion from the regional government.

With regard to airport development, municipal plans are required by law to include airports within a specific “zone” that covers all major infrastructures, preserving them from any other land use. Since the area to be included in such “infrastructure zones” must encompass the entire surface contemplated in the airport master plan for future development, this is a powerful instrument to prevent encroachment on this land for other uses. Unfortunately, this raises problems deriving from the fact that such reserves cannot usually be maintained for more than five or six years without expropriation because land use planning law allows land-owners to seek compensation if the land has not been acquired for the intended use after this period of time.

3.2.3. Regulatory (detailed) plans

Detailed planning is conducted primarily through two kinds of instruments: “Partial Plans” (*Planes Parciales*) and “Special Plans” (*Planes Especiales*). Both types are rather different in purpose and contents, but they share common

characteristics: the need to conform to the General Plan, and the fact that they are legally binding on both public and private sectors.

Partial Plans are used as instruments to develop land outside consolidated built-up areas. They can be drafted by public or private developers and are usually approved at the municipal level except in smaller municipalities where planning services may be nonexistent.

Special Plans can be adopted for a variety of purposes ranging from environmental or historical preservation to infrastructure building. In some cases, they cover areas greater than a single municipality, but they are usually restricted to smaller areas within the boundaries of a municipality or across municipal borders.

In most cases, special plans are drafted by the public sector, but usually the law does not prevent private sector initiatives. Adopting these plans is often the responsibility of the municipal government, except in smaller localities or when such special plans affect parts of several municipalities. Special plans are used for airport planning as discussed below in part 4.

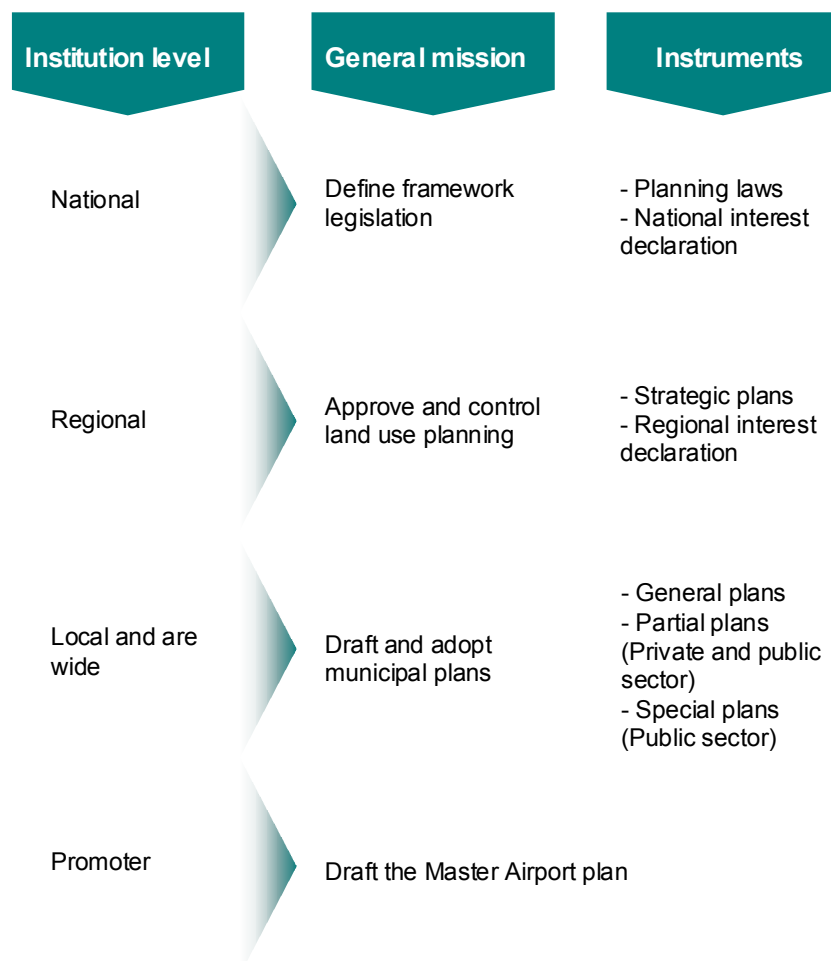


Figure 9. Mission and main instruments by institution level

3.3. Process

Regardless of their nature and purpose, spatial plans are always subject to both inter-governmental consultation and citizen participation..

3.3.1. *Inter-governmental consultation*

Consultation always takes place through written statements or opinions which the planning authority must take into consideration, and state how and why they are integrated into the planning documents.

In the case of regional planning, the law usually requires that all departments be consulted, and the plan itself be approved either by the regional “cabinet” where all sectors are present or at parliamentary level.

When it comes to local planning, both regional planning laws and national legislation on roads, coasts, airports, etc., require that municipalities submit their proposed plans to the central government for consideration.

In the case of airports, municipalities are bound to submit both framework and regulatory plans to the “Civil Aviation General Directorate” (*Dirección General de Aviación Civil*, DGAC), who determines whether any conflict exists with current or future airport projects in terms of land reserved for infrastructure development or affected by noise or safeguarded areas.

The opinion of the DGAC is binding⁷ and the local plan cannot be approved if it contradicts that opinion.

There is no legal requirement to submit local plans to the consideration of airport operators.

In the case of special plans for State airports, as mentioned below, it is the airport operator who drafts the plan, and the local authority (in some cases the regional government) is responsible for the adoption. If no agreement is reached within six months, the matter is referred to the National Cabinet of Ministers. The decision adopted by the Cabinet is binding on the municipality.

3.3.2. *Policy integration*

Land use planning and airport development are integrated via mandatory inclusion in the municipal plans of the area designated for future development in the airport master plan.

There is no mandatory policy integration on a wider scale (i.e. regional), but regional plans will usually reflect plans for future airport development.

⁷ *Real Decreto 2591/1998, de 4 de diciembre, sobre la Ordenación de los aeropuertos de Interés General y su Zona de Servicio*

In case of conflict between municipal plans and airport planning, the municipality is prevented from adopting the land use plan.

3.3.3. Citizen participation

All spatial plans must be subject to public scrutiny through a process of public participation. The form in which such participation takes place is not determined by law, but most spatial planning acts require that the citizen participation process last for at least one month (sometimes two) and be announced through with adverts placed in at least one major local newspaper.

In major municipalities, General Plans are made available to the public through exhibitions, A/V presentations and, often through public debates and web pages.

All citizens, administrations and interested parties can submit a written presentation which must be formally taken into account. Plan documentation must include a report detailing how the participation process was conducted, what written submissions were received, and how they were considered. In most municipalities, a personal answer is sent to everyone who submitted a presentation.

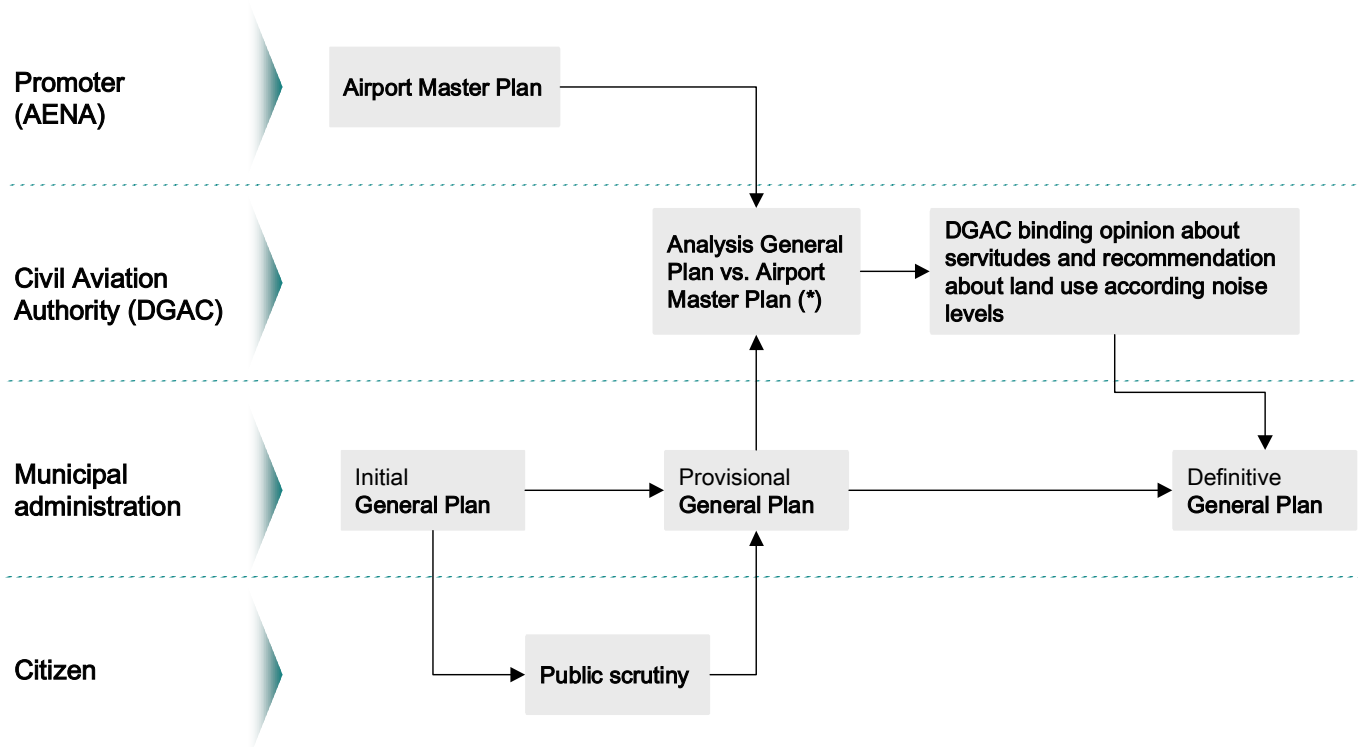


Figure 10. Municipal land use planning procedure

4. REGULATIONS AND PERMITS

The development control system operates in a fairly homogenous way all throughout the country despite that fact that it is governed by regional laws and local ordinances. In the case of national infrastructures the law is uniform because the national law determines whether such activities do or do not require building permits.

4.1. Development control system

4.1.1. *Activities subject to development control*

In principle, all building and construction activities require a building permit issued by the Municipality regardless of their purpose or ownership.

4.1.2. *Exceptions or exemptions*

Land use legislation has traditionally considered that all construction activities are subject to development control process, but it has admitted that national interest can override a local plan, and can be exempted from such control on a case by case basis. The Courts have upheld this possibility provided there is supporting evidence which confirms that the project is of national interest.

In the past twenty years, however, specific sector legislation like the Highway Act, the Transportation Act, and, more recently, airport legislation⁸, have established a general exemption that large infrastructures built by national authorities should not be subject to control from local governments.

In some Regions, specific projects can be considered “of Regional interest” and are subject only regional government control, but not to the development control system managed by the municipalities. This has been the case of the Don Quijote airport in Ciudad Real, built by a private firm with the blessing of regional authorities.

4.1.3. *Institutions involved: inter-government relations*

As mentioned above, construction permits are normally granted by municipal authorities regardless of who the developer is. However, in the case of public infrastructures and services established by the central government, the permit is not usually required, either because national legislation establishes a general exemption for this kind of project or because it is considered “of general interest”, and the local plan is overridden.

⁸ *Ley 13/1996, de 30 de diciembre, “de medidas fiscales, administrativas y del orden social”, Article 166.3.*

4.1.4. *Relationship with planning*

Planning documents are vested with regulatory force and are the only reference that can be taken into account when examining a building permit. As a result, no construction can be authorized unless it is in accordance with the plan, and, conversely, if the proposed project conforms with planning, the permit cannot be denied.

Conformity with local or regional planning is not an issue, however, when national infrastructures are exempted from obtaining a building permit or when an exception may be obtained on a case by case basis.

4.2. Environmental permits

4.2.1. *Environmental Impact Assessment*

Spanish legislation and practice on Environment Impact Assessment (EIA) follows the dictates of Directive 85/337/EC⁹ (the “EIA” Directive) closely. However, as regards the evaluation of plans and programs, Spain has not yet fulfilled the obligations imposed by Directive 2001/42/EC¹⁰ (the “SEA” Directive), and lacks national legislation on that subject¹¹. EIA was regulated at the national level by (Royal Legislative Decree 1302/1986 of 28 June 1986” (*Real Decreto Legislativo 1302/1986, de 28 de junio, de Evaluación de Impacto Ambiental*), as amended in 2001 and 2003. Most regions have passed their own legislation on EIA, but National Government projects are always evaluated according to national law.

In some Regions, land use plans and other planning and programming documents are subject to environmental evaluation, but such requirements cannot be applied to plans adopted by National Government.

4.2.2. *Other environmental controls*

Industries are subject to local and regional environmental permits, usually taking the form of municipal operating licenses and regional permits concerning air emissions, water discharges, waste production, etc.

In some cases, most of these permits are integrated into a single procedure following Directive 96/61/EC¹² (the “IPPC” Directive). In other cases, the

⁹ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

¹⁰ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

¹¹ On 6 May 2005 the Council of Ministers approved a Bill of Law on the evaluation of the environmental impact of certain plans and programs. The Bill was sent to the national parliament where it will probably be enacted during the first half of 2006.

¹² Council Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

municipal license may be unnecessary if the project has been subject to EIA. Airports are not included in the list of activities subject to the IPPC process and therefore, do not benefit from the advantages of a single procedure.

In the case of airports, any new development of significance will be subject to an Environment Impact Assessment (EIA), and, therefore, will not be required to obtain a municipal operating license. For public airports developed by the central government, the law establishes an exemption from municipal control, including the building permit and the operational license.

This does not exclude the obligation to obtain permits concerning air, water, waste, etc that may be required by other environmental legislation.. Such permits are necessary whether the project has been subject to EIA or not and irrespective of whether the owner or operator is public or private.

4.2.3. Institutions involved

Environmental Impact Assessment is conducted either at the regional level or by the central government depending on who is responsible for building or authorizing the project being evaluated. In the case of airports, this means that all major projects are evaluated by the Ministry of the Environment because most airports are either built or authorized by Central Government.

As regards the other environmental permits that may be required, a variety of institutions are involved, and most of them belong to the regional government. Water discharge permits in watersheds encompassing more than one region constitute an exception in that the permit is granted by an agency of the central government.

4.2.4. Integration with other permits

There is very little integration in the permit process. Only the industries falling under the above mentioned "IPPC" Directive are covered, and even then it is still necessary to obtain building permits and some other industrial permits separately.

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

Spanish legislation makes a distinction between two types of airports: “non commercial” and “commercial”. The latter are classified into two groups: those that are considered of “general interest” and those that are not.

At the time of this writing (November 2005) almost all Spanish airports, excluding a few aerodromes that are only involved in general aviation, are considered of “general interest”, and consequently subject to authorization by the central government. All master plans and construction projects for these airports must be approved by the Minister of Public Works (*Ministerio de Fomento*).

5.1.2. Instruments

All “general interest” airports are required by law to prepare a Master Plan (*Plan Director*) which shall include not only the infrastructure, buildings and facilities required for operation of the airport in the short term, but also the area required for maximum development in the future. This Plan is binding on all subsequent spatial planning. Municipal Plans must include the entire area marked for future development within a specific “infrastructure zone” which prevents any development from taking place in the area.

The Master Plan is complemented by a Special Plan (*Plan Especial*), drafted in accordance with the provisions of spatial planning law which is designed to regulate the building process within the airport in more detail. This Plan is required for any construction undertaken by parties other than the Spanish public airport operator Aena.

5.1.3. Process

The procedures followed for the Master Plan and the Special Plan respectively are rather different.

The Master Plan is adopted by the Minister of Public Works after hearing the Municipalities and Regions who may be affected as well. The Ministries of Defence and the Treasury area also required to provide their opinion.

Consultation is, therefore, rather limited, and takes place only through a formal procedure in which only Municipalities, Regions and the two above mentioned Ministries are asked to give their opinion. They are given one month to present written submissions. This procedure will probably change in the near future

when the necessary strategic environmental assessments are introduced, and some form of citizen information is included.

In contrast with the airport Master Plan which is approved at ministerial level, the Special Plan undergoes the same procedure as any other land use plan. This means that it must be processed via the Municipal Council and will be subject to a one-month public information period. The adoption of Special Plans is usually a municipal competence, but the regional government may take charge when more than one municipality is affected.

Although airport Special Plans are subject to consultation among levels of government and must be submitted to citizen participation for one month, the procedure, is not entirely like that of other Special Plans. The Ministry of Public Works may request that the matter be submitted to the Cabinet of Ministers when no agreement is reached on the definitive text of the Plan or when the municipality fails to adopt it within the legal deadline.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The implementation of safeguarded areas takes place in Spain by means of “aeronautical servitudes” established by law¹³ in order to prevent the owners of adjoining land from building or surpassing certain height restrictions. These restrictions are established not only with respect to obstacle limitation surfaces and radio-electric interference. They are also extended to protect aircraft operations and impose the same kind of restrictions on nearby areas based on approved flight paths.

The extent of these servitudes, specially as regards “operational servitudes”, varies with the characteristics of the terrain, and can be extensive when the airport is near mountains or plateaus.

¹³ *Ley 48/1960, de 21 de julio, de Navegación Aérea and Decreto 584/1972, de 24 de Febrero, de Servidumbres Aeronáuticas.*

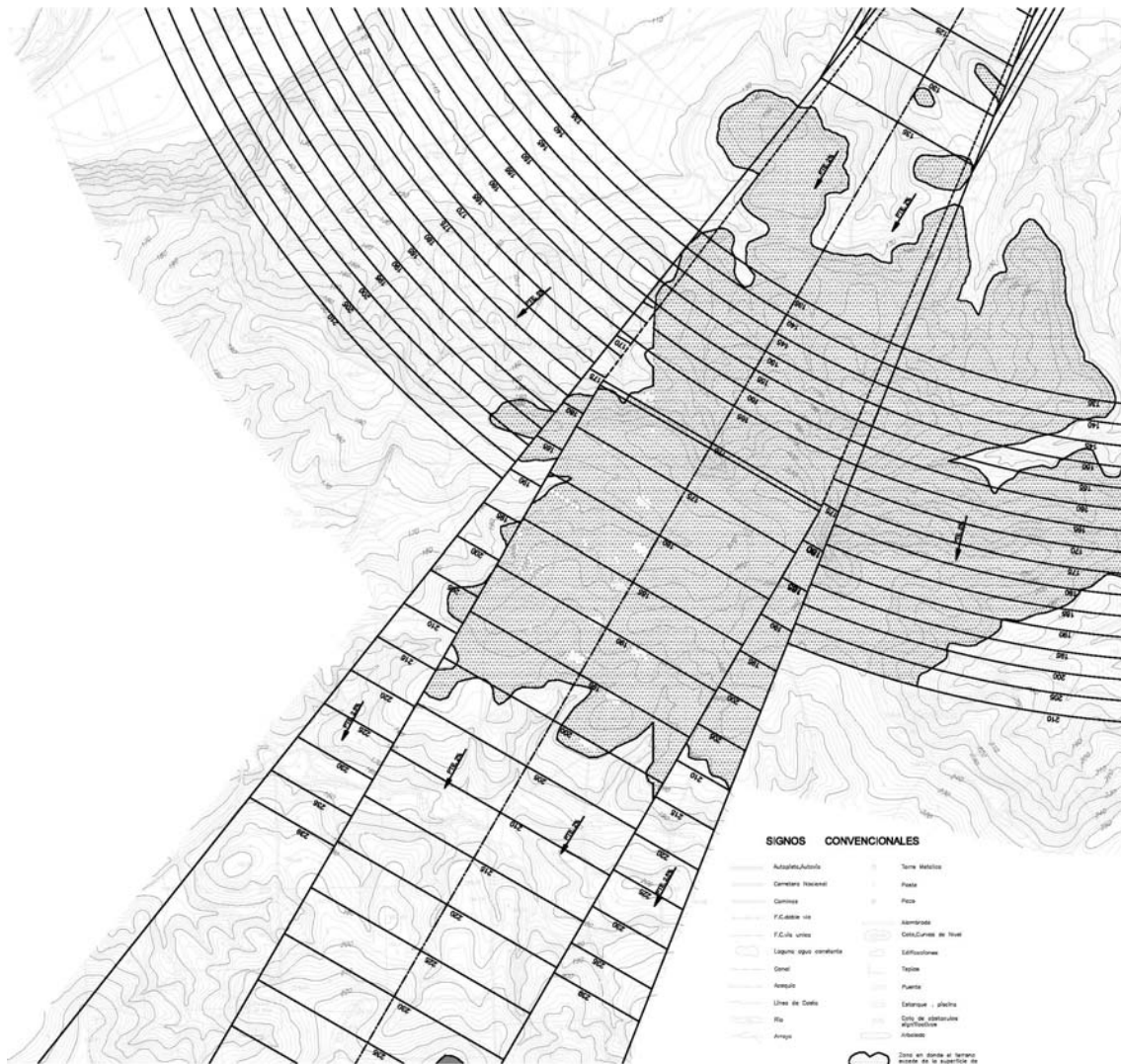


Figure 11. Obstacle limitation surfaces (Annex 14. ICAO)

5.2.2. Noise Impact

In 1999¹⁴, the list of aeronautical servitudes was enlarged with the establishment of what are called “acoustical servitudes” aimed at preventing land uses which are not compatible with airport operations. The legal extent of these servitudes is yet to be determined, and the regulations needed in order to do so are still being discussed. However, it is clear that the area covered by noise contours within the range which is being contemplated (60 dBA to 50 dBA) may, on occasion, be very large and in some municipalities will, therefore, have a considerable impact on the use of land of significant portions..

¹⁴ Ley 55/1999, de 29 “de diciembre, de medidas fiscales, administrativas y del orden social”. Article 63.

5.2.3. Risk prevention

Although there are no specific provisions for preventing risks to third parties, but ordinary “aeronautical servitudes” are large enough to cover this eventuality to a considerable extent.

5.2.4. Implementation of restrictions derived from servitudes

All these servitudes may be established without compensation unless the affected party proves that he or she has been deprived of rights or properties that were already in their possession. This means that no compensation is paid for the theoretical loss of land value based on future expectations, and land owners must prove the extent of economic damage arising from the servitudes. In practice there have been very few cases over the years in which compensation has actually been paid on account of these limitations.

Aeronautical servitudes are not usually represented in land use plans. Municipalities receive a description that does not always include any graphic representation, and usually consists of a long list of coordinates. With the adoption of airport Master Plans and “Special Plans”, this situation is changing because both these instruments contain a map that shows the delimitation of current and future servitudes including those derived from noise.

All construction and development activities taking place within servitude areas must obtain prior consent from the civil aviation authority (*Dirección General de Aviación Civil*), which also has the power to veto any spatial plan that impinges on land reserves for future airport development or aeronautical servitudes be they current or projected.

5.2.5. Land reserve for future construction

As regards the spatial impact arising from land reserves for future airport development, each airport Master Plan establishes the boundary for future growth, based on maximum projected development. Municipal Plans place this area, which can be extensive, within a special infrastructure zone which becomes unavailable for any other purpose except uses such as agriculture which can be easily eliminated when construction of the development begins. This restriction does not give rise to any compensation but the owners will receive the price of the land when it is acquired for public use in the future.

Such land reserves are, nevertheless, subject to certain time constraints. Land use planning legislation almost invariably establishes a maximum period, usually four or five years, during which such a reserve can be maintained. After this period, the owner can either request that the land be acquired via compulsory purchase or that the restrictions be lifted.

5.3. Airport construction

5.3.1. *Permits and authorizations required for airport construction or development*

- a) Building permit: No building permit is required in “general interest” airports for projects undertaken by the State operator (Aena). Construction for commercial or industrial purposes not directly related to airport operations or undertaken by other developers is subject to ordinary municipal building permit requirements.
- b) Environmental permits (water, waste, air, etc.): Regular environmental permits for water discharges, waste disposal, etc. are required regardless of who owns or operates the airport. In many instances, an Environmental Impact Statement is required, but when it is not, it is necessary to obtain a municipal operation permit if the activity is not going to be undertaken by the state operator.
- c) Civil aviation: The creation and major modification of “general interest” airports are subject to authorization by the Ministry of Public Works. When the airport is not classified as such, authorization may be given by the regional government subject to prior assent of the Civil Aviation Authority who considers the impact on air traffic.

5.3.2. *Institutions and processes involved*

- a) Authorization: The institutions involved in authorizing the construction of new airports or major changes to existing ones varies depending on whether the airport is classified “general interest” or not, and on the Region where it is going to be built: not all Regions have the same powers in this matter.

The central government is responsible for authorizations concerning “general interest” airports, and must also assent to the construction or major modification of all other airports because they will have an impact on air space and air traffic. Within the central government, the main responsibility falls on the Ministry of Public Works, but the Ministry of Defence must also be consulted in all cases, and can issue a binding opinion.

- b) Supervision: Current legislation does not regulate the supervision of airport construction.

5.3.3. *Integration with planning and environmental controls*

When the project has been the object of an Environmental Impact Assessment, the primary responsibility for controlling that any requirements that may have

been established are met during implementation lies with the authorizing authority but compliance is supervised by the environmental authority.

The responsibility for other environmental controls lies with the environmental authority in charge of each authorization or permit.

Environmental Impact Assessment takes place at the time of approving the airport project. Other than that, there is no integration of civil aviation, planning and environmental permits.

5.4. Airport operation

5.4.1. Operating permit

Airports are required to obtain prior authorization from civil aviation authorities before they can begin operations. In “general interest” airports no other permit or license is required for the airport as a whole, but some facilities, like fuel storage or sewage treatment plants, may require a specific permit in order to begin operation. In other airports, a municipal license may be required to operate the airport.

There is no integrated procedure that authorizes the start of operations, and as of November, 2005, there is no regulation concerning the authorization to be issued by the Civil Aviation Authority.

5.4.2. Airport certification

Airport certification has not yet been regulated in Spain.

Figure 12 offers a schematic representation of the process involved in developing land use planning around a Spanish airport and the process for its construction and operation. This example describes the process used when the developer is AENA, the state public airport operator.

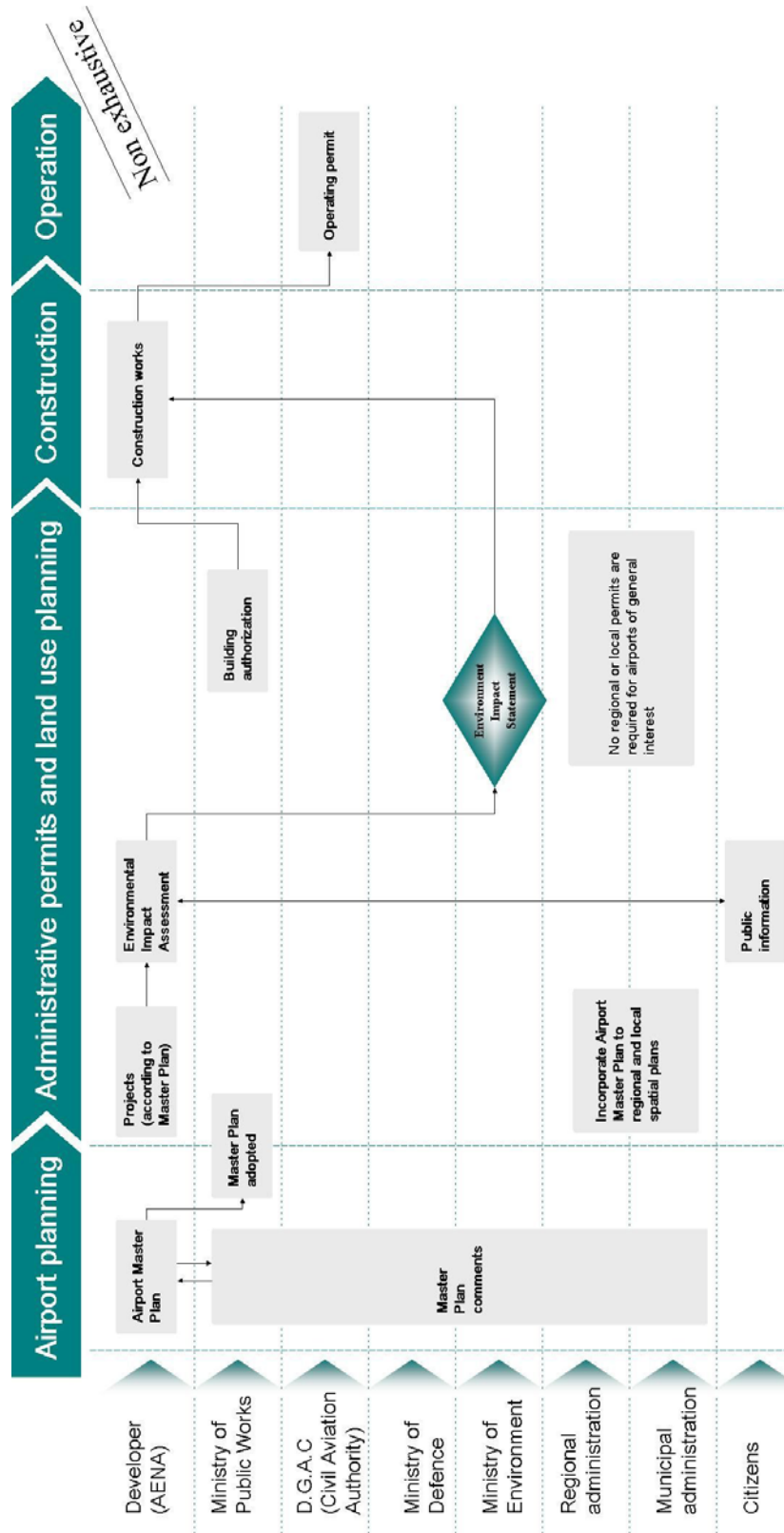


Figure 12. Airport planning and construction process
(General interest airport)

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

For many years, issues of noise and air quality were treated together under Spanish legislation, but now they are each subject to separate laws.

While noise issues have been regulated at the regional level for quite some time, at the national level the passing of a Noise Act (*Ley 37/2003, de 17 de noviembre, del ruido*) only dates from 2003. This Act transposes Directive 2002/49/EC¹⁵ (the “noise” Directive), into Spanish law, and establishes some general principles and requirements. However, it does not lay down detailed procedures or set noise levels for specific activities or areas.

There is little specific noise legislation concerning airports other than that applying to aircraft operation. Royal Decree 1257/2003¹⁶ transposes Directive 2002/30/EC¹⁷ (the “noise-related operating restrictions” Directive), but mention must also be made of the Safety Act of 2003¹⁸ which among other things, regulates sanctions for non compliance with operating restrictions and noise issues. Finally, Order 926/2005¹⁹ regulates review of the noise contours included in Airport Master Plans.

This does not mean that airport noise has not been considered until the recent regulations cited above. On the contrary, it has been a major issue in most Environmental Impact Assessments concerning new or enlarged airport facilities. Both the EIAs for the enlargement of the airports of Madrid and Barcelona established a set of noise contours together with monitoring systems and programs for soundproofing affected homes and, in some cases, compensating homeowners.

As regards air quality, Spanish legislation is still based on a 1975 Act that over the years has been gradually adapted to EU requirements. There are no special provisions concerning airport operation because these infrastructures are not included within the list of potential air polluters.

¹⁵ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

¹⁶ *Real Decreto 1257/2003 de 3 de octubre, por que se regulan los procedimientos para la introducción de restricciones operativas relacionadas con el ruido en los aeropuertos.*

¹⁷ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

¹⁸ *Ley 21/2003, de 7 de julio, de Seguridad Aérea.* www.fomento.es/NR/rdonlyres/88DB7B35-852C-423D-9020362469ECEEBE/8992/Law_21_2003.pdf.

¹⁹ *Orden FOM/926/2005 de 21 de marzo por la que se regula la revisión de las huellas de ruido de los aeropuertos de interés general*

6.2. Institutions

As a general rule, environmental competence falls within the same level of government that is responsible for the construction or authorization of a project. This means that airport noise control is left to the national authorities, and is conducted in accord with national legislation.

In the case of airport noise, the limits to be applied are those adopted by the national government. The Civil Aviation Authority is responsible for establishing the extent of the “aeronautical servitudes” derived from noise contours. In spite of the fact that most regions and large municipalities have adopted their own noise legislation, airports under the control of the central government are subject only to national standards and rules.

6.3. Instruments

a) Planning:

Noise abatement plans and the establishment of noise contours for major airports are features introduced by the Noise Act of 2003, but have not yet been fully regulated and implemented.

Nevertheless, in the case of airports, noise contours have been integrated into airport planning instruments. They are used as a basis for establishing “aeronautical servitudes” and judging spatial planning proposals that may affect areas under projected noise levels which are not considered compatible with residential development.

b) Land use restrictions:

As a rule, regional legislation and municipal ordinances establish a set of standards for noise exposure limits applied to different types of land use. Unfortunately, although this has not yet been done at the national level, work on a set of regulations for that purpose is entering its final stages.

At present spatial planning proposals are reviewed by the Civil Aviation Authority (“*Dirección General de Aviación Civil*”) which applies a *de facto* standard of 60 dB(A) during day time and 50 dB(A) during night time. Spatial plans that include residential development within these limits can not be approved.

Aeronautical servitudes based on noise have yet to be fully regulated and at the time of writing are not being applied. As a result, land use restrictions are only applied indirectly by preventing the adoption of spatial plans that do not take into consideration current and projected noise contours as they appear in airport planning instruments.

Although the impact of airports on air quality is not taken into consideration for the regulation of land uses per se, it can be considered one of the many factors such as, for example, roads, factories, and any other sources, contributing to air pollution..

c) Compensation:

The compensation issue has not yet been raised with regard to development restrictions based on airport noise because they are only applied indirectly via spatial planning.

In the vicinity of the Madrid and Barcelona Airports the Environmental Impact Statements of airport enlargement projects established the obligation to soundproof homes or even relocate residents in areas affected by airport noise.

6.4. Integration with spatial planning

According to the Noise Act of 2003, spatial planning must take noise pollution into consideration, and may not allow residential development, hospitals, schools or cultural uses in areas that do not meet established noise standards. Some regions, like Madrid, require that land use plans include an analysis of current and projected noise levels and enforce the Noise Act provisions very strictly new developments.

Noise standards are set for different types of areas according to the kind of land uses that may be allowed. The resulting “noise zones” are used to prevent the establishment of new activities that may elevate the noise level beyond the accepted standard for the area or for the construction of residential buildings, schools or hospitals that require a standard below what is accepted in the zone.

Air quality regulations are basically aimed at controlling emissions, and, as a rule, spatial plans do not consider air pollution issues except to separate industrial uses from other non-polluting uses. Municipalities and regions are empowered to adopt special measures when certain pollution levels are reached, but this does not include the possibility to restrict air traffic or airport operations.

6.5. Integration with development, construction or operation controls

Since neither the Noise Act nor the law creating “noise aeronautical servitudes” has yet been developed with the necessary regulations, the noise contours contained in airport plans are the only instruments that are effectively used around airports to evaluate spatial planning proposals. At the Madrid and Barcelona airports, the specific provisions contained in the Environmental Impact Statements are used to determine noise exposure and mitigation measures.

In municipalities with noise ordinances, such as Madrid, developers are required to contribute noise studies showing that their proposed development is within the standards set by the municipality and the regional legislation.

Airport noise and air quality at the time of construction are considered in the Environmental Impact Assessment which usually includes a set of prescriptions regarding these issues. Control over implementation of these prescriptions lies primarily with the aviation authority.

No mechanisms other than airplane operation monitoring exist to control airport compliance..

7. CASE STUDY – THE VIGO AIRPORT

Vigo is a regional airport located in the northwest of Spain (The Region of Galicia) with passenger traffic of approximately one million (2004). Three municipalities are affected by the Vigo airport: Vigo, Redondela and Mos.

The Vigo airport Master Plan was approved on 31 July 2001 by ministerial order, and published in the Spanish Government Gazette. Recently, the municipality of Vigo adopted a new General Plan. This General Plan was sent to the Spanish civil aviation authority (DGAC) on 9 July 2004 in accord with Decree 2591/1998²⁰.

After an exhaustive study of this General Plan and the current Vigo airport Master Plan, the DGAC issued a binding report on the General Plan which the Municipal Council had provisionally adopted (August 2004). This report identified some critical problems between land use planning and airport servitudes, and gave recommendations for land use planning in accord with forecasted noise levels.

Figure 13 shows the modifications adopted by the municipality of Vigo to make its General Plan consistent with the airport Master Plan and avoid future constraints to airport development.

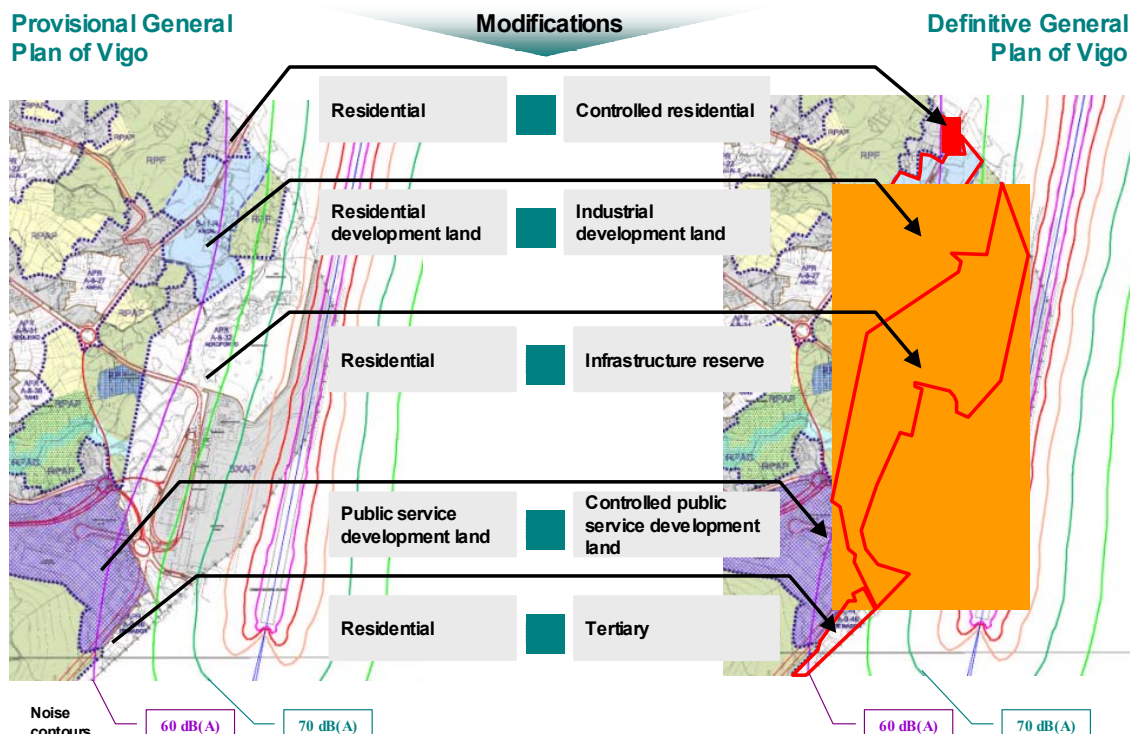


Figure 13. General Plan modified to conform with the Airport Master Plan

²⁰ REAL DECRETO 2591/1998, de 4 de diciembre, sobre la Ordenación de los Aeropuertos de Interés General y su Zona de Servicio

COUNTRY CONTACTS

- **DGAC – Spanish Civil Aviation Authority**

Jesús Pérez Blanco – Director of Airport & Air Navigation Systems

Francisco González Castellanos – Director of Airport Planning

Juan José Pérez Altozano – Airport Planning

- **AENA**

José María Guillamón – Head of Environmental Affairs

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”²¹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

²¹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

Comunidades Autónomas	Regions
<i>Plan Director Aeroportuario</i>	Airport Master Plan approved by Decree

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<http://www.boe.es/boe/dias/2005-04-13/pdfs/A12609-12610.pdf>



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Study on the functioning of the internal market. Part 2: land-use planning and management in the EU

Country Report

SWEDEN

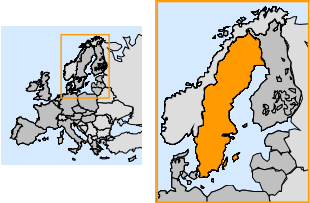


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SWEDEN		Location Map
Population	9 mill. (21.9 inhabitant per sq. Km)	
Airports network : Public airports network (19 airports) managed by LfV; all of them considered as national interest. There are other 9 national interest airports owned and managed by the municipalities or private entities		
<p>Spatial planning system : The Swedish spatial planning system is mainly based on the Planning and Building Act and the Environmental Code. According to the legislation in force, the planning power lies with the local municipalities</p> <ul style="list-style-type: none"> • Institutions <ul style="list-style-type: none"> National level: Ministry of Sustainable Development + National Board of Housing, Building and Planning (BOVERKET) Regional level: County administrative boards Local level: Municipalities • Instruments: At national level, there are no spatial planning instruments, while regional planning, which only exists in Stockholm county, are not binding <ul style="list-style-type: none"> Framework plans: Comprehensive plans (not binding) Regulatory plans: Area regulations Detailed development plans Property regulation plans • Process: All processes are developed at municipal level, with a non-binding opinion from the county administrative board (binding only if affecting national interests) and citizen participation 		
<p>Regulation and permits</p> <p>All building and construction activities require a building permit, which is granted by the Building Committee. Depending on the area, the authorisation of Civil Aviation Authority shall be necessary. Only national defence constructions are exempted from building permit requirement.</p> <p>Environmental permit is needed for hazardous activities, and it is granted by Environmental Courts or local Environmental Public Health Committees, depending on the activity.</p>		
<p>Airport planning</p> <ul style="list-style-type: none"> • Policy and planning: Airport plans are developed by LfV (or the operator) and approved by the county administrative board, and the corresponding environmental administration (when EIA is needed) • Spatial impact: Obstacle limitation surfaces are included in the airport plan, as well as noise contours, which usually define Building Restriction Areas • Construction: Building and environmental permits are required. The Civil Aviation Authority (<i>Luffartsstyrelsen</i>) is involved in the process. • Operation: <i>Luffartsstyrelsen</i> grants the airport operation permits; airport certification has not yet been regulated 		
<p>Airport noise and air quality</p> <p>Swedish government pays considerable attention to the Environment. Noise contours are incorporated into the spatial planning through the Building Restriction Areas and new airport charges have been adopted as means to reduce air pollution levels and other environmental impacts</p>		

1. SUMMARY

SPATIAL PLANNING SYSTEM

There are no spatial plans at national level, although Central Government can issue policy statements with clear spatial impacts on areas of “national interest”. Regional plans are strategic documents indicating fundamental features for the use of land and water areas as well as guidelines for the location of development and infrastructure.

Municipalities must prepare a “comprehensive plan” covering their entire territory, in which some strategic issues must be addressed, mainly concerning the intended use for land and water areas, the development and preservation of the built-up environment and the integration of national interest and environmental quality standards. These plans have no binding effect, although they must be taken into consideration by other spatial plans and decisions concerning the use of land.

Construction is regulated by “detailed development plans” and “area regulations” adopted for those parts of a municipality where a comprehensive approach to development is required.

Local plans can contradict regional or national policies but municipal decisions can be annulled by county boards if proven to be contrary to the public interest.

REGULATIONS AND PERMITS

Construction permits

All building and construction activities require a building permit issued by the Building Committee, unless a detailed development plan or an area regulation establishes special provisions to the contrary.

No exceptions or exemptions are defined for public infrastructures; only constructions designed for national defence are exempted from building permit requirements.

Environmental permits

Environmental Impact Assessment is applied to projects, plans in programmes according to the requirements of EU legislation.

There is a long list of activities which are considered “environmentally hazardous” and require an environmental license. The environmental authorities can require a license for any activity which they consider may involve environmental or health risks, even though it is not included in the list.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

Most airports are owned and operated by the Swedish Civil Aviation Administration (LVF), which prepares airport development plans and sends them to county administrative boards for approval. These plans do not have, nevertheless, a statutory basis, even though they are official documents. Once they have been approved by the county board they must be taken into consideration by spatial plans for the area, although municipalities are not bound to integrate them into their local plans. Local regulatory plans can be repealed, if they are considered to be contrary to the national interests, as expressed in an airport plan.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Airport plans include the safeguarded areas required to protect the obstacle limitation surfaces of current and projected infrastructures.

Construction projects within these areas must be cleared with the CAA before a building permit can be granted.

- Noise Impact

Airport plans include current and projected noise contours and define a “Building Restriction Area” on the basis of noise exposure. The restriction area is included in the EIA decision and must be taken into consideration by spatial plans. Municipalities, nevertheless, may disagree and propose their own noise contours, originating a conflict which can only be solved on a case by case basis at the time of adopting detailed development plans or issuing building permits.

- Risk prevention

There is no specific legislation regarding third-party risk areas, but the aviation authorities have considered this factor in connection with some building permits in the vicinity of airports.

- Land reserve for future construction

There are no land reserves for airport development. Land is usually purchased by the aviation authority once the airport development plan and the EIA have been approved.

Construction

Building permits are necessary for all airport constructions.

All airports require some sort of environmental assessment to be carried out: by Central Government in the case of runways over 2,100 m, by the Environmental Courts for runways over 1,200 m or more than 100 operations/year, and by municipalities in all other cases.

Operation

Airports require an operation permit issued by the CAA.

Airports are included among the activities that require an environmental permit to operate.

Airport certification has not yet been regulated in Sweden.

AIRPORT NOISE AND AIR QUALITY

Noise

Airport development plans include a “building restriction area” based on noise exposure, which must be taken into consideration when adopting detailed spatial plans or issuing building permits.

There are no noise abatement plans, but environmental permits include provisions on the sound insulation costs to be paid by the airport operator.

Air quality

The environmental goals set by the Swedish Government lead to the introduction of take-off and landing charges based on total emissions of hydrocarbons and nitrogen oxides.

2. CONTEXT

Sweden is a kingdom in the north west of Europe, occupying the eastern part of the Scandinavian Peninsula, on the Gulf of Bothnia and the Baltic. About 50 per cent of the total area is forest and 9 per cent lakes.

Sweden was first united during the Viking period (8th-11th centuries), and did not participate in the World Wars. Indecision on the country's role in the political and economic integration of Europe delayed Sweden's entry into the EU until 1995. It waived the introduction of the euro in 1999 and a referendum confirmed that decision in 2003. At present, its currency is the Swedish krona.

The country is divided into 21 counties: Blekinge, Dalarna, Gävleborg, Gotland, Halland, Jämtland, Jönköping, Kalmar, Kronoberg, Norrbotten, Örebro, Östergötland, Skane, Södermanland, Stockholm, Uppsala, Värmland, Västerbotten, Västernorrland, Västmanland, and Västra Götaland. These counties are divided, in turn, into a total of 290 municipalities.

The official language is Swedish, although there are small Finnish-speaking minorities.

Aided by peace and neutrality for the whole of 20th century, Sweden has achieved an enviable standard of living under a mixed system of high-tech capitalism and extensive welfare benefits. It has a modern distribution system and a skilled labor force. GDP per capita exceeds the EU average (22,400¹), by 15.6%. The government's commitment to fiscal discipline resulted in a substantial budget surplus in 2001, which was cut by more than half in 2002, due to the global economic slowdown, declining revenue, and increased spending.



Figure 1. Map of Sweden

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices 2004
Source: EUROSTAT

Characteristic	Description
Population	8,975,700
Latitude / Longitude	62° 00' N, 15° 00' E
Land area	410,934 sq Km
Coastline	3,218 Km
Capital City	Stockholm (1.6 million)
GDP per capita (PPS at market prices)	25,900
GDP real growth rate	3.6 %
Inflation rate	1%
Unemployment rate	6.3

Table 1. Sweden: Main facts and figures(2004)²

2.1. Population and statistics

Currently, the population in Sweden is close to 9 million with one of the lowest population densities in the European Union with 21.9 inhabitants per sq Km.

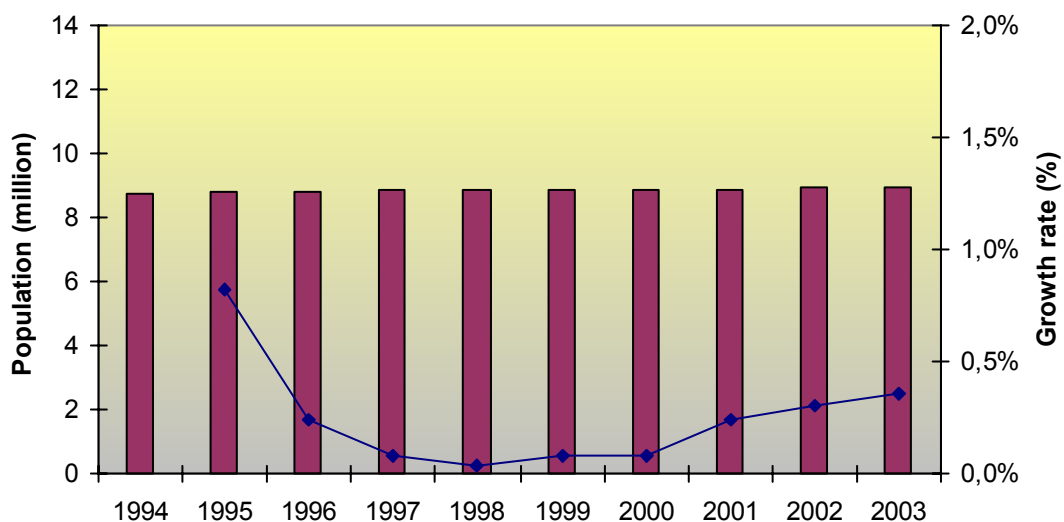


Figure 2. Population growth

² Source: EUROSTAT

During the last 10 years, the annual population growth rate in Sweden has remained steady at under 1%.

The birthrate is very close to EU average with 10.46 births / 1,000 population (2004 est.). The median age in Sweden is around 40.3 (2004 est.).

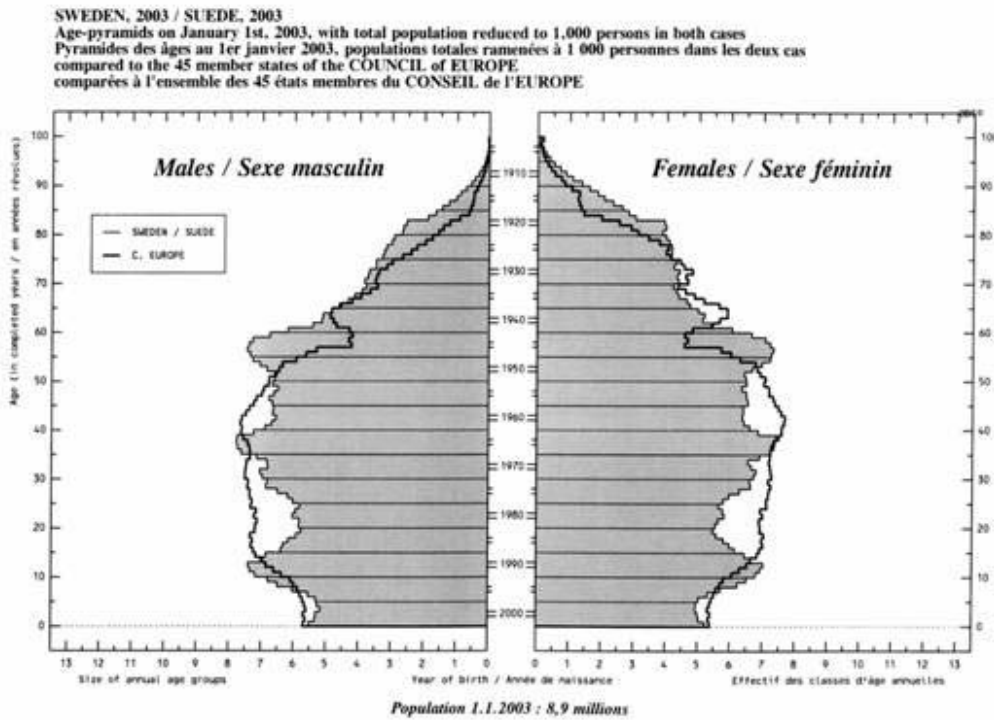
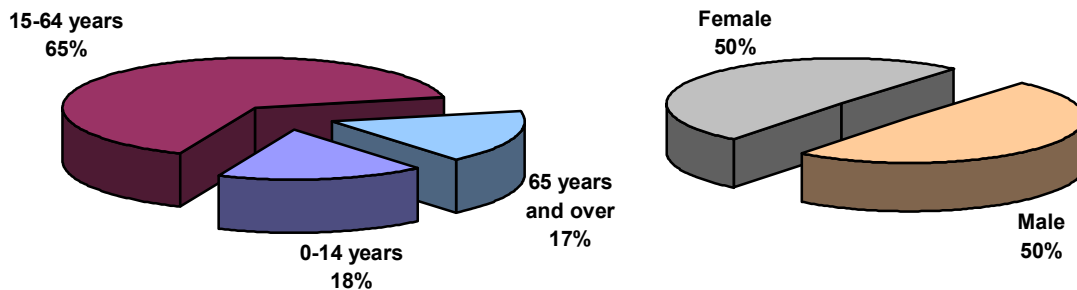


Figure 3. Age-pyramids (.2003)³

The pie charts below show the population by age and gender, with more than 65 per cent of the population between the age of 15 and 64, and an equal percentage of men and women.



Figures 4 and 5. Population and gender split (2004 est.)

³ Source: Council of Europe

2.2. Government structure and powers

Sweden is a constitutional monarchy with a parliamentary form of government based on a one-chamber legislature. Currently, the head of state is the King Carl Gustaf XVI and the Primer Minister is Goran Persson. The system of Swedish government is divided into three administrative levels: the central state, the regional county, and the local municipality. The regional level contains both directly elected councils and administrative state units.

Sweden is a highly decentralized country where county and municipal authorities enjoy considerable autonomy, although the national government provides the framework and the structure for local government activities and makes important decisions with high territorial impact, such as in the field of infrastructures.

At national level, the Swedish people are represented by the *Riksdag* (Swedish Parliament) which has legislative powers. The Government is assisted in its work by the government offices, comprising a number of ministries, and some 300 central government agencies, national boards and public administrations.

Sweden is divided into 21 counties (*län*)⁴ each of which has a county governor and a county administrative board. Political tasks at this level are undertaken on the one hand by the county councils, whose decision-makers are directly elected by the people of the county, and on the other by the county administrative boards, which are the State Administration offices in the counties, whose role is to represent the State and to coordinate the activities of all the administrations, making certain that national policies are implemented and providing assistance to municipal bodies.

Sweden has 290 municipalities (*kommun*). Each municipality has an elected assembly, the municipal council, which takes decisions on municipal matters. The municipal council appoints the municipal executive board, which leads and coordinates the work of the municipality.

With regards to aviation and airports, the State has reserved exclusive powers over air navigation and air traffic (Civil Aviation Act 1957:297), as well as over nineteen airports owned and managed by *Luftfartsverket* (LFV Group - Swedish Airports and Air Navigation Services), all of which are considered “national interest” airports. There are another nine “national interest” airports owned and managed by the municipalities where they are located or by private entities. There are proposals to include other airports in that category.

⁴ Sweden has been experimenting with regional reform based on the counties. As a result 18 counties have county councils, 2 counties are designated as regions and 1 county consists of only of 1 municipality.



Figure 6. List of national interest airports

Municipalities and county administrative boards shall collaborate in developing and monitoring local and regional community planning, as stated in the 15 National Environmental Quality Goals defined by the Government in the Government Bill (1997/98:145), “Swedish Environmental Quality Goals: An Environmental Policy for a Sustainable Sweden”, in order to foster sustainable development.

With respect to spatial planning, the State (through the BOVERKET - National Board of Housing, Building and Planning) and the County Administrative Boards set out the general policies which apply across the country, but also policies that may be spatially specific for particular topics such as infrastructure. Nevertheless, there is a municipal planning monopoly in Sweden, established by the Planning and Building Act (1987:10).

Thus, the municipality has the overall responsibility for all the physical planning. Special national interests are pointed out by different National Boards. For example, the Swedish Civil Aviation Authority has marked out Arlanda as an airport of national interest. This means that the County Administrative Board can invalidate a local development plan if it could cause obvious damage to the possibility of running the airport. The County Administrative Board can also terminate such a plan if it represents a threat to personal health or security.

2.3. Main airports

The civil aviation scene in Sweden underwent a major change this year. On 1 January 2005, the Swedish Civil Aviation Administration was split up and a new Civil Aviation Authority was formed.

The Swedish Civil Aviation Authority (*Luftfartsstyrelsen*) is responsible for regulations, approvals and inspections within Swedish civil aviation and shall supervise, analyse and evaluate the development of the civil aviation sector as well as provide expertise in physical planning, the environment, emergency planning, contingency planning, and other issues. From 1 March 2005, the Swedish Civil Aviation Authority also is responsible for the Search and Rescue Services.

In addition, the LFV Group (*Luftfartsverket*) is now a services provider, managing the public airport network and providing air navigation services in Sweden

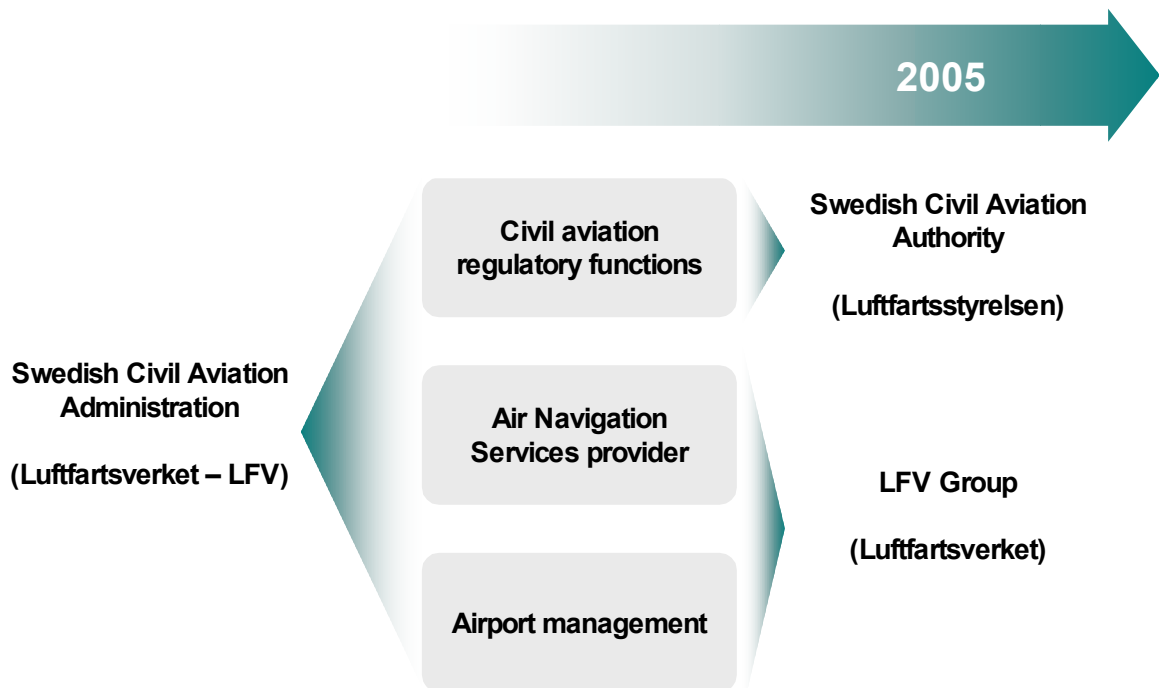


Figure 7. New Swedish Civil Aviation framework

There are 255 aerodromes in Sweden, most of which are very small. Only 15 of them have a paved runway over 2,400 m long.

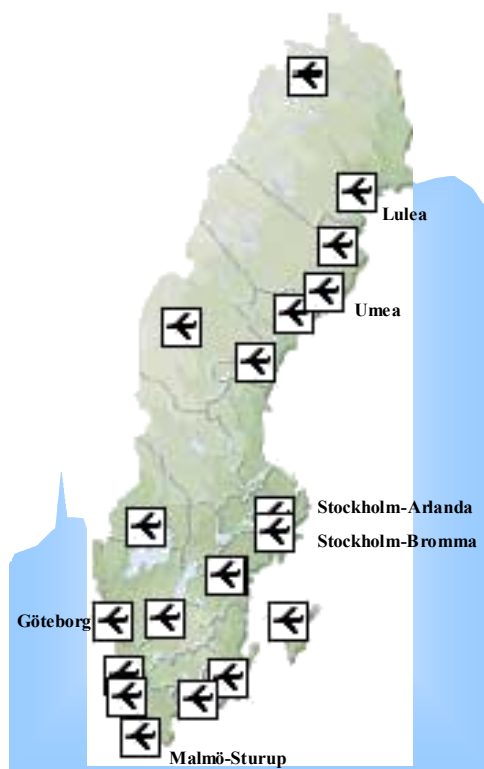


Figure 8. Main Swedish airport network

The following table shows the commercial passenger and cargo traffic of the main Swedish airports during 2004:

Airport	Passengers	Cargo (Tons)
Stockholm-Arlanda	16,364,000	101,800
Göteborg-Landvetter	3,938,000	67,100
Malmö-Sturup	1,775,000	31,800
Stockholm-Skavsta	1,348,000	13,700
Stockholm-Bromma	1,273,000	-
Lulea	902,000	1,800
Umea	788,000	6,500

Table 2. Main Swedish airport data (2004)⁵

⁵ Source: ATI (www.rati.com)

3. SPATIAL PLANNING SYSTEM

The spatial planning system in Sweden has a century long tradition and is regulated by several pieces of legislation, the most important of which are the Planning and Building Act (PBA) (1987:10), the Environmental Code (1998:808) and the Law on Technical Qualities of Buildings (1994:847).

The PBA was an important change in the operation of the planning system, since it introduced a strong devolution of planning and decision-making from central to regional level and above all to local municipalities, which now have a very high degree of autonomy in this field.

At the beginning of 1990's the Government decided that physical planning should become an integral part of an environmental policy. This led to an effort to integrate sustainable goals into the provisions of the Planning and Building Act and the Environmental Act. Since then, the pursuit of ecologically sustainable development has gathered momentum and resulted in a new Environmental Code which came into force in 1999.

3.1. Institutions

3.1.1. National

At national level, responsibility for spatial planning lies with the Ministry of Sustainable Development, but there is no spatial planning instrument at this level.

The National Board of Housing, Building and Planning (BOVERKET), an independent body under the Ministry of Sustainable Development, is the central government authority for urban environment works and the management of natural resources, physical planning, building and housing. One of the agency's main tasks is to adopt spatial planning methods with a view to ensuring the sustainable development of urban and built-up areas.

3.1.2. Regional

At regional (county) level the main authorities in relation to spatial planning are the county administrative boards which integrate the offices of several State administration departments. They are more concerned with regional development than with spatial planning, but they fulfil an important role by coordinating national interests at county level and exercising a supervisory, consultative and supporting role with regard to municipal planning.

However, in Stockholm (which is both a county and a municipality), the county council has been directly involved in spatial planning by undertaking the preparation of the regional development plan.

The elected county councils are not involved in spatial planning, as their field of action is the provision of services such as health or transportation that are better dealt with at a larger scale than a single municipality.

3.1.3. *Local*

Spatial planning in Sweden is considered a municipal “monopoly” as only municipalities are enabled to adopt spatial plans. This power has to be exercised in accordance with the state legislation and with full regard for national interests.

3.2. **Instruments**

The Planning and Building Act defines five different types of spatial planning instruments: regional plans, comprehensive plans, detailed development plans, area regulations and property regulation plans.

The planning system is not hierarchic, i.e. a detailed development plan can conflict with the comprehensive plan. Only area regulations must always be in accordance with the comprehensive plan.

3.2.1. *Strategic plans or policy documents*

The Planning and Building Act does not define any spatial planning instrument at national level. As a result, Sweden has no overall physical plan for the development of the territory of the State. There are, however, some policy statements at national level, which can not be considered plans but include provisions with spatial impact which must be taken into consideration by spatial plans when dealing with areas of “national interest”.

Regional Plan

The Regional Plan is an “strategic planning instrument” defined by the Planning and Building Act which aims to coordinate issues affecting more than one municipality. When it is of importance to the region as a whole or parts of it, the regional plans can indicate fundamental features for the use of land and water areas as well as guidelines for the location of development and civil engineering works.

Regional plans are not legally binding, but shall serve as a model for decisions concerning comprehensive plans, detailed development plans and area regulations. There are very few examples of regional plans, such as the Stockholm Regional Plan which is orientated more towards regional development than to spatial planning.

3.2.2. *Local (framework) plans*

Comprehensive Plan

According to the PBA, each municipality shall draft and keep updated a comprehensive plan covering the entire municipal area. The comprehensive plan aims to deal with long-term, strategic questions regarding land use and development and to a large extent can be considered a strategic planning instrument.

Comprehensive plans must indicate:

- the main points concerning the intended use of land and water areas
- the municipality's view concerning how the “*built-up environment*” is to be developed and preserved, and
- how the municipality intends to take national interests into consideration and comply with the current environmental quality standards.

The last point is especially relevant for the purpose of this report since it provides the link with national policies and stresses the need for municipalities to negotiate with national Government on some issues, such as airports, which are considered of national interest.

Comprehensive plans are not binding on the public or the private sectors, but they must be taken into consideration by more detailed spatial plans as well as by any agency making decisions concerning the use of land, since all these decisions must state how they relate to the provisions of the plan. No building or development rights arise directly from this type of plans.

3.2.3. *Regulatory (detailed) Plans*

In order to implement the broad development objectives expressed in comprehensive plans, municipalities must adopt regulatory instruments in the form of detailed development plans or area regulations, both of which are legally binding.

A property regulation plan may also be attached to the detailed development plan in order to facilitate its implementation, but building permits are usually issued directly if they comply with the detailed development plan.

Detailed Development Plan

Detailed development plans are used to regulate development in specific areas of a municipality when new public infrastructures are required, and to regulate building conditions when a piecemeal approach, permit by permit, is not

considered satisfactory and a more comprehensive approach is required. They can define new developments not considered in the comprehensive plan.

Detailed development plans must include certain public infrastructures and amenities such as roads, watercourses, sanitation and power networks, sports facilities and parks, as well as restricted areas, safety areas and water areas used for recreation. They also regulate the use of land, establishing compatibility rules in order to avoid possible disturbances, and specifying types of dwelling units, as well as building regulations concerning height, position, shape, fences, vegetation, parking lots, land reserves for public facilities, subdivision criteria, or protection of spaces of environmental or cultural value.

A detailed development plan may even regulate that building permits shall not be granted for measures involving a substantial alteration of the use of the land in a certain area until certain conditions have been met.

These plans have both a spatial and a time dimension, since they confer development rights in specific areas and establish a timeframe, usually between 5 and 15 years, during which owners can implement the planning provisions. Once the term established in this timeframe expires, the municipality can modify the plan without compensation.

Area Regulations

Area regulations are used to supplement comprehensive plans in areas where there is no detailed development plan and it is considered necessary to regulate land use in more detail in order to secure the purpose of the comprehensive plan or to safeguard national interests. The possible purposes of area regulations are limited by law and in some cases coincide with those of detailed development plans, but as a rule this instrument is restricted to areas where no new development is to take place but certain specific issues require some regulation.

Area regulations must conform to the comprehensive plan and become legally binding when the municipal council adopts them. This instrument does not generate building or development rights, as is the case with detailed development plans, which means that municipalities are not bound to grant construction permits in places covered by area regulations even though the proposed activity is in conformity with such instrument.

Property Regulation Plan

Property regulation plans may be adopted for the purpose of facilitating the implementation of detailed development plans in order to regulate the subdivision of land, the establishment or elimination of public or private easements or the establishment of common facilities to be shared or built by different owners.

Property regulation plans must, at all times, be in accordance with detailed development plans and must be modified or cancelled whenever the latter are altered or become no longer valid.

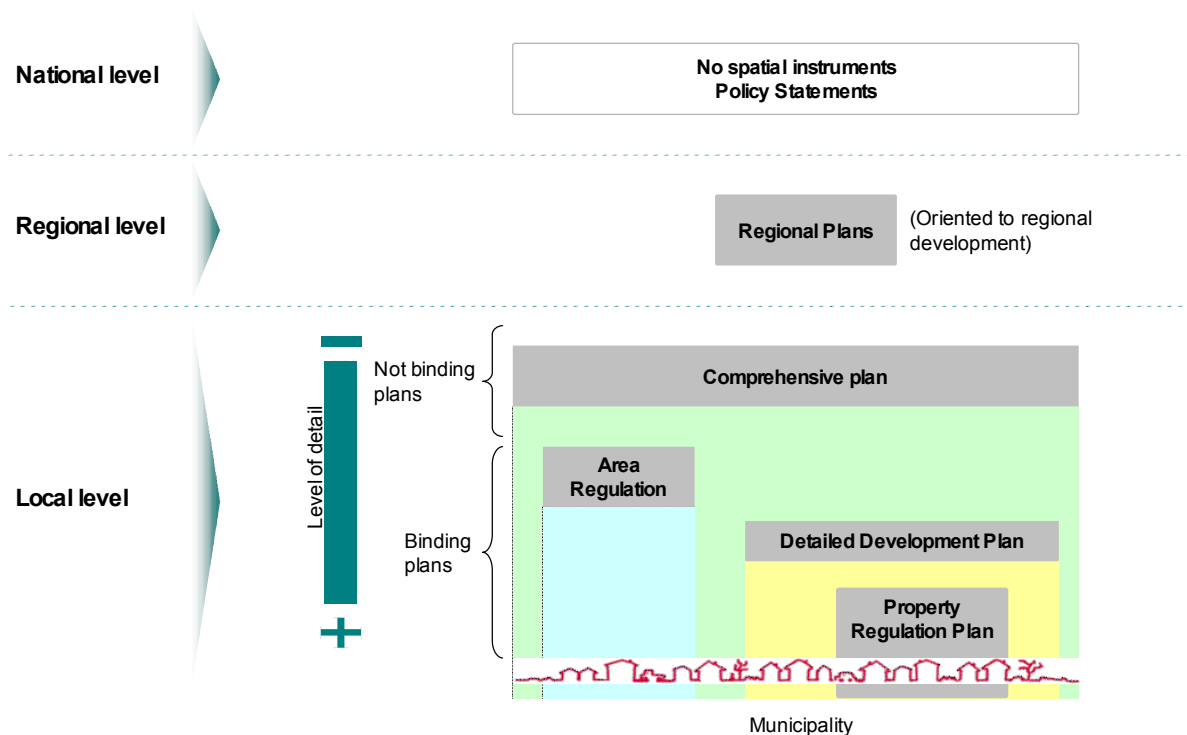


Figure 8. Swedish spatial planning instruments

3.3. Process

3.3.1. Inter-government consultation

Every spatial plan in Sweden is subject to consultation both at the time the first draft is prepared and when a more finalized version is submitted to public participation before it is approved. All plans are required to include a “consultation report” in which the results of this process are explained and the final position is justified.

In the case of comprehensive plans, when a proposal for a new plan or for an amendment is prepared, the municipality shall consult the county administrative board and any regional planning body or municipality that may be affected by the proposal. In the case of detailed development plans, the municipality must consult the county administrative board, the Cadastral Authority (land registry) and the municipalities that are affected by the program or the proposal. Property regulation plans are drafted, amended and cancelled in accordance with the same rules for detailed development plans, except that the consultation procedure is simpler since only property-owners in the area are involved.

The primary function of the county administrative board during the consultation is to safeguard and co-ordinate the public interests; thereby the board shall promote compliance with national interests in accordance with Chapters 3 and 4 of the Environmental Code. Chapter 3 - Section 8, states:

“Land and water areas that are particularly suitable as sites for facilities for industrial production, energy production, energy distribution, communications, water supply or waste treatment shall, to the extent possible, be protected against measures that may be prejudicial to the establishment or use of such sites.

Areas that are of national interest on account of facilities mentioned in the first paragraph shall be protected against measures that may be prejudicial to the establishment or use of such sites.”

National interest airports are considered to be communication facilities. Therefore, spatial planning instruments drafted by municipalities according to the Planning and Building Act must be fully compatible with airport operation and future developments which have already been approved by the county administrative board and granted environmental approval by the Environmental Courts.

Although, the opinion of the county administrative boards regarding comprehensive plans is not binding, it must be annexed to the Plan. Consequently, these plans can be adopted by municipalities even though they do not conform to national interests. However, the Plan must be accompanied by a review statement from the county administrative board where the disagreement will be made apparent.

Pursuant to Chapter 12 of the Planning and Building Act, in the case of detailed development plans, area regulations or building permits, municipal decisions can be cancelled by the county administrative board if proven to be contrary to public interest.

3.3.2. *Policy Integration*

There is no mandatory integration of airport development plans with spatial plans.

In the case of “national interest” airports, county administrative boards approve airport development plans proposed by the airport authorities and send them to the affected municipalities. Municipalities can then include these plans in their comprehensive plans, but they have also the right to show their disagreement with the airport plans and leave them out of their comprehensive planning instruments. In this case, the county administrative boards include their opinion in the statement that is always annexed to the comprehensive plan.

3.3.3. *Citizen participation*

Every spatial plan in Sweden is subject to public participation.

Prior to adopting a new plan or a modification to the plan, the municipality shall hold a public exhibition of the plan proposal during at least three months for Regional Plans, two months for comprehensive plans and three weeks for Detailed Development Plans, area regulations and property regulation plans. Anyone who wants to make a comment about the plan proposal must do so in writing during the exhibition period. In the case of detailed development plans all affected property owners must also be individually notified.

A notice about the public exhibition of the plan proposal shall be displayed on the municipality's notice board and shall be advertised in a local newspaper at least one week prior to the commencement of the exhibition period.

During the public exhibition period, the plan proposal shall be accompanied by:

- a planning description (and an implementation report in the case of detailed development plans),
- the consultation report,
- the current comprehensive plan or the programme for the detailed development plan together with the environmental impact report, and
- such planning material the municipality considers relevant to assess the proposal.

The planning description should give an account of the planning conditions, the reasons for the design of the plan and the measures envisaged by the municipality to implement the plan. Furthermore, an assessment of the impacts of the plan must be stated. If a detailed development plan differs from the comprehensive plan, the derogation and the reasons why shall be specified in the planning description.

After the public exhibition period, the municipality shall compile a list of the representations submitted in writing and describe any proposals in response to these statements, which shall be annexed to the case-documents. The opinion, or information on where the opinion is made available, shall be sent as soon as possible to those whose demands have not been considered. The right to appeal against a decision to adopt, amend or cancel a detailed development plan is only given to those who, before the end of the public exhibition period, have submitted representations in writing which have not been taken into consideration. Appeals are made before the county administrative board, but the matter is finally settled by the National Government.

If the proposed plan is substantially amended after the exhibition, a new exhibition shall be held.

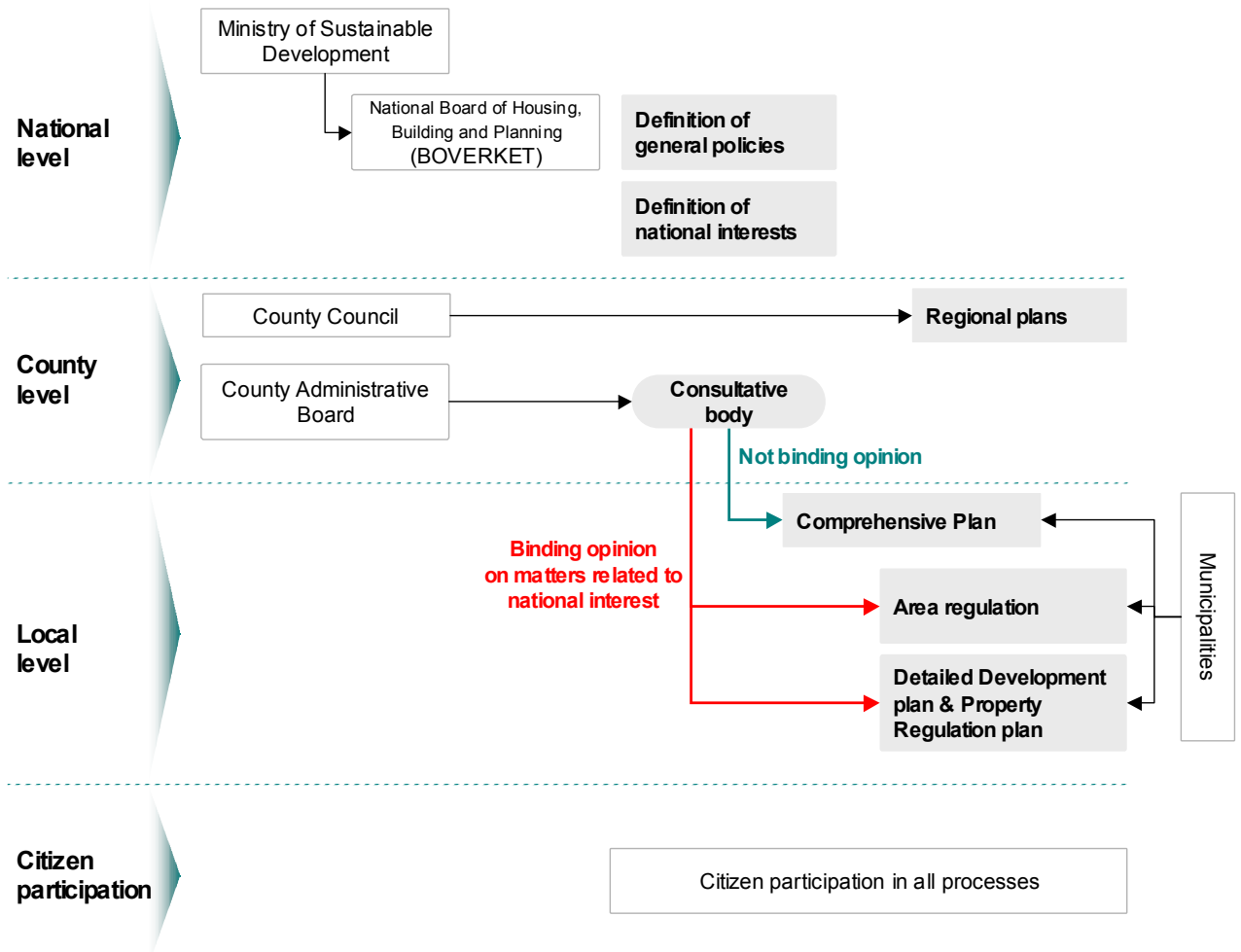


Figure 10. Spatial planning process

4. REGULATIONS AND PERMITS

According to the Planning and Building Act, ownership of land does not give an unconditional right to develop land area, which can only be carried out on land that is suitable for development.

4.1. Development control system

4.1.1. *Activities subject to development control*

Pursuant to Chapter 8 of the Planning and Building Act, all building and construction activities require a building permit issued by the Building Committee, unless a detailed development plan or an area regulation establishes special provisions to the contrary.

4.1.2. *Exceptions or exemptions*

The municipality may decide in a detailed development plan that some activities within a certain area do not require a building permit provided that they comply with certain criteria. Likewise, the municipality may decide in area regulations that no building permit is required for certain actions in compliance with the regulations. However, this authority has never been used for airport developments.

No exceptions or exemptions are defined for public infrastructures. The only constructions which are exempted from building permit requirements are those whose purpose is to serve national defence.

4.1.3. *Institutions involved: inter-government relations*

Applications for a permit must be submitted in writing to a Building Committee and accompanied by the drawings, specifications and any other relevant information which need to be examined.

Prior to granting a permit, the Building Committee shall inform affected parties and organizations if the proposed activity deviates from the detailed development plan or area regulations or is to be undertaken in an area not covered by such instruments. County administrative boards will analyse compatibility with approved airport development plans, even if they have not been included in comprehensive plans.

If the Building Committee establishes that there are reasonable grounds for assuming that a measure requiring a permit also requires planning permission from another authority, as in the case of the Swedish Civil Aviation Authority (*Lufftraststyrelsen*) regarding building heights around airports, the committee shall inform the applicant of this.

A decision on a permit or a tentative approval for fillings or forestations within a restricted area or a safety area around an existing or a future development of state-owned airports or other public airports, may be subject to appeal by the National Swedish Civil Aviation Authority.

4.1.4. Relationship with planning

Building permits for activities carried out within areas covered by adopted detailed development plans must be granted provided that they comply with the plan or with any property regulation plan covering the area. In areas not covered by detailed development plans there is much more discretion on the part of the Building Committee, since no building or development rights have yet been created.

A building permit may be issued even though there are minor deviations from the detailed development plan, area regulation or property regulation plan, if the deviations are compatible with the purpose of the plan or regulation, but it can not be granted in contravention of such instruments unless it is stated in the plans.

Building permits are issued for a certain period of time, and will cease to be valid if the activity has not been initiated within two years and completed within five years from the date when the permit was granted.

4.2. Environmental permits

4.2.1. Environmental Impact Assessment

Unless otherwise stated in the laws that apply to individual sectors, the provisions of the Environmental Code shall regulate all activities and all actions involving a risk of environmental impact. It is irrelevant whether the activity or action is performed by a natural or legal person.

The regulations in the Environmental Code that apply to Environmental Impact Assessments are considerably stringent and fully comply with the provisions of Directive 85/337/EEC⁶ (the “EIA” Directive) regarding environmental assessment and, since 21 July 2004, with the obligations imposed by Directive 2001/42/EC⁷ (the “SEA” Directive) regarding strategic environmental impact of plans and programmes.

4.2.2. Other environmental controls

Pursuant to the Environmental Code,

⁶ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

⁷ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

“...the Government may provide that the building or operation of certain kinds of factories, other facilities or other environmentally hazardous activities may not be undertaken without prior permission or notification...”

“...Applications for permits for environmentally hazardous activities shall be considered by Environmental Courts. The Government may provide that applications for permits for certain kinds of activities shall be considered by county administrative boards. If an environmentally hazardous activity is likely to have little environmental impact, the Government may provide that the permit application shall be considered by a municipal committee.”

Activities or operations for which permits are compulsory are specifically stated in Ordinance (1998:899), “Concerning environmentally hazardous activities and the protection of public health”. Approximately 6,500 activities require some form of permit. That number includes activities regulated in Directives 96/61/EC⁸ (the “IPPC” Directive) (1,000 of the A and B activities) and 96/82/EC⁹ (the “SEVESO II” Directive) (about 130 of the A and B activities). A large number of activities, about 15,000, (type C) are not subject to licensing, but the operator must notify the municipal board (local Environmental and Public Health Committee).

Even where a permit is not required, the supervisory authority may, in individual cases, order an operator to apply for a permit where the activity involves the risk of significant pollution or other significant detriment to human health or the environment.

4.2.3. *Institutions involved*

The Swedish Environmental Protection Agency (EPA - *Naturvardsverket*) is, in general, responsible for developing the national environmental quality objectives, monitoring achievement and coordinating the efforts made by other agencies to achieve the objectives. The Swedish EPA also has the overall responsibility for coordinating all environmental monitoring in Sweden.

The environmental goals approved by Parliament should always be used as a basis for the application of the act in the five Environmental Courts that are in charge of licensing.

The county administrative boards, through their Environmental Protection Departments, have overall responsibility for the implementation and evaluation of the environmental measures at regional level. The objective of sustainable

⁸ Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control

⁹ Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances

development is integrated into all the activities of the county administrative boards and places emphasis on its work in infrastructure planning. There is close cooperation between these departments and the EPA. The Environmental Licensing Delegation (ELD) in every county administrative board is also a licensing authority.

Municipalities also have boards (local Environmental and Public Health Committees) which are responsible for licensing and supervision. As explained above, Swedish municipalities are independent of government, although the activities of the boards are largely determined by central laws and regulations and the EPA exercises supervisory authority over them.

The allocation of licensing tasks between the municipal boards, the ELDs at the county administrative boards and the Environmental Courts is regulated in the Ordinance (1998:899) "concerning environmentally hazardous activities and the protection of public health".

In 1998, twenty-four government authorities, including the National Civil Aviation Administration, were specifically instructed to take responsibility for the ecological dimension of sustainable development, which means that these 24 authorities have been given the responsibility for promoting ecological sustainability in their particular sector.

4.2.4. Integration with other permits

It is necessary to obtain building permits and environmental permits separately. In the case of airports, building permits are issued by the Building Committees while environmental permits are granted by the Environmental Courts (or the municipal board in the case of small airports).

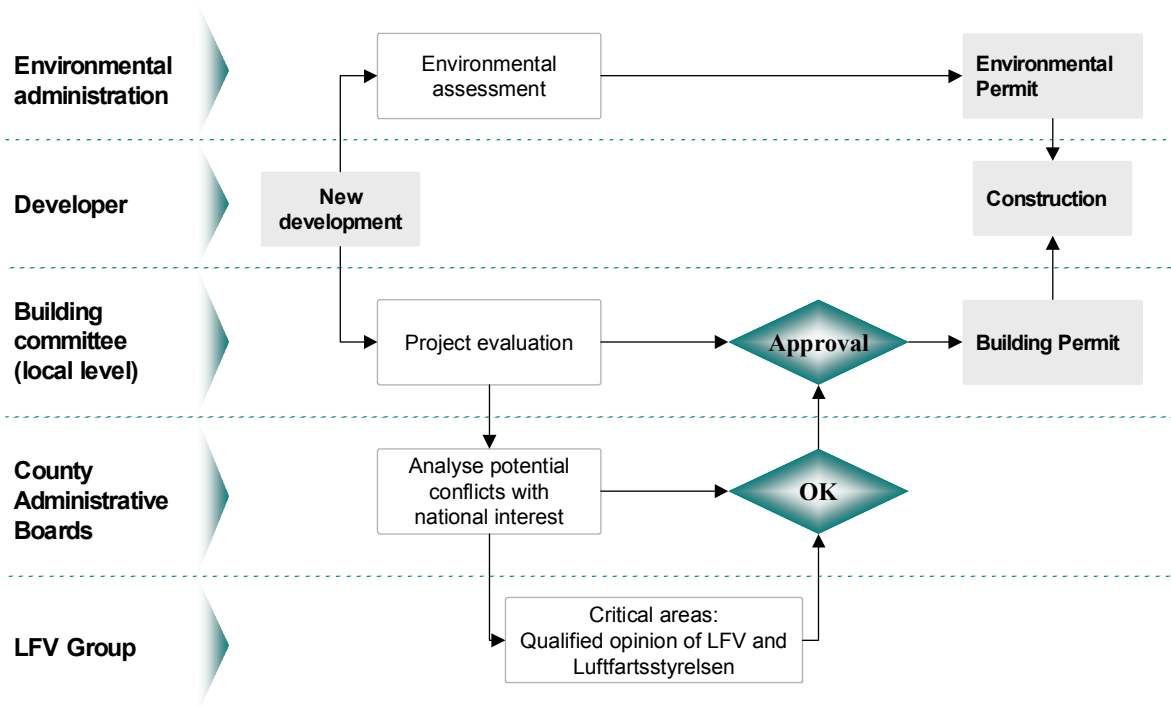


Figure 11. Permit process

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

The LFV Group (*Luffartsverket*) owns and operates nineteen airports, all of which are considered of “national interest”. These nineteen airports account for 96% of the passengers on the country’s civil air traffic. LFV prepares airport development plans when necessary. The Stockholm Bromma airport, which is also considered of national interest, is owned by the municipality but operated by LFV for a period of time.

Airport plans are sent to the affected county administrative boards for approval after a negotiation process between the affected municipalities whose purpose is to facilitate their agreement as much as possible.

Another nine airports, owned and operated by different municipalities or private companies, are also classified of “national interest”. Airport development plans in these cases are prepared directly by the owners.

The central Government does not participate directly in the approval of airport plans. The county administrative boards are responsible for ensuring compliance with the public interest.

Environmental Courts (in the case of airport runways which are longer than 1,200 m) shall approve the environmental impact reports associated with the airport expansion projects and grant the environmental permit, which is usually subject to certain conditions and compensation measures.

5.1.2. Instruments

There is no legal requirement for airport development plans in Sweden. However, the planning documents for airport development, which are prepared by LFV, have an official character, as the LFV is a national agency. After they have been approved by the respective county administrative board, they are sent to the affected municipalities which should take them into account when developing spatial plans in the vicinity.

Airport development plans and environmental impact reports prepared by LFV include a Building Restriction Area, which is approved by the Environmental Court when the environmental permit is granted. This area is delimited taking into account future noise contours.

Municipalities can integrate these plans into their comprehensive plan if they fit together, but they are not under any obligation to do so.

5.1.3. *Process*

In the case of “national interest” airports, LFV (or the municipalities or private companies in charge of them) send their “airport development plans” to the affected county administrative boards for approval. The established procedure tries to involve all the affected municipalities in order to reach a consensus on the airport plan.

If the plan includes new developments with a potential environmental impact, the corresponding impact report must be attached to the plan and sent to the Environmental Courts (or to the local Environmental and Public Health Committee for small airports) responsible for licensing.

When the environmental permit is granted, each county administrative board should send the approved airport plans, as well as the conditions and the compensation measures imposed by the environmental permit, to the affected municipalities, which can incorporate them into their comprehensive plans. These municipalities can choose not to include the airport plans, but they are not exempt from taking the plans into account when adopting a spatial plan or granting a building permit. However, it should not be a problem to include airport plans in comprehensive plans, as they are not binding, and it is only the first step to protect future airport developments.

Finally, if the airport plans are not given proper consideration in the comprehensive plans, the county administrative board shall clearly set this out in the Statement that must be attached to the Plan. In the case of detailed development plans, the position of the municipal administration is very different, since the local plan can be cancelled if it is considered contrary to the national interests. Building permits can also be cancelled for the same reasons.

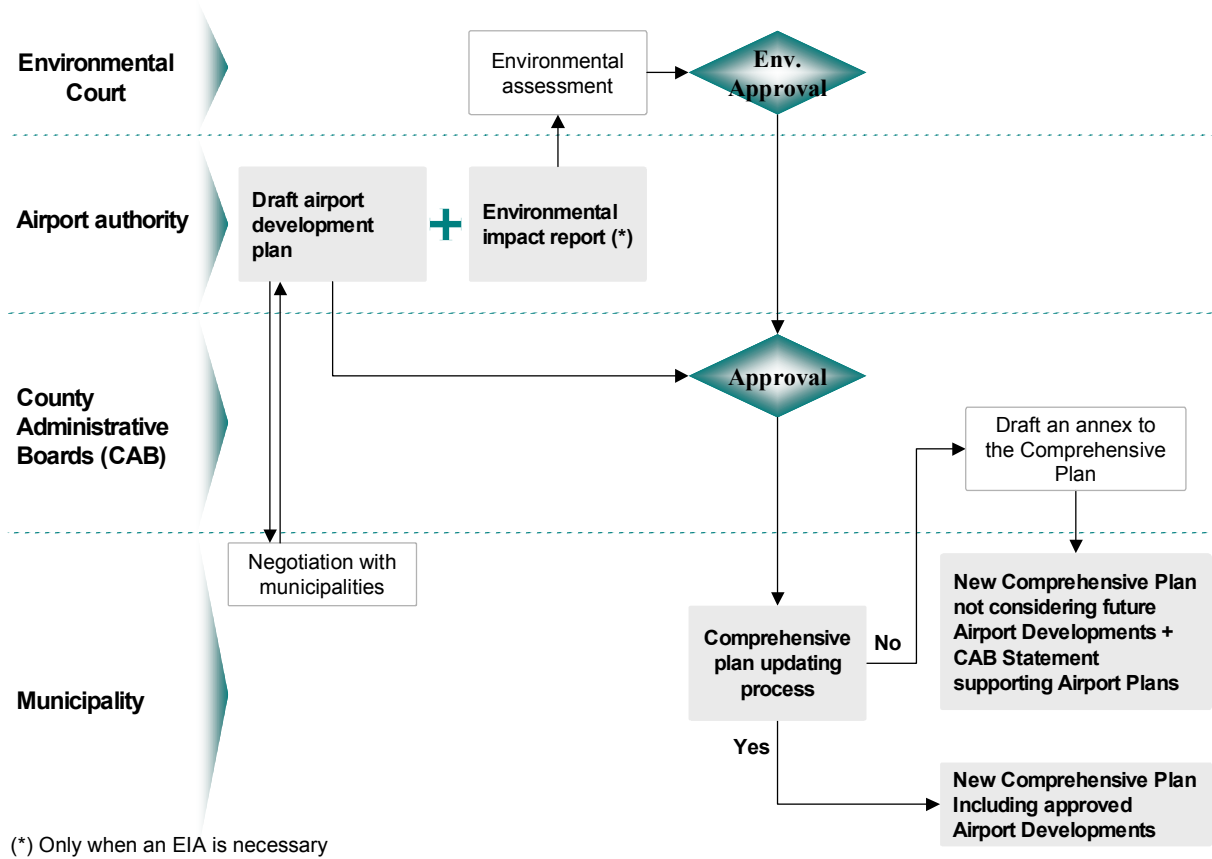


Figure 12. Airport planning process

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

Obstacle Limitation Surfaces for existing airports and for proposed future developments are included in the airport plans prepared by LFV and sent by the county administrative boards to the municipalities affected. These plans state clearly that the Swedish Civil Aviation Authority (*Luffartsstyrelsen*) must be consulted about heights when a new construction is built or land is filled in within that area.

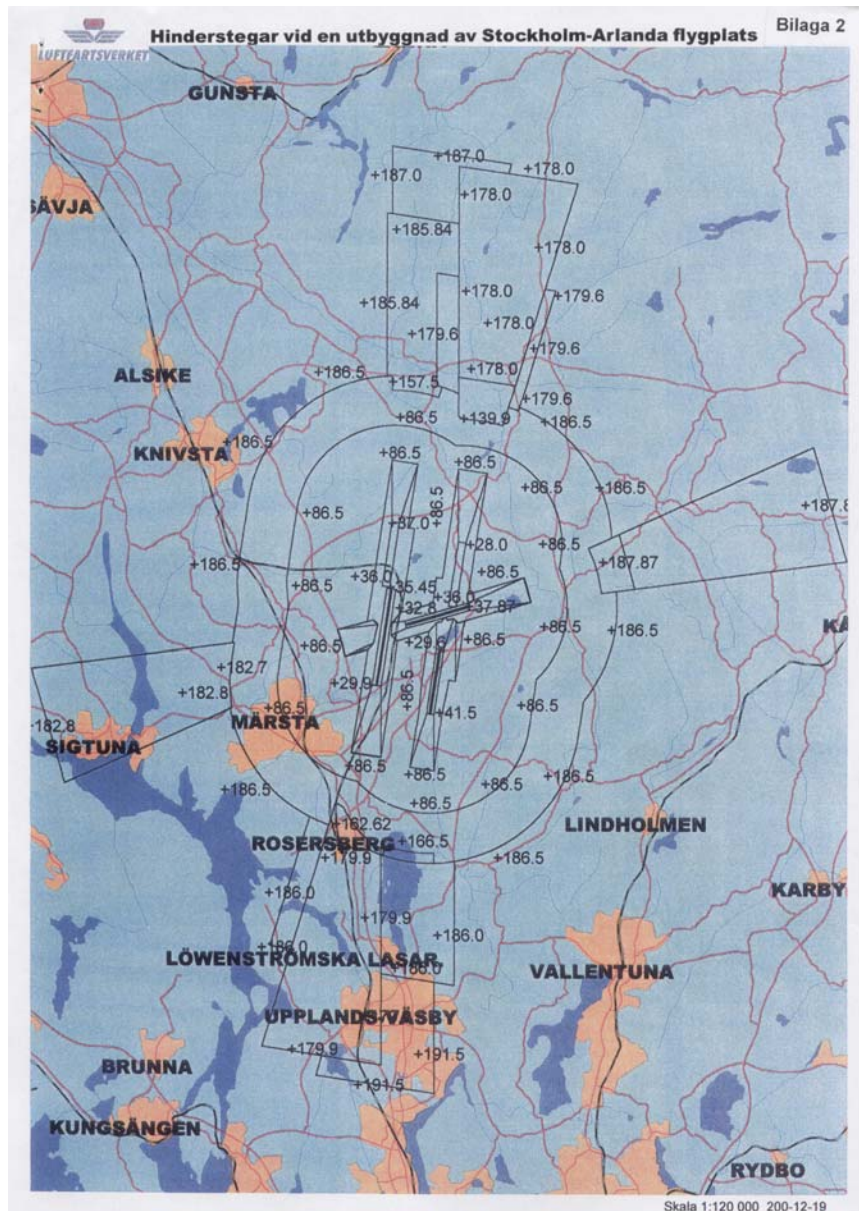


Figure 13: Obstacle Limitation Surfaces for Stockholm-Arlanda Airport

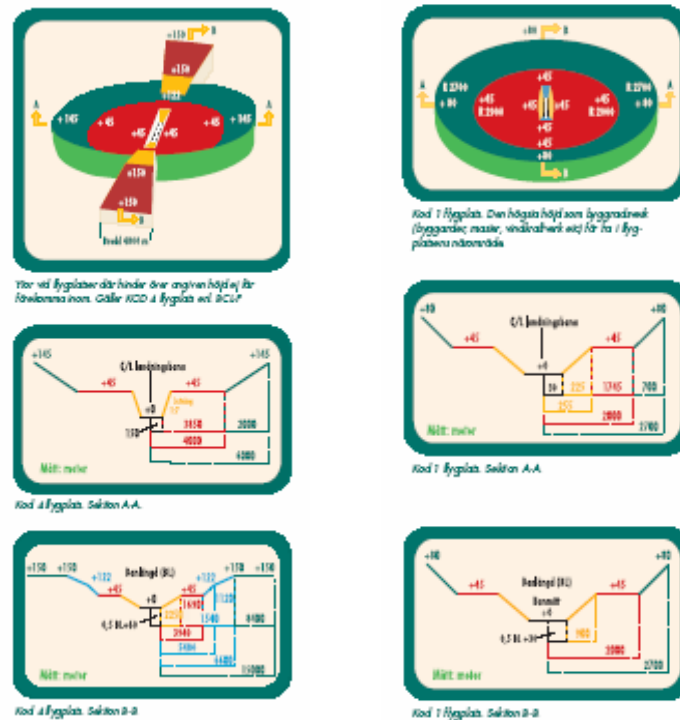


Figure 14: Calculation of the Obstacle Limitation Surfaces (Luffartsstyrelsen)

Building Committees must also advise the applicant for a permit within that area about consulting with *Luffartsstyrelsen* regarding height. County administrative boards also send a proposal for a spatial plan or an application for a building permit to LFV and the CAA (*Luffartsstyrelsen*) whenever a potential conflict is detected, as part of their responsibility to guarantee that public interests are considered.

Subject to the provisions in Section 7 of Chapter 8 of the Planning and Building Act, the municipalities may require building permits for light emitting facilities in the vicinity of existing or planned airports.

5.2.2. Noise Impact

Noise contours (FBN metric, very similar to L_{den}) for the existing airport, the future developments proposed and the estimated air traffic are included in the airport plans prepared by LFV. A Building Restriction Area is defined which takes them into account.

When an Environmental Assessment is required, according to the “SEA” Directive and the Environmental Code (Chapter 6), and it is analysed by the Environmental Courts, the environmental permit and the conditions thereto may point out the Building Restriction Area. The county administrative board shall

then make sure that it is taken into consideration by all spatial plans. Municipalities should include and comply with the Building Restriction Area in their comprehensive plans, but they have the right to disagree and to propose different noise contours.

A good example of this is the Comprehensive Plan adopted in 2002 by the Municipality of Sigtuna. The plan included the airport development plan for a third runway at Arlanda Airport as prepared by LFV in 2001. The Environmental Court had approved a Building Restriction Area with the defined obstacle limitation surfaces and noise contours, when it granted the environmental permit for the construction of the third runway. The municipality disagreed with those restrictions and proposed alternative noise contours. The county administrative board included a report in the Statement annexed to the Plan, which clearly supported the Building Restriction Area approved by the Environmental Court, but the plan was approved as the municipality had proposed. There is no other solution to this kind of conflict; according to the Planning and Building Act, municipalities are allowed to express their opinion in the comprehensive plan, but in case of conflict, public interests will prevail at the time of adopting detailed development plans or issuing building permits.

5.2.3. *Risk prevention*

There is no specific legislation in Sweden regarding third-party risk areas.

There have been cases, nevertheless, when the question has been contemplated by the county administrative boards when building permits in areas around airports are being considered. In the case of Arlanda, it was estimated that a certain proposed housing development would be located outside the 10^{-6} risk contour. The building permit was granted with the approval of the County after several analysis, but the *Luffartsstyrelsen* disagreed and complained to LFV and the County.

5.2.4. *Land reserve for future construction*

After an airport development plan and the environmental impact assessment have been approved and the environmental permit has been granted, LFV usually begin acquiring the necessary land for the location of the new airport infrastructures. There is no legal requirement or timeframe, as airport plans are not binding and do not impose any time limits. Compensation would not be required if the plan was not finally developed, even if is a private airport. According to the Planning and Building Act, ownership of land does not give an unconditional right to develop the land area, so land owners can not oblige LFV to acquire the land for future airport development before it is actually needed to implement the plan.

Pursuant to the Expropriation Act, land can be expropriated in the case of “national interest” airports, but LFV strategy is to directly acquire the necessary land as soon as the decision to implement the plan is made.

5.3. Airport construction

5.3.1. *Permits and authorisations required for airport construction or development*

- a) Building permits: According to the Planning and Building Act, a building permit is required for “*state-owned airports and other public airports*”. Every building or construction to be erected within the airport property, including runways, aprons, terminals and any other area related to aviation or commercial activities, requires a building permit.

The permit must follow the guidelines of the relevant local development plan, if there is one in force. If not, the municipality has to prepare a plan or change the existing one.

- b) Environmental permits: Ordinance (1998:899) provides guidelines for deciding whether a particular activity requires special authorisation in accordance with the provisions of the Environmental Code. The Annex to the Ordinance states that civil airports with runways longer than 1,200 m are classified as Category A, which means that an application for an environmental permit shall be made to the Environmental Courts, while airports with shorter runways but more than 100 aircraft operations/year are classified as Category C, which means that notification shall be made to the municipalities (usually to the local Environmental and Public Health Committees). Airports with runways equal to or exceeding 2,100 m are subject to EIA and the responsibility lies with the State Government.

5.3.2. *Institutions and processes involved*

- a) Authorisation:

In relation to airport construction, the application for building and environmental permits is made by the airport owner in each case.

Building permits are granted by the Building Committees, following the above-mentioned process. In the case of airport constructions, municipalities, county administrative boards and the *Luffartsstyrelsen* are the institutions usually involved.

Environmental permits are granted by the Environmental Courts or by the municipalities, depending on the activity; the Swedish Environmental Protection Agency may involve itself in some licensing cases.

b) Supervision:

The supervision of the airport construction is not regulated, but in any case, all environmentally hazardous activities can be subject to inspection by an authority in relation to the polluter. General guidelines for inspection have been issued by the Swedish EPA.

5.3.3. Integration with planning and environmental controls

Building and environmental permits are not integrated and no other permit for airport construction is required from the aviation administration.

5.4. Airport operation

5.4.1. Operating permit

Airport operating permits are granted by the Swedish Civil Aviation Authority (*Luffartsstyrelsen*).

Operating permits for other facilities/activities are integrated into the environmental permits approved by the appropriate authority in each case, which usually imposes conditions for the operation.

5.4.2. Airport certification

Airport certification has not yet been regulated in Sweden.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

The Environmental Code (1998:808) is the integrated environmental legislation in Sweden. Its provisions relate also to noise and air quality. As it is a framework law, the provisions of the Code do not specify limit values, although it does state that the Government may instruct a public authority to issue “environmental quality standards” specifying the maximum levels for noise pollution or disturbance to which the population may be exposed without any risk of significant harm.

More detailed provisions are laid down in Ordinance (1998:899) concerning environmentally hazardous activities and the protection of public health”. The term “environmentally hazardous activities” refers to all environmental impacts, including noise and air quality. However, the provisions do not apply to mobile sources, such as aircraft which are covered by other legislation. Airports, nevertheless, are stationary sources and are covered by the provisions.

Ordinance (2004:675) on environmental quality standards for noise sets requirements for strategic noise mapping and for the establishment of action programmes in order to limit road traffic noise, aircraft noise and railway noise, in accordance with Directive 2002/49/EC¹⁰ (the “noise” Directive).

Ordinance (2001:527) on ambient air quality standards sets standards for nitrogen dioxide, nitrogen oxides, sulphur dioxide, carbon monoxide, lead, benzene, particulate matter (PM10) and ozone in ambient air. The standards are based on Directive 1996/62/EC¹¹ (the “air quality framework” Directive), and its daughter Directives 1999/30/EC, 2000/69/EC and 2002/03/EC.

The Swedish Government and the Parliament have adopted 15 national long-term Environmental Quality Objectives (EQOs) These EQOs should provide guidance to all authorities in their work and also serve as a policy instrument when applying the legislation.

Directive 2002/30/EC¹² (the “noise-related operating restrictions” Directive) has already been transposed into Swedish legislation.

¹⁰ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

¹¹ Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

¹² Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

6.2. Institutions

The “polluter pays principle” is one of the basic principles of the Environmental Code. The LFV Group (*Luffartsverket*), as a national agency and airport owner and operator, is responsible for reducing the environmental impact caused by its activities to a minimum. The Environmental Courts are responsible for licensing, so they have to analyse the environmental impact reports, propose the measures of compensation and define the conditions for granting environmental permits.

County administrative boards are responsible for ensuring that the restrictions imposed for noise and air pollution are fully considered by spatial planning. The Swedish EPA is the national agency responsible for defining the general guidelines and quality standards throughout the country.

6.3. Instruments

The transport sector, like many other sectors, is involved in the work relating to the 15 Swedish EQO's¹³. The most relevant objectives for the air transport sector are “Reduced Climate Impact” and “Clean Air” with regard to air quality, and “A Good Built Environment” with regard to noise, although the interim targets set by Parliament in the latter case essentially focus on traffic noise.

By 2010, the number of people who are exposed to traffic noise in excess of the values approved by Parliament for noise inside dwellings should have been reduced by 5% compared with the values for 1998. Measures to reduce levels of traffic noise in homes have been introduced by the transport agencies, including LFV, among others. The initial phase, up to 2007, focuses on the worst-affected homes. Windows and external walls will be improved, and noise bunds and screens will be built along roads. These measures are primarily designed to reduce indoor noise levels.

Air traffic in Sweden during 1999 emitted 2.5 million metric tons of carbon dioxide. Air traffic emissions are the fastest growing of all the types of traffic. In order to reduce these figures the country has adopted an approach of imposing charges. Since 1998, the LFV Group has had a system of take-off and landing charges based on emissions of hydrocarbons and nitrogen oxides¹⁴. They charge 50 SEK/kg for the total amount of NO_x emitted in the LTO-cycle.

a) Noise planning:

No specific noise abatement plans have been adopted for airports, other than those explained in the following paragraphs with regard to land use

¹³ Environmental Quality Objectives

¹⁴ Detailed information on these charges can be found at http://www.lfv.se/templates/LFV_InfoSida_70_30_37751.aspx

restrictions and compensations. Some airports are closed at night or special night routes are designed.

b) Land use restrictions:

Airport development plans prepared by LFV define a Building Restriction Area, on the basis of the noise contours calculated using FBN metrics (very similar to L_{den}) for the future developments of the airport and the estimated air traffic. This restriction area must be approved by the county administrative board and by the Environmental Court, when the environmental permit is granted. This permit usually includes the conditions to be complied with in the area, in terms of sound insulation and noise levels.

Although the municipalities do not have to take these restrictions into account when they establish their comprehensive plans, the detailed development plans and the building permits shall be reviewed by the county administrative board, which may then cancel the municipal decision if it is found to be contrary to national interests. Therefore, it is in the municipalities' interest to include these restrictions in their regulatory spatial planning instruments.

c) Compensation:

Environmental permits, granted by the Environmental Courts, usually include the compensation measures to be paid by the operator in the licensing conditions. In the case of airport noise, those conditions are defined in terms of the percentage of the sound insulation costs to be paid for in different stages by LFV, depending on the noise level measured.

No compensation rights arise out of land use restrictions based on noise limits.

6.4. Integration with spatial planning

Once the airport development plan is approved by the county administrative boards and the environmental permit is granted by the Environmental Court, the Building Restriction Area becomes a land use restriction that should be considered when updating municipal comprehensive plans, although there is no legal obligation in that respect. The fact that the area is not included in the comprehensive plan, however, does not exempt the municipality from including it in detailed plans or taking it into consideration when granting building permits, since county administrative boards will always consider the Building Restriction Area with the aim of protecting the public interest.

County administrative board statements annexed to the comprehensive plans will always remind the municipalities of the existence of such a restricted area if they do not incorporate it into the Plan.

6.5. Integration with development, construction or operation controls

Building Committees will have to consider Building Restriction Areas when granting building permits. Even if they are granted, they can be later cancelled by the county administrative board without any right to compensation.

The Swedish LFV is responsible for the noise and air pollution caused during the construction and operation of their airports, in accordance with the “polluter pays principle”. In Sweden, it is mandatory for an operator to have a Self-Monitoring System (SMS). It is regulated by the “Ordinance on Operators Self-Monitoring”. LFV, just like every other operator, is obliged to submit an annual environmental report to the county administrative board and Swedish EPA.

7. CASE STUDY – STOCKHOLM-ARLANDA AIRPORT

This section describes the planning process for the airport development plan currently in force for Stockholm-Arlanda.

Planning and Building

In February 2001, the LFV prepared the airport development plan, including an environmental impact report that was approved by the Counties of Stockholm and Uppsala, both of which were affected by the airport.

Five different zones around the airport were defined. The results provided for consultations between the local communities (there are ten municipalities affected by noise around Arlanda) and the county administrative boards for more than two years:

- Airport area with three runways (the third runway was under construction and only opened to air traffic in December 2003)
- Proposal for the future airport area, with up to five runways
- Area within the FBN 60 dB(A) noise contour with three runways operating
- Area within the FBN 55 dB(A) noise contour with five runways operating
- Areas overflown during landing and take-off up to 17 km from the runways

The environmental impact report considered different land uses for each of the zones, which were then submitted as recommendations to the municipalities. In the outer zone, it was proposed that only the occasional one-family building be permitted while larger residential areas were to be controlled by the County Administrative Board, as that kind of development was contrary to the national interest. The County Administrative Board has the power to cancel decisions of the municipalities on building permits or local development plans which run contrary to those provisions.

In 2002, the Municipality of Sigtuna, where the airport is located, decided to update its Comprehensive Plan. They had received the recommendations concerning the airport development and the environmental conditions described above, and decided to include them in their plan. But they also included an alternative proposal, developed in the local interest, which provided more opportunities for building in the area. They used the noise zone defined by the Environmental Court which did not include the future development of the airport.

The County Administrative Board of Stockholm received the proposal for the new comprehensive plan as part of the spatial planning process. Although they

could not oblige the municipality to change the plan, they issued a statement which made it clear that the comprehensive plan could not be accepted by the County Administrative Board, in its capacity as a representative of the State. The municipality was obliged to attach this statement to the Comprehensive Plan.

The LFV has now put forward new recommendations about building and planning in the area. Discussions are taking place between the County Administrative Board and the new Civil Aviation Authority, and the proposal from LFV will be looked into at the end of 2005.

Environmental Approval

The District Environmental Court granted the Environmental Approval for the whole project with certain conditions and compensatory measures. They also included some outer lines near existing towns (red thick lines on Figure 15), based on the combination of the five areas, where noise levels shall never exceed 55 dB(A). This is the so-called Building Restriction Line.

The conditions for the approval included, in the first stage, the sound insulation of all the houses within the FBN 60 dB(A) contour affected by noise levels above 80 dB(A) an average of three occasions per night over a year. This meant soundproofing 200 dwellings, and the acquisition of the most affected ones which could not be properly insulated. These houses have been rented to airport employees. In the second stage, ongoing until 2007, they must insulate every house subject to more than 70 dB(A) an average of three occasions per night over a year.

The conditions for the Environmental Approval of future plans are expected to be similar to the previous ones, although the Swedish EPA has already recommended that houses within the 55 dB(A) L_{den} contour should be soundproofed.

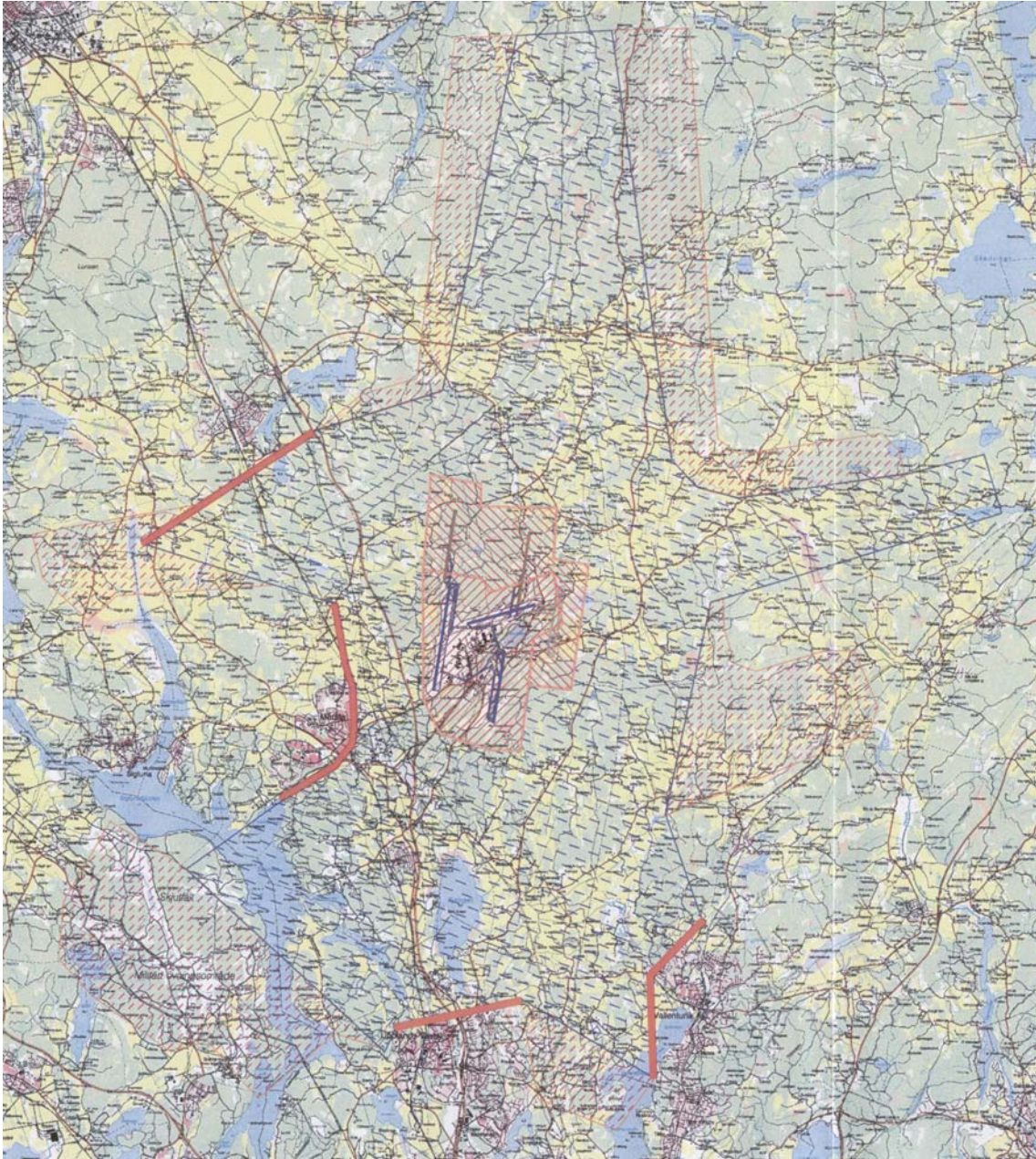


Figure 15: Noise Zoning and Building Restriction Line

COUNTRY CONTACTS

- **Naturvardsverket – Swedish Environmental Protection Agency**
Sven Hunhammar – Transport and Energy Section

- **Stockholm County Administrative Board**
Carl-Gustaf Hagander – Environmental and Planning Department
Majlis Bergqvist – Environmental Protection Section

- **Luffartsverket – LFV Group. Swedish Airports and Air Navigation System**
Eva Myrin – Stockholm Arlanda Environmental Manager
Lena Wennberg – LFV Group Environmental Strategy Manager

- **BOVERKET – National Board of Housing, Building and Planning**
Dick Larsson

GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”¹⁵)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

¹⁵ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

Local terms

<i>Riksdag</i>	Parliament
<i>Län</i>	County
<i>Kommun</i>	Municipality
<i>Luffartsverket</i>	LFV Group - Swedish Airports and Air Navigation Services
<i>Luffartsstyrelsen</i>	Swedish Civil Aviation Authority
<i>Naturvardsverket</i>	Swedish Environmental Protection Agency – EPA

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 - BOVERKET

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 - The Environmental Code
 - Ordinances of relevance
 - Swedish Parliament

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 - Civil Aviation Act 1957:297

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 - Ordinance on environmentally hazardous activities and the protection of public health
- Swedish Environmental Objectives



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Country Report

UNITED KINGDOM

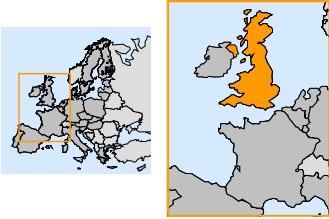


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UNITED KINGDOM		Location Map												
Population	60.2 mill. (248 inhabitant per sq. Km)													
Airports network A large civilian airports network, most of them owned by private companies including some by private companies owned by local authorities. The largest airport owner is the BAA plc which owns 7 airports and handle 65% of all airport traffic.														
Spatial planning system Local authorities play a central role in spatial planning and environmental matters, although any plan or decision must comply with national policies and regulations														
<ul style="list-style-type: none"> • Institutions <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">National level</td> <td>Promote legislation and set policies related to land use planning. Arbitration in controversial cases.</td> </tr> <tr> <td style="padding-left: 20px;">Regional level</td> <td>Limited powers (but new statutory regional spatial strategies recently introduced)</td> </tr> <tr> <td style="padding-left: 20px;">Local level</td> <td>Draft and adopt plans, grant planning applications (permits), take enforcement action</td> </tr> </table> • Instruments <table style="width: 100%; border: none;"> <tr> <td style="padding-left: 20px;">Strategic plans</td> <td>National Planning Policy Guidance (PPG) notes, Planning Policy Statements (PPS) and Government Circulars. White Papers</td> </tr> <tr> <td style="padding-left: 20px;">Framework plans</td> <td>Regional Spatial Strategies (RSS), Regional Transport Strategies, Local development Framework (LDF)</td> </tr> <tr> <td style="padding-left: 20px;">Regulatory plans</td> <td>Area Action Plans (AAP)</td> </tr> </table> • Process: There is not a fixed process. The Statement of Community Involvement (SCI) shall define community and citizen participation and timescales 			National level	Promote legislation and set policies related to land use planning. Arbitration in controversial cases.	Regional level	Limited powers (but new statutory regional spatial strategies recently introduced)	Local level	Draft and adopt plans, grant planning applications (permits), take enforcement action	Strategic plans	National Planning Policy Guidance (PPG) notes, Planning Policy Statements (PPS) and Government Circulars. White Papers	Framework plans	Regional Spatial Strategies (RSS), Regional Transport Strategies, Local development Framework (LDF)	Regulatory plans	Area Action Plans (AAP)
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Framework plans	Regional Spatial Strategies (RSS), Regional Transport Strategies, Local development Framework (LDF)													
Regulatory plans	Area Action Plans (AAP)													
Regulation and permits Planning application system (EIA integrated) administered by Local Planning Authorities (LPAs). For major applications, the central government may use its “ call in” powers (application subject to public inquiry)														
Airport planning <ul style="list-style-type: none"> • Instruments: Airport Master Plans requested by the White Paper: The Future of Air Transport. Non-statutory documents with no legal status, but could be incorporated into AAPs • Spatial impact. Safeguarded maps. Noise and Number Index (NNI) contours. Public Safety Zones • Construction: conditions included in planning permission, Building Control Department • Operation: aerodromes licensing and certification (CAA) 														
Airport noise and air quality Noise: Large body of legislation to comply with. Schemes to monitor and mitigate noise impacts. Compensation (relocations, insulations.). Track monitoring systems (fines for infringements); Night time flying restrictions at Heathrow, Gatwick and Stansted airports (ie designated airports). Section 78 of 1982 Civil Aviation Act requires 5 year plans to be consulted upon and approved at designated airports. Air Quality: Monitoring. Consideration of people exposed prior to airport developments. Emissions charging scheme (NO2) at some major airports.														

1. SUMMARY

SPATIAL PLANNING SYSTEM

The spatial planning system in the UK has recently undergone considerable change with the passing of the Planning and Compulsory Purchase Act in 2004.

Local authorities, 388 two tier county and district councils and single tier unitary councils, play a central role in spatial planning. They are required to prepare a Local Development Framework (LDF) comprising a Core Strategy and a suite of Local Development Documents (LDDs) where more detailed policies and proposals on specific land use planning issues and/or geographic areas can be provided.

The LDF and any decisions on planning applications must comply with national policies and regulations established by the Office of the Deputy Prime Minister (ODPM) through National Planning Policy Guidance (PPG) Notes, Planning Policy Statements (PPS) and Government Circulars. They must also comply with the Regional Spatial Strategies (RSS) which are prepared by the 8 Regional Assemblies and which set out the broad development strategy for a region. The RSSs are required to include a Regional Transport Strategy which can include policies on the development of airports and surface access.

The different levels of government (national, regional and local) are closely integrated to ensure a consistent approach to plan-making and the day-to-day control of development. All plan-making and planning applications are subjected to statutory processes of public consultation.

REGULATIONS AND PERMITS

Construction permits

In the UK, most types of development require planning permission from the local planning authority before construction can proceed. Even those few exceptions established by the legislation require consultation with the local authority.

For major applications, such as new airport developments and major expansion proposals, which are likely to have regional and national impacts, the government can use its 'call in' powers and require that the application is determined by means of a public inquiry.

New parliamentary procedures were introduced in 2001 by the government aimed at speeding up the decision-making process for major projects and reducing planning costs. A key component of these procedures is for Parliament to have the right to debate such proposals and to approve them (or otherwise) in principle.

Environmental permits

The regulations on assessment of the impact of projects on the environment follow EU Environmental Directives closely. However, there is a lack of clarity as to whether non-statutory airport master plans prepared by the airport authorities should be accompanied by Strategic Environmental Appraisals (SEAs).

Environmental Assessment and SEA processes, which are integrated in the planning application system, are administered by the local planning authorities, although several national agencies may participate.

AIRPORT PLANNING AND CONSTRUCTION

Policy and planning

- National

The White Paper: The Future of Air Transport was published in 2003 by the Department for Transport, following an extensive period of consultation. It sets down the national policy and strategic framework to guide the development of airport capacity until 2030. All owners/operators of major commercial airports are requested to prepare or update Master Plans or Development Strategies which take account of the White Paper, and can be used as a basis for consultation with local authorities and regional government organisations.

- Airport

The airport operator is responsible for the planning and development of the airport. Master Plans are non-statutory documents prepared on a voluntary basis, with no legal status. They do not need to be approved by the CAA, national or local government. However, the new planning system does allow such master plans to be incorporated into Area Action Plans (AAP), which could then become one of the local development documents comprising a Local Development Framework (LDF). This possibility is subject to the local authority agreeing to this approach.

Spatial impact

- Implementation of ICAO Annex 14 requirements (obstacle limitation surfaces)

Certain civil and military aerodromes, selected on the basis of their importance, are officially safeguarded. This protection is defined on safeguarding maps, which are prepared by the airport operator, certified by the CAA and are intended to inform affected local authorities on how to respond to development proposals, including development which might create a bird hazard. Within

Safeguarded Areas it is a requirement for the local authority to consult with the aerodrome operator with respect to most applications for development.

Operators of airports which are not officially safeguarded are encouraged to take steps to protect airports from the effects of development by establishing consultation procedures with the LPA.

- Noise Impact

For all major aerodromes, noise contours have to be prepared for the existing and forecasted traffic, to determine approximately which residential properties are affected by the different noise exposure categories determined by the government. This information is then used to inform local planning policies, to determine decisions on planning applications, and to determine whether existing residents may be entitled to compensation payments including roof insulation and double glazing, and in some cases relocation packages.

- Risk prevention

The airport authorities, in consultation with the CAA and local authorities, have to prepare maps showing Public Safety Zones. These zones are areas of land at the ends of runways at the main UK airports within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident.

There is a general presumption against most types of development, although such uses as open storage, long stay/employee car parking, low intensity public open space, unmanned structures, golf courses and allotments may be acceptable.

Compensation is also considered in some cases.

- Land reserve for future construction

The White Paper: The Future of Air Transport supports the safeguarding of land at several airports for future developments.

Compulsory acquisition is possible, although it is subject to obtaining an Order from the Secretary of State for Transport.

Construction

Prior to any construction works taking place at airports it is necessary to obtain planning permission through the general development control system, where the Environmental Impact Assessment, when necessary, is integrated.

No permit is required for some specific small developments, although consultation with the local authority is required.

Operation

All civil and military aerodromes used for the public transport of passengers or for the purposes of instruction must be licensed and certified by the CAA.

AIRPORT NOISE AND AIR QUALITY

The White Paper: The Future of Air Transport sets out the government's latest policies with respect to aircraft noise and air quality. It established the following objectives:

- To require that airport developments are consistent with existing arrangements for the control of the noise impacts of aviation, and to develop further procedures and regimes for managing noise, including night noise.
- To respect targets on air quality which have been agreed to protect human health and the wider environment;

Under the White Paper, the government expects relevant operators to offer households subject to high levels of noise (69 dB(A)) assistance with the cost of relocating and to offer acoustic insulation to noise sensitive buildings exposed to medium and high levels of noise (63 dB(A)).

With regard to air quality, the government has set out a National Air Quality Strategy, including the objective of bringing aviation within the European emissions trading scheme, which must be considered by the airport operators.

For the 3 London airports (Heathrow, Gatwick and Stansted) which are the country's worst affected airports in terms of population affected by noise and air quality, there is additional legislation. The White Paper also suggested some additional actions to tackle these problems.

Noise and air quality issues can be integrated into the statutory spatial planning process through incorporating Airport Master Plans into Area Action Plans (AAP), adopted by the local authorities. This is subject to local authority agreement.

When a planning permission for an airport development is granted, it is usually subject to a number of conditions, including noise and air quality issues, which the airport developer will need to comply with before construction can commence and/or the development becomes operational.

2. CONTEXT

The United Kingdom of Great Britain and Northern Ireland (UK) comprises the countries of England, Scotland, Wales and Northern Ireland.

The UK can be considered as being a multi-racial society.. It is one of the five permanent members of the UN Security Council, a founding member of NATO, and has been a leading member of the European Community since 1973.

English is the national language, although Welsh and Gaelic (both Celtic languages) are spoken by local communities as recognised second languages.

United Kingdom has a complex administrative division of local government authorities comprising 388 two tier county and district councils and single tier unitary councils.

The UK has a mixed capitalist economy with a GDP per capita that is 118% of the EU average (22,400)¹. It is currently one of the fastest growing economies in Western Europe. It gained admission to the European Union in 1973, but so far has concluded that the five tests which the government has set for joining the European single currency have not been met. As such the UK continues to use the Pound Sterling as its official currency.



Figure 1. Map of United Kingdom

¹ GDP per capita in PPS (Purchasing Power Standards) at market prices. 2004
Source: EUROSTAT

Characteristic	Description
Population	59,699,700
Latitude / Longitude	54°00' N, 2°00' W
Land area	241,590 sq Km
Coastline	12,429 Km
Capital City	London (7.2 million – 2001 Census)
GDP per capita (PPS at market prices)	26,500
GDP real growth rate	3.2 %
Inflation rate	1.3 %
Unemployment rate	4.7 %

Table 1. UK Main Facts and Figures (2004)²

2.1. Population and statistics

The estimated population of the UK in 2004 was around 60 million with an average density of 248 inhabitants per sq Km, making it one of the most densely populated countries in Europe, well above the European average (EU-15 population density: 115 inhabitants per sq km).

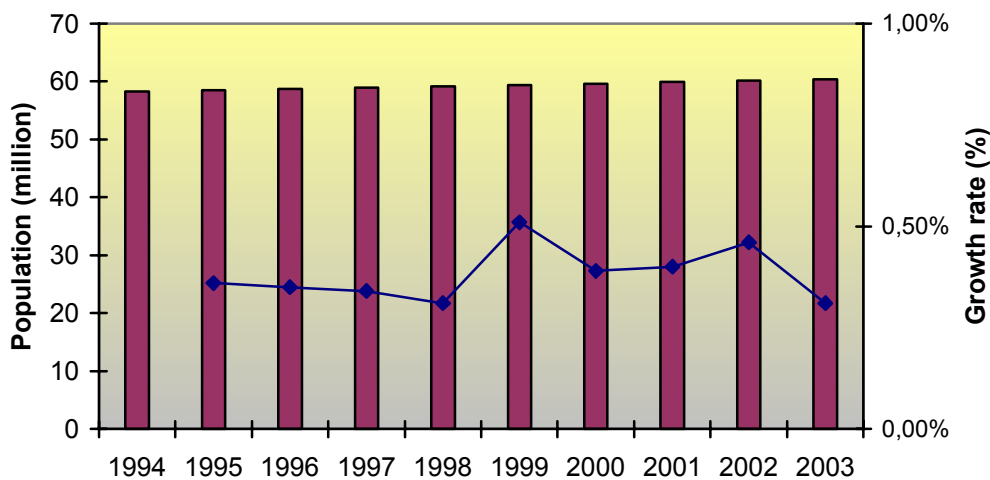


Figure 2. UK population evolution

² Source: EUROSTAT

From 1981-2001 the population grew by 4.8%, but the rate of growth is projected to almost double over the next 20 years. By 2021 the population is estimated to reach 63.3m, an increase of 8% over the 2001 total. The main cause of this rise is anticipated to be immigration. In 2004, the immigration rate was 2.19 migrants per 1,000.

The UK median age is 38.7 years; the birth rate is 10.88 births/1,000 population (2004 est). In 2001 18% of the population were aged 0-14, 66.3% were aged 15-64 and 15.7% were over 65 – the proportion aged over 65 is projected to increase significantly over the next few decades with potentially serious impacts on the labour force, taxation policy and pension costs.

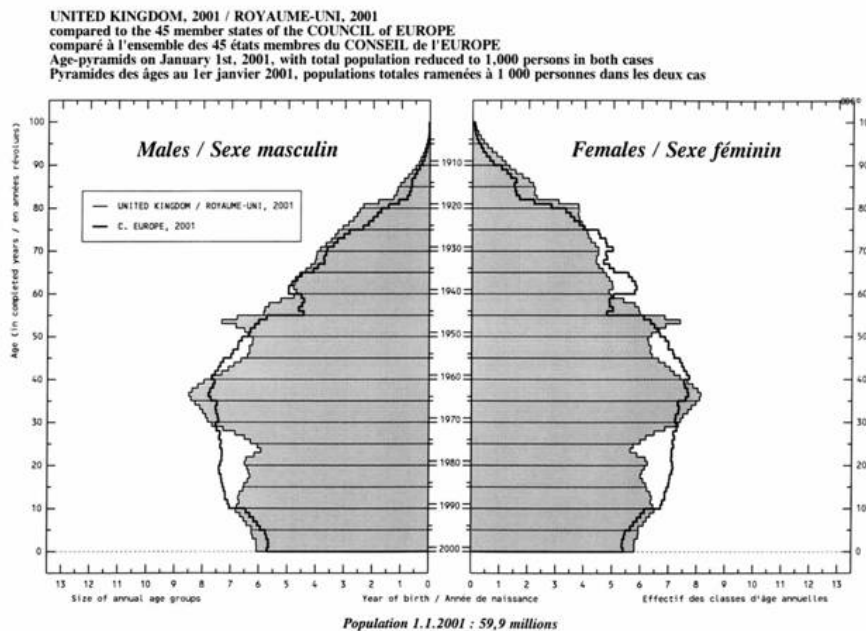


Figure 3. UK Age-pyramids (2001)³

2.2. Government structure and powers

The UK is a constitutional monarchy. The chief of state is Queen Elizabeth II (since 6 February 1952). The head of government is the Prime Minister, currently Anthony (Tony) Blair who has been in power since May 1997, and has recently been re elected (on 5 May 2005) for another five years of office. The Prime Minister is responsible for appointing the Cabinet of Ministers. The Parliament comprises an Upper Chamber (House of Lords made up of life peers, hereditary peers and clergy – 698 in total) and the Lower Chamber (House of Commons which is made up of 659 Members of Parliament (MPs) who are elected by popular vote on a first-past-the-post basis for a particular geographical constituency).

³ Source: Council of Europe

Until 1999 the UK had a highly centralized system of government in which the distribution of functions and the governance system were concentrated in the hands of central government. However, since 1999 following the creation of the Scottish Parliament and the Welsh Assembly, Scotland and Wales have enjoyed a degree of devolved government. Devolved rule to Northern Ireland is currently on hold pending positive resolution to political issues. Attempts to devolve powers to the English regions have been thwarted by the electorate, who have indicated that they oppose the establishment of another layer of government. Greater self rule in Northern Ireland will depend on the outcome of the political processes.

At the local level there is a sophisticated system of democratic and accountable local government. However, local government finances are largely controlled and supported by central government, and in many ways local government authorities are agents for implementing government policy and for the delivery of local services.

All legislation relating to aviation and airports has to be passed by Parliament. Key relevant legislation includes: Civil Aviation Act 1982, Airports Act 1986, Transport Act 2000, and the Planning and Compulsory Purchase Act 2004.

The Department for Transport (DfT), through its Aviation Directorate is responsible for setting policy relating to aviation and in 2003 published the White Paper: The Future of Air Transport (hereinafter referred to as the White Paper), which provides the UK with an effective national air transport policy and a strategic framework for the development of airport capacity over the next 30 years.

The Office of the Deputy Prime Minister (ODPM) through its Planning Directorate is responsible for promoting legislation relating to land use planning and for establishing spatial planning policies. The DPM Secretary of State is also the final arbiter when it comes to making decisions on controversial planning applications and those of more than local importance. Environmental matters are the responsibility of the Department of Environment, Food and Rural Affairs (DEFRA).

The Civil Aviation Authority (CAA) is the UK's independent aviation regulator, with responsibility for all civil aviation regulatory functions, through its Safety Regulation Group, Directorate of Airspace Policy, Customer Protection Group and Economic Regulation Group. The National Air Traffic Services (NATS) is a public private partnership with responsibility for air traffic control services in the UK and over the eastern part of the North Atlantic. NATS is regulated by the CAA which has to authorise proposals from NATS for airspace changes having regard to inter alia environmental impacts.

Local Authorities (LAs) are responsible for local environmental and land use (spatial) planning matters including the processing of planning applications and reaching decisions, planning enforcement, building control, environmental controls (including the implementation of noise and air quality regulations). The LAs have

to ensure that their plans, development control decisions and monitoring of noise and air quality are in accordance with national policies and regulations.

Other agencies and organizations with responsibilities which impact on the planning and development of airports include the Highways Agency (roads), DfT/Rail Regulator (for rail access to airports), Regional Development Agencies (financial support for infrastructure), Environmental Agency (surface water drainage, flood protection and pollution control), English Nature (ecology and nature conservation) and English Heritage (archaeology, conservation areas and Listed (ancient) Buildings).

Figure 4 shows the distribution of planning and environmental functions in so far as they impact on airport planning in England (slightly different arrangements apply in Wales, Scotland and Northern Ireland).

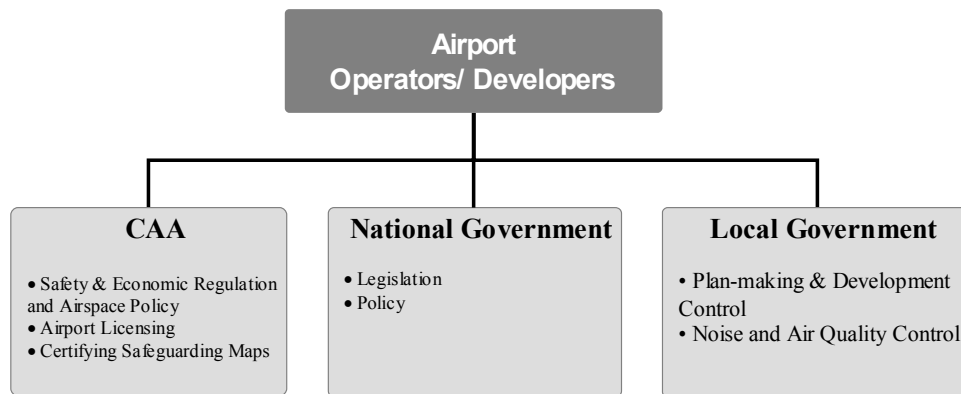


Figure 4. Distribution of Planning and Environmental Functions Impacting on Airports

2.3. Main airports

In the United Kingdom there were an estimated 471 airports and aerodromes in 2003. These comprised 334 with paved runways and 137 with unpaved runways. They include major international and regional airports (28 were considered in detail in the White Paper), smaller local airports, private and business aerodromes, military airfields and airfields used for gliding purposes etc. 145 of these aerodromes are licensed by the CAA for civilian use. All the UK's top thirty airports are on the Trans European Road Network (TENs).



Figure 5. Main UK commercial Airports

companies owned by local authorities. The largest airport owner in the UK is the British Airports Authority (BAA) which owns 7 airports (these are the main London airports (Heathrow, Gatwick and Stansted), and also Glasgow, Edinburgh, Aberdeen and Southampton), which together handle 65% of all airport traffic. The next largest owner is the Manchester Airport Group (MAG), which is owned by a group of local authorities within Greater Manchester. Apart from Manchester Airport, MAG owns Nottingham East Midlands, Bournemouth and Humberside airports, which together handle another 15% of all traffic.

Table 2 shows the commercial passenger traffic and cargo for the main UK airports during year 2004. In total, it shows that over 215 million passengers are handled by the UK airports, an increase of 8% over 2003. Air transport movements (ATMs) at UK airports grew by 6% from 2003 to 2004 to a total of 2.2million (over 1million were at the London airports). It is estimated that the aviation industry contributes over £10 billion to national GDP and generates around 250,000 direct jobs.

Airport	Passengers	Cargo (Tons)
Heathrow	67,109,000	1,325,173
Gatwick	31,391,000	216,203
Manchester	20,969,000	225,772
Stansted	20,907,000	149,180
Birmingham	8,797,000	9,848
Glasgow	8,557,000	8,121
Edinburgh	7,992,000	27,376
Luton	7,520,000	
Newcastle	4,708,000	
Bristol	4,603,000	
Belfast	4,403,000	
Nottingham East-Midlands	4,375,000	
Liverpool	3,352,000	
Aberdeen	2,634,000	
Leeds Bradford	2,368,000	
Prestwick	2,159,000	
Belfast City	2,091,000	
Cardiff Wales	1,873,000	
London City	1,675,000	
Southampton	1,531,000	
Other UK	6,667,000	
TOTAL	215,681,000	2,133,651

Table 2. Main UK Airport Data (2004)

It should be noted that in the UK unlike in many European countries where investment in airport infrastructure such as runways is often funded by the state (and generally considered acceptable under European guidelines on State aid for airports), such investment is almost entirely a commercial decision and dependent on private finance. The UK approach ensures that regulatory (planning) and investment decisions are clearly separated.

3. SPATIAL PLANNING SYSTEM

Being a country with a high population density and considerable pressures on its land resources, the UK has evolved a sophisticated and complicated spatial planning system. It is an accumulation of checks and balances which seeks to regulate the development and use of land in the public interest. The system recognises the need for close integration between land use and transport planning, and the environmental and social effects of development. The different levels of government (national, regional and local) are closely integrated to ensure a consistent approach to plan-making and the day-to-day control of development.

To address concerns about the weak level of regional planning, the long time frame to make plans, the need for more inclusive community consultation processes on statutory plans and planning applications, and the need to integrate sustainability and strategic environmental appraisal (SEA) into the planning process, the planning system has recently undergone considerable change with the passing of the Planning and Compulsory Purchase Act in 2004.

However, the Act, albeit in a modified form, still retains the broad system of policy and plan-making on the one hand, and the development control system on the other.

3.1. Institutions

3.1.1. *National*

At the national level the Government is responsible for all legislation and policy; it does not have any spatial or airport plan-making powers as such. These responsibilities are devolved to the regional and local levels of government. However, the government maintains a tight control on all aspects of spatial planning and has powers to ensure that plans and planning decisions are in accordance with policy.

In England and Wales, planning policy falls under the remit of the Office of the Deputy Prime Minister (ODPM), whilst Transport Policy is the responsibility of the Department for Transport (DfT).

In Scotland, planning and transport policy has been devolved to the Scottish Parliament. In Northern Ireland, the planning system differs from the remainder of the UK in that the six divisional offices of the Department for Environment and Transport in Northern Ireland are responsible for all statutory planning functions – the district councils are however consulted on plans and planning applications.

Although it does not have any statutory planning powers, the CAA is also an important national organisation with respect to airport planning. Specifically, it is responsible for: licensing of aerodromes; certifying safeguarding maps; advising airports on public safety zones; and agreeing airspace changes, more intensive use of runways and noise preferential routes having regard to land use and environmental impacts

3.1.2. Regional

In England, the system of regional government is not well developed. However, the government created 8 Regional Assemblies a few years ago, one for each administrative region, as the basis for establishing a system of regional government. These are unelected bodies with limited powers, and are likely to remain so for the foreseeable future. The Regional Assemblies have powers to prepare statutory Regional Spatial Strategies.

3.1.3. Local

Local planning authorities (ie County, District and Unitary Councils) have powers to prepare local plans (local development frameworks under the new planning legislation) and to make decisions on planning applications, and to take enforcement action when development takes place which is not in accordance with any extant planning permissions.

3.2. Instruments

3.2.1. National Planning Policy Guidance and Statements

The Planning Directorate at the ODPM is responsible for producing National Planning Policy Guidance (PPGs) notes, Planning Policy Statements (PPSs) and Government Circulars which set out the government's position and policy on particular aspects of planning. With respect to airport planning, relevant PPGs and PPSs include: "PPS 1: Delivering Sustainable Development", "PPS 11: Regional Spatial Strategies", "PPG 13: Transport", "PPS23: Planning and Pollution Control" and "PPG24 Planning and Noise".

Many of these are currently being updated to bring them into line with the new planning legislation. These relate to all aspects of planning and include guidance on plan-making and sustainable development, land use activities (such as housing, industry, town centre developments, waste), environmental issues (such as nature conservation, the historic environment, pollution control, flood risk, noise).

The White Paper sets the national airports policy and provides a strategic framework for the development of airport capacity over the next 30 years.

3.2.2. *Regional Strategies:*

Following the passing of the Planning and Compulsory Purchase Act 2004, one of the tasks of the Regional Assemblies is to prepare Regional Spatial Strategies (RSS). These will be statutory plans approved and issued by the Secretary of State following a public examination of the draft RSS. Thus, the RSS will become a material consideration in reaching decisions on planning applications to develop and expand airports.

The purpose of RSS is to provide a broad development strategy for a region over a fifteen to twenty year period (possibly longer in some circumstances), and take into account: the identification of the scale and distribution of provision for new housing; priorities for the environment; and transport, infrastructure, economic development, agriculture, minerals extraction and waste treatment and disposal.

A key component of the RSSs are Regional Transport Strategies (RTS) which provide a strategic steer on the role and future development of airports, as well as railways and ports in the region consistent with national policy. ,

Slightly different arrangements are in place in Wales, Northern Ireland and Scotland.

As an interim measure most Regional Assemblies have adopted the existing Regional Planning Guidance documents as the interim RSS.

3.2.3. *Local Development Frameworks*

Under the new Planning Act, the Local Planning Authorities (LPAs) are required to prepare a Local Development Framework (LDF) comprising a suite of local development documents (LDDs) and supplementary planning documents (SPDs) where additional detail can be provided.

The preparation of the LDFs will involve significant community and stakeholder involvement from the outset, be subject to a public examination and a binding Inspector's decision. It is intended that there will be nation-wide coverage of LDFs by 2008.

Until the LDFs are in place the policies contained in the currently adopted Local Plans will continue to apply. At present the Development Plan comprises the adopted Structure Plan (prepared by County Council) and Local Plan (prepared by the District Council) where there is a two tier system of local government. In single tier authorities, the Unitary Development Plan is the Development Plan. Under the new Planning Act structure, the Development Plan will be replaced by RSSs and Local Development Frameworks (LDFs)..

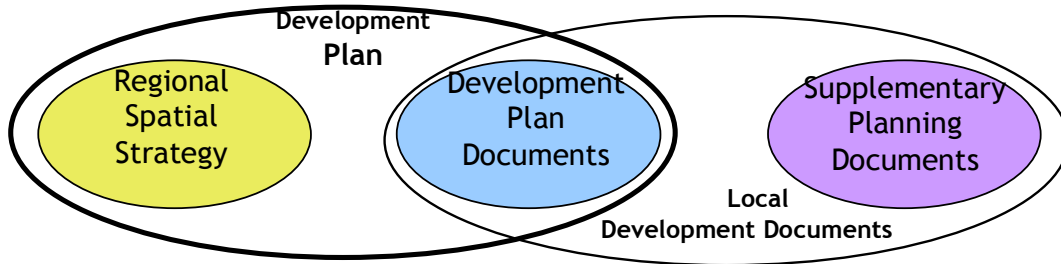


Figure 6. Planning Policy Framework

The LDF will comprise:

- a) Local Development Scheme (LDS) which sets out the project plan (time-table) for the preparation of the LDF – this has to be agreed to by the government;
- b) Statement of Community Involvement (SCI) which sets out how the LPA will engage with the community and stakeholders in the preparation of the LDF – this is a statutory document and will be subject to an examination-in-public;
- c) Core Strategy (CS) which sets out the overall land use strategy and broad scale and distribution of development within a district – this will be tested to ensure consistency with the RSS;
- d) Other Local Development Documents (LDDs) which can include more specific planning documents setting out housing and employment allocation sites, waste and minerals plans and development control policies;
- e) Area Action Plans (AAPs) for areas which are likely to undergo significant change.. For example Airport Master Plans could be taken forward as AAPs to add more planning certainty to the future expansion of a particular airport. Potentially Airport AAPs could represent a very useful vehicle for translating the key content of airport master plans into statutory plans, but adjusted to reflect local authority concerns. Incorporation into an AAP could also enable the content of airport master plans to be tested at a LDF Public Inquiry. As these AAPs would be adopted by the LPA, they should reduce the planning risks (and time) involved in securing planning permission for expansion proposals, which are always going to be controversial. As an example an AAP is currently being prepared for Edinburgh Airport and the wider area, so as to enable off-site impacts of airport growth to be taken fully into account.

Figure 7 shows the inter-relationship of the different elements of the Development Plan, and the suite of documents comprising the Development Plan.

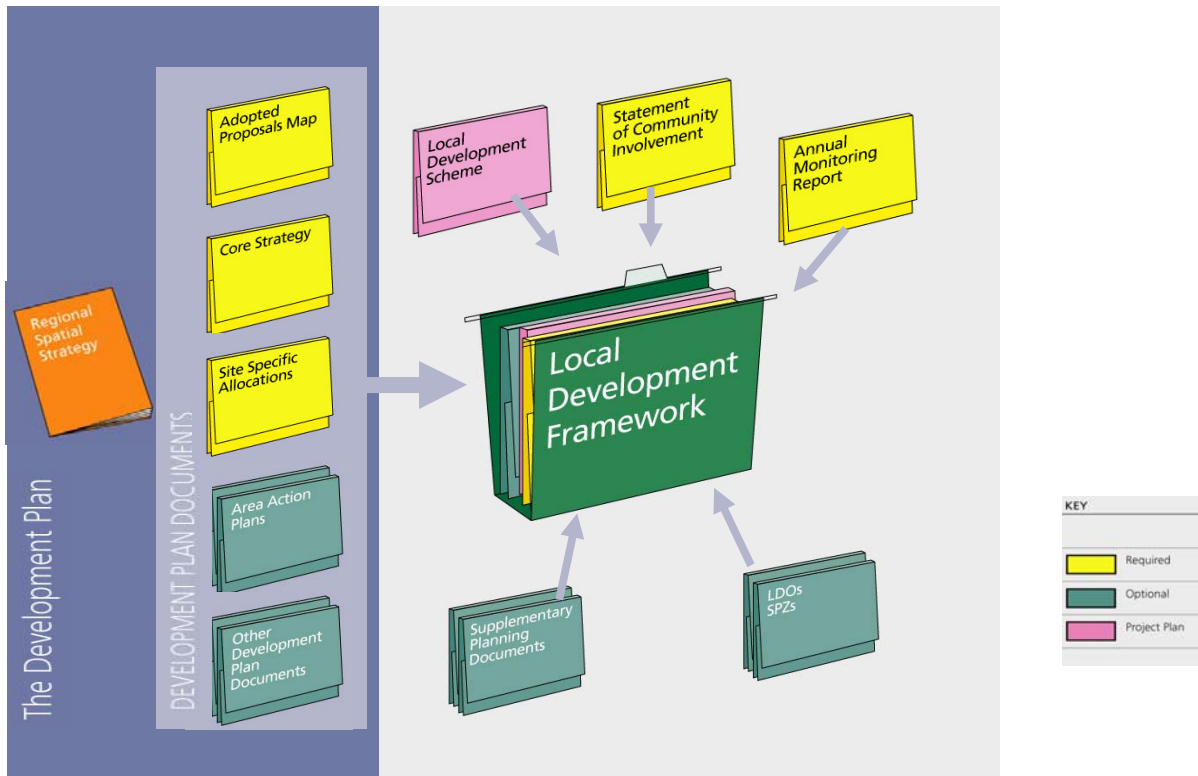


Figure 7. The Development Plan

Figure 8 shows the interrelationship between the different layers of government in the plan-making process

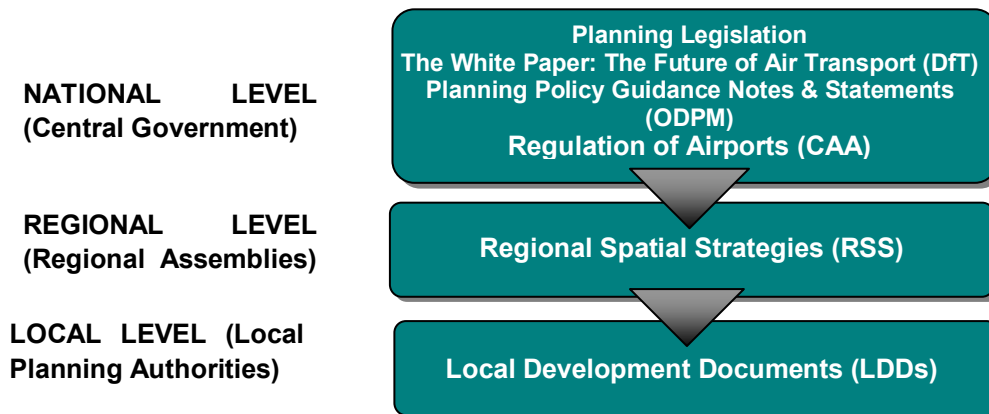


Figure 8. Planning Policy Framework

3.3. Process

All aspects of the planning system, including policy making, plan making and the processing of planning applications, are subject to clearly defined procedures where community and stakeholder consultation are of paramount importance.

3.3.1. *Community consultation and participation*

The new Planning Act and government policy, as set down in its Planning Policy Guidance notes (PPGs) and Planning Policy Statements (PPSs), requires the plan making authorities to set down clearly the processes and timescales for the preparation of the new planning documents, comprising the Regional Spatial Strategy (RSS) and the Local Development Framework (LDF). Community and stakeholder consultation is seen as being an essential and continuous part of the process.

The RSSs will be prepared over the next 2¹/₂ -3 year period and involve several stages. Public consultations will take place at different stages including at the Options and Issues stage, at the draft RSS stage, when a public examination will be held, and after any proposed changes have been proposed following the report of an independent panel on the public examination. The process will also include consultation with local communities and stakeholders.

With respect to the LDF process, Local Planning Authorities (LPAs) will have a statutory obligation to set out the authority's vision and strategy for community involvement, the techniques required to effectively involve the community both informally and formally, and the points at which the LPA will involve the community in preparing the LDF. This will involve community participation on a draft Statement of Community Involvement (SCI) which may be tested for soundness at a hearing.

The SCI will also be required to set out how the LPA intends to consult with the community, particularly with respect to major applications, such as airport expansion proposals. In these circumstances, it will also be incumbent on the airport operator/applicant to demonstrate that he has consulted on the proposals and involved the local community and stakeholders with an interest in the development of the airport.

3.3.2. *Policy integration*

The UK spatial planning system is well integrated across all levels of government, enabling national legislation and policy formulation to cascade down to regional and local levels of plan-making to ensure a consistent approach to development. For example the recommendations of the White Paper: The Future of Air Transport will need to be reflected in the preparation of the RSSs and LDFs.

The system also provides checks and balances and greater certainty through on-going community and stakeholder consultation, public examinations of key planning issues and binding Inspector's reports.

With respect to airport development, the White Paper provides an overarching national framework to guide increases in capacity at the UK's airports. The White Paper proposals will need to be taken forward into the RSSs/RTSs and then into the core strategies of the LDFs. Recommendations on airport expansion contained in the White Paper do not however mean that planning permission will automatically be forthcoming, although the White Paper will be a major material consideration in determining decisions on such applications. A progress report on actions arising from the White Paper is due to be published during 2006.

In particular, the system enables airport operators to bring expansion schemes forward with a degree of confidence as long as they accord with government policy. In this context, the preparation of airport master plans will be important documents. Although they will not have any statutory basis they will facilitate communication of expansion proposals to the community and to stakeholders in their airport, and allow for debate and discussion before planning applications emerge. More certainty can be gained by taking an Airport Master Plan forward with the LPA as part of an AAP.

4. REGULATIONS AND PERMITS

4.1. Development control system

In the UK the Local Planning Authorities (LPAs) are responsible for administering the planning application system (ie the system of development control) on behalf of the Secretary of State. Locally elected representatives make decisions on such applications based on officers' reports, unless such decision powers have been delegated to officers (this normally only applies to small non controversial proposals).

4.1.1. *Activities subject to development control*

In the UK, most types of development require planning permission from the LPA before construction can proceed.

For major applications which are likely to have regional and national impacts, the government can use its 'call in' powers and require that the application is determined by means of a public inquiry. In the case of airport developments this is likely to apply to applications involving a new airport, a new or extended runway and a new terminal/major expansion of existing terminal resulting in significant increase in capacity. In recent years proposals for a new runway at Manchester Airport, a fifth terminal at Heathrow and a new civilian airport at Finningley (now known as Robin Hood Airport), in Yorkshire have been subjected to public inquiries in this way.

4.1.2. *Exceptions or exemptions*

Exceptions are set down in the Town and Country Planning (General Permitted Development) Order 1995.

In the case of airport developments, permitted development includes the carrying out on operational land of development (including the erection or alteration of an operational building) in connection with the provision of services or facilities at a relevant airport, air navigation development, development by the CAA for air traffic control and navigation, and also for emergency purposes. The Order excludes from this general permit the construction or extension of runways, the construction of passenger terminal with floor space in excess of 500 m, and the erection of buildings other than operational buildings.

The airport operator is nevertheless, required to consult with the local planning authority, before carrying out any development included in the 1995 Order, except if it is urgently required for the efficient running of the airport, or it consists of the carrying out of works, or the erection or construction of a structure or of an ancillary building, or the placing on land of equipment, and the

works, structure, building, or equipment do not exceed 4 metres in height or 200 cubic metres in capacity.

4.1.3. *Planning application process*

The following provides a summary of the whole planning application process (refer also to Figure 9):

- a) Pre application discussions between the applicant and the LPA. These discussions will focus on:
 - Whether the development can be considered as operational facilities which will not cause more than 15% increase in capacity; if so then the development can be allowed under powers granted under the General Development Plan Order (GDPO);
 - Whether to submit an outline or detailed application. The purpose of an outline planning application is to determine the principle of a development;
 - The extent to which the location, nature and scale of development conforms with planning policy set down in national planning guidance and the Development Plan (to comprise the RSS and LDF or adopted Local Plan until new documents are adopted);
 - Whether the application will need to be submitted with a formal environmental assessment (EA). Formal confirmation on this requirement can be determined by the applicant seeking a Screening Opinion from the LPA, and if one is required to seek a Scoping Opinion regarding the topics to be covered in the EA. Most airport schemes of any significance will almost certainly require an EA;
 - Other additional information which may need to be submitted with the application. Depending on the site and type of development these requirements might include a Transport Assessment, Green Travel Plan, Flood Risk Assessment, Conservation Statement etc;
- b) Preparation and submission of Planning Application. Depending on the size and scale of development the LPA will have up to 13 weeks to process the application, and up to 16 weeks if an EA is submitted. During this period, the LPA will consult with other local authority departments and possibly neighbouring authorities, other statutory consultees and the general public. The application will be advertised in the local press. During this period the regional Government Office can 'call in' the application and the Secretary of State can decide whether the application

is so controversial and of more than local importance that he wishes the issues aired at a public inquiry before reaching his own decision.

- c) Notice of Decision. Following the consultation period, the Officers of the LPA will prepare a report including their recommendation for the Planning Committee, which comprises elected representatives, to consider. Planning permission will be granted when the elected members vote in favour irrespective of the Officers' recommendation. If the members vote against the application, then the applicant can appeal against the decision. If planning permission is granted, it is usually subject to a number of planning conditions and possible legal agreements which will require the applicant to make planning contributions towards meeting the costs which his development imposes on the wider environment. These agreements usually cover contributions towards external road improvement works, public transport, environmental enhancements and in the case of new housing contributions towards the costs of educational, open space and health facilities are usually sought.
- d) Appeal: If a planning application is rejected then the applicant has the right of Appeal. The appeals service is run by the Planning Inspectorate, which is an Agency set up by Government. Appeals can take several forms but the basic principle is the same, that is to allow interested parties to put their point of view either in writing or at a formal or informal hearing. An independent Inspector is appointed by the Planning Inspectorate to deal with each appeal. Normally the Inspector reaches a decision which is binding, or in major cases the Secretary of State makes the final decision based on the Inspector's report and recommendations. An applicant has up to 6 months after receiving the Notice of Decision from a local authority to lodge an Appeal. There is currently a long waiting period before most appeals can be heard (ranging from 3 months to over 12 months). After the Appeal has been heard it can take between 6 weeks to a year to receive the Inspector's decision depending on the length and complexity of the appeal. If the appellant, objector or LPA are not happy with the Inspector's decision, then they can seek a Judicial Review, but this course of action is normally only open if the court considers that the correct procedures were not followed.

Apart from minor works, planning applications for major development at airports invariably prove controversial. Arguments against are usually focused on noise, air quality, surface access and arguments for usually emphasise air traffic growth and the economic benefits.

Recent major applications have included:

- a) Heathrow Terminal 5: This application was subject to a 'call in' by the Secretary of State, and led to the longest and most costly ever planning public inquiry (nearly four years and £100m);
- b) Manchester Airport Second Runway: This application was also subject to a 'call in' followed by an inquiry (refer Chapter 6 for details);
- c) Finningley Airport: Application to reuse a former military airport for as an international airport. This was submitted by Peel Holdings plc after they purchased RAF Finningley in 1999. The application was 'called in' and a public inquiry was held commencing in September 2000 and ending in March 2002. The Secretary of State's decision was announced in April 2004 and the airport's first civilian flights took off on 28 April 2005.

Following the experiences at Heathrow Terminal 5 (where the public inquiry into the planning application lasted 4 years and the total lapsed time for the planning process was around 10 years), the government introduced new parliamentary procedures in 2001 aimed at speeding up the decision-making process for major projects and reducing planning costs. A key component of these procedures is for Parliament to have the right to debate such proposals and to approve them (or otherwise) in principle.

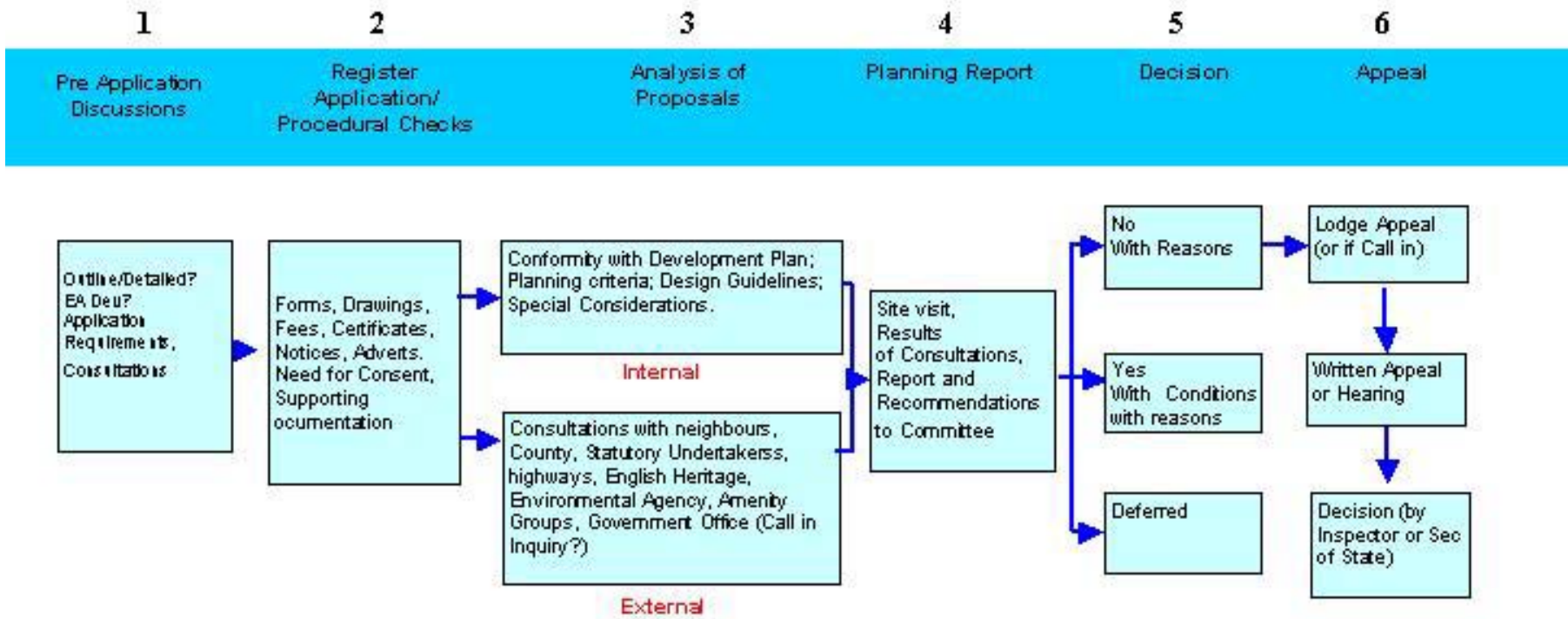


Figure 9. Planning Application Process

4.1.4. *Relationship with planning. Enforcement*

In deciding planning applications LPAs enjoy a somewhat greater degree of discretion in the UK than in most countries in the rest of Europe, since they can grant permission for developments which are not in accordance with the Development Plan by following a special procedure; and they can refuse permission even in cases of conforming with the Development Plan if there are other “material considerations” ..

Local Planning Authorities have powers of enforcement if planning permission has not been obtained prior to development commencing, and if a planning condition is being breached. In such circumstances the LPAs have powers to issue an Enforcement Notice and in rare circumstances a ‘Stop Notice’ which means that all activities must cease. To not comply with these Notices is an offence. With Enforcement Notices (but not with Stop Notices) there is a right of Appeal.

A recent example of an Enforcement Notice being served on a UK airport operator is at Coventry Airport, where a temporary terminal has been erected without planning permission. Coventry Airport appealed against this Notice, and a local public inquiry is now being held.

4.2. **Environmental permits**

4.2.1. *Environmental Impact Assessment*

Under the Town and Country Planning (Assessment of Environmental Effects) Regulations 1988 and as amended in 1992, 1994 and 1995 (The Regulations), which were a response to the Directive 85/337/EEC⁴ (the “EIA” Directive), certain categories of development need to be the subject to environmental assessment. The Regulations are explained in Circular 15/88. In the first instance the LPA decides whether an EA is required by reference to Schedule 1 and Schedule 2 of the Regulations. Schedule 1 projects (listed under 10 headings) require an EA in every case, and Schedule 2 Projects (listed under 11 headings) may require an EA depending on whether they are likely to have significant effects.

With respect to airport developments, Category 7 of Schedule 1 refers to aerodromes, and states that airports with a runway length of 2.100 m or more require an EA. With respect to the proposed second runway at Manchester Airport, this was interpreted to mean the addition of a new runway if it was more than 2.100 m in length (which it was at 3.050 m).

⁴ Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment

Aerodromes, that do not fall into Schedule 1, may fall into category 10 (Infrastructure Projects) of Schedule 2. Under this Schedule it is likely that an extension to a runway (or new runway less than 2.100metres) and new terminals including ancillary developments extending over more than 10 ha will require an EA.

In the UK, EAs are normally carried out by a team of consultants appointed by the applicant. EAs are assessed by the LPA who will seek the views of other LA departments such as the Environmental Health Department (air and noise), Highway Authority (transport) Environment Agency (surface water drainage and flood risk), English Heritage (archaeology and listed buildings) etc. In some cases they may appoint external consultants or the Institute of Environmental Assessment to assess the technical content of the EA and to comment on the proposed package of mitigation measures.

Apart from examining the technical environmental effects of a development proposal, including during construction, an EA should also address the need for the development and evaluate alternative locations and site options.

4.2.2. Sustainability appraisal and Strategic Environmental Assessment

The UK government has introduced the Environmental Assessment of Plans and Programmes Regulations 2004 in response to the Directive 2001/42/EC⁵ (the “SEA” Directive). These Regulations apply to plans or programmes such as the RSSs and LDFs for which it is now a mandatory requirement to prepare such assessments. Previously such plans required Sustainability Appraisals. As SEAs and sustainability appraisals overlap, the UK government intends to integrate both processes.

SEA legislation does not apply to planning applications. There is a lack of clarity as to whether airport master plans should be accompanied by SEAs. If they are adopted by the LPA under an Area Action Plan (AAP), then it is likely that they may require a SEA.

4.2.3. Other requirements

Apart from the LPAs, other agencies have powers which can influence the granting of planning permission and the conditions to be included in a planning permission. The main ones are:

- a) Environment Agency (surface water drainage, flood risk);
- b) English Heritage (archaeology, conservation areas, Listed buildings);

⁵ Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment

- c) English Nature (ecology and nature conservation) who can require that permits be issued to, for example, relocate protected species;
- d) Other statutory undertakers (water supply, electricity, water supply and telecoms);

5. AIRPORT PLANNING AND CONSTRUCTION

5.1. Policy and planning

5.1.1. Institutions

The Department for Transport (DfT), through its Aviation Directorate, is responsible for setting policy relating to aviation. The DfT is also responsible for policy on the operation of foreign registered aircraft in the UK and other issues such as night curfews, environmental standards and aviation security.

The Civil Aviation Authority (CAA) is responsible for all civil aviation regulatory functions. It does not have any statutory plan-making powers. However, its regulatory functions impact on land use planning in a number of ways, principally through its responsibility for the licensing of aerodromes, for certifying Safeguarded Maps prepared by the airport operators for changes in airspace and through price control at 'regulated' airports.

With respect to development at airports, the Local Planning Authorities (LPAs), through the Development Control system, are responsible for controlling development. The local authorities are also responsible for building control and for monitoring and implementing environmental health regulations including those relating to noise and air quality.

Following the publication of the White Paper: the Future of Air Transport, all owners/operators of major commercial airports have been requested to prepare Master Plans or Development Strategies which respond to the proposals contained in the White Paper.

National, regional and local government organizations have no statutory requirement to prepare airport plans. However, Airport Master Plans can be taken forward by the LPAs and incorporated into an AAP which could form part of the adopted LDF as noted in Chapter 2.

5.1.2. Instruments

In 2000, following a long period during which no new runways have opened in the south east and only one had opened elsewhere (Manchester), the government embarked on preparing a national policy and strategic framework to guide the development of airport capacity until 2030. After studies into several aspects and extensive public consultation (over 500,000 responses were received), the government published its **White Paper: The Future of Air Transport (2003)**. The White Paper recognizes that Britain's economy increasingly depends on air travel, yet it also recognized that airport capacity can not be added to regardless of the environmental cost. These costs and concerns include: local air quality, greenhouse gas emissions, aircraft noise, impact of planning blight on properties affected by airport development

proposals, safety and security, and the impacts of surface access on local road networks and public transport services.

The policies and proposals contained in the White Paper will have far reaching consequences for the development of airports in the UK and will become material planning considerations in the preparation of statutory plans at the regional and local levels, and in making decisions on planning applications relating to the expansion of airports.

Under the White Paper: The Future of Air Transport, the government requests that all airport authorities should produce or update existing **Airport Master Plans** to take account of the White Paper. They will provide useful documents for consultation purposes and for feeding into the RSS and LDF plan-making processes. They will also provide the rationale for expansion proposals and establish comprehensive planning frameworks within which subsequent planning applications can be considered.

These Master Plans will be non-statutory documents prepared on a voluntary basis, will have no legal status and do not need to be approved by the CAA , national or local government. However, the new planning system does allow such master plans to be incorporated into Area Action Plans (AAPs), which could then become one of the LDDs comprising a LDF, subject to the LPA agreeing to this approach.

Most commercial airports have or are preparing Master Plans. Indeed, most airport operators recognize the benefits of producing such plans. They provide an opportunity to put forward at an early stage and without any firm commitment their plans for the development of their airports, and to set out land use and environmental policies which they will pursue. By subjecting the draft Master Plans to a process of consultation involving the local community, government organizations and all other parties with an interest in the development of the airports, and then seeking the approval of the Airport Board to the Final Plan, it is intended that these plans will carry weight when subsequent planning applications are submitted to the LPAs, and thus facilitate the planning application process.

The plans should indicate areas of land which will need to be safeguarded and eventually acquired to facilitate future expansion.

5.1.3. *Process*

With respect to the formulation of national aviation and planning policy considerable consultation took place involving elected representatives, central government departments, regional and local government organisations, special interest groups, environmental groups, the business community, resident organisations and the general public.

In preparing the White Paper: The Future of Air Transport, 500,000 responses were received in response to seven regional consultation documents. As would be expected, the most controversial issues were options to develop new airports and for new runways and for runway extensions, and in particular the environmental and amenity impacts of such proposals. However, the preparation of the White Paper did not involve any public examination or public inquiry into the policies and proposals contained in the Paper.

There is no fixed process for preparing Airport Master Plans, although most involve the preparation of a draft plan, followed by a period of consultation, and amendments before the plan is finalized as an instrument of the airport's development and land use policy.

5.2. Spatial impact

5.2.1. Implementation of ICAO Annex 14 requirements

The airport authorities, in consultation with the CAA and LPAs, have to prepare Safeguarded Maps. These provide guidance to the LPAs, when considering planning applications within defined areas where the location and activities of the airport will influence the types of development to be permitted.

“Circular 01/03 Safeguarding Aerodromes, Technical Sites and Military Explosive Storage Areas” sets out the requirements for safeguarded areas. Certain civil (and also some military) aerodromes, selected on the basis of their importance (and en route technical sites) are officially safeguarded to ensure that their operation and development are not inhibited by buildings and structures, and air traffic safety impaired. These safeguarded areas are defined on safeguarding maps, which are certified by the CAA, and are intended to inform LPAs on how to respond to development proposals including development which might create a bird hazard;

These maps are used as standard for civilian aviation aerodromes, and the following colour coding is normally used.

- a) Grey: All developments should be notified;
- b) Red: Developments exceeding 10m AGL (above ground level) should be notified;
- c) Green: Developments exceeding 15m AGL should be notified;
- d) Red: Developments exceeding 45m AGL should be notified;
- e) Red: Developments exceeding 90m AGL should be notified;

A safeguarding map should also show a circle of 13 km radius about the aerodrome reference point representing the need for consultation about

potential bird attraction developments. In drawing up a safeguarded map regard should be had not only to the existing configuration of the aerodrome, but also a different configuration planned for the future.

The Circular suggests that the outer boundary of the safeguarded areas should be shown on the LPA's Proposals Map. Within Safeguarded Areas it is a requirement for the LPA to consult with the aerodrome operator with respect to most applications for development. The airport authorities normally have 21 days to respond to a planning application within a safeguarded area.

Operators of licensed and unlicensed aerodromes which are not officially safeguarded are recommended to take steps to protect their locations from the effects of adverse development by establishing an agreed consultation procedure between themselves and the LPA; this could include a non-official safeguarded map. The CAA has produced guidance on the Safeguarding of Aerodromes (CAP 738).

An example of a Safeguarded Map is shown in Figure 10.

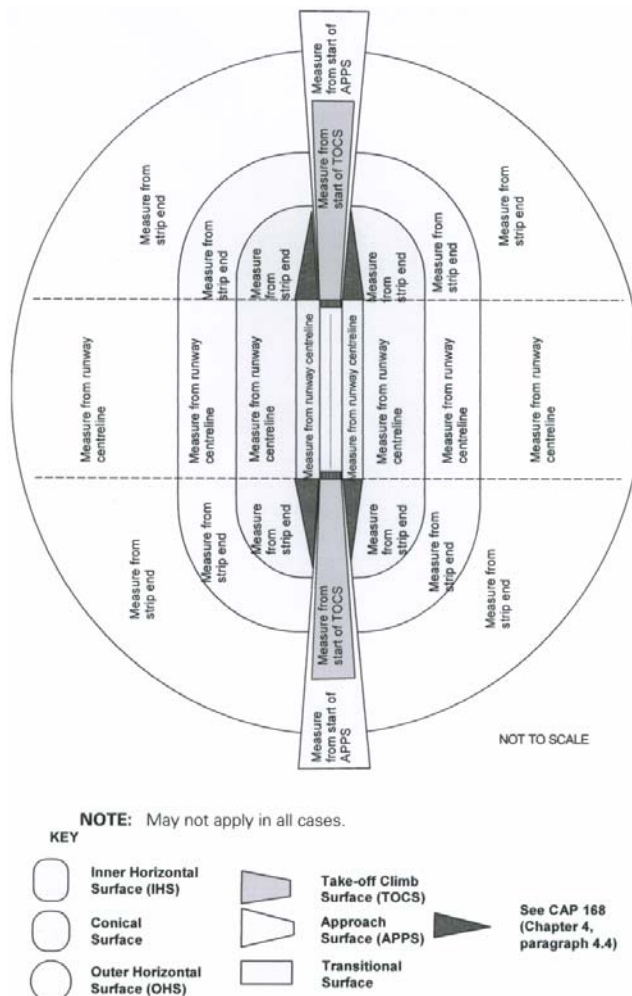


Figure 10. Guidance on the measurement of the Location of a Proposed Development in Relation to the Aerodrome and its Obstacle Limitation Surfaces

5.2.2. *Noise impact*

“PPG24: Planning and Noise” provides guidance to LPAs and developers, including airport operators, on noise impacts of development and noise sensitive development.

This PPG provides guidance on how the planning system can be used to minimize the adverse impact of noise without placing unreasonable restrictions on development. It sets out general land use planning principles, establishes noise exposure categories (NEC) (for daytime and night time periods), and suggests measures and planning conditions to mitigate the impact of noise to enable development proposals to proceed where it would otherwise be necessary to refuse permission. For all major aerodromes, NNI (Noise and Number Index) contours (existing and forecast) have to be prepared to determine approximately which residential properties are affected by the NECs. This information is then used to inform local planning policies, to determine decisions on planning applications, and to determine whether existing residents may be entitled to compensation payments including roof insulation and double glazing.

For major aerodromes, NNI contours have been already produced to aid development control (refer Chapter 5 for further information).

5.2.3. *Risk prevention*

Following a review of Public Safety Zone policy and administration, the DfT has prepared the “DfT Circular 1/2002 Control of Development in Airport Public Safety Zones”, which provides specific guidance for local planning authorities to determine planning applications within these zones. Public Safety Zones are areas of land at the ends of runways at the main UK airports within which development is restricted in order to control the number of people on the ground at risk of death or injury in the event of an aircraft accident.

The Public Safety Zones correspond essentially to the 1 in 100,000 individual risk contours, based on forecasts about aircraft movements calculated for 2015. There is a general presumption against most types of development, although such uses as open storage, long stay/employee car parking, low intensity public open space, unmanned structures, golf courses and allotments may be acceptable. The guidance states that the Secretary of State wishes to see the emptying of all residential and workplace properties in such zones - in such cases compensation may be payable.

The airport authorities, in consultation with the CAA and LPAs, have to prepare Maps showing Public Safety Zones.

5.2.4. *Land reserve for future construction*

Under Section S59 of the 1986 Airports Act (and also the 1981 Acquisition of Lands Act and Civil Aviation Act 1982) airports owners have powers to acquire land compulsorily subject to obtaining an Order from the Secretary of State (for Transport). For example, Heathrow Airport Ltd used these powers to acquire 275 ha for the purposes of building Heathrow Terminal 5.

The White Paper: The Future of Air Transport supports the safeguarding of land at several airports for future developments.

5.3. **Airport construction**

5.3.1. *Permits and authorisations required for airport construction. Institutions.*

Prior to any construction works taking place at airports it is necessary in the first instance to obtain planning permission through the development control system, where the Environmental Impact Assessment, when necessary, is integrated.

The granting of planning permission will set out planning conditions with which the airport developer will need to comply before construction can commence. Depending on whether an outline or detailed application has been granted permission these may include separate approvals for:

- a) Details of sitting, design and external appearance of the development, the means of access and landscaping (often referred to as the Reserved matters) – LPA approval;
- b) Laying of foundations, finished floor levels and site excavation works, storage of chemicals, discharges into water courses, approved flood risk assessment – by Environmental Agency;
- c) Disposal of foul and surface water – Water/Sewage Authority/Drainage Board;
- d) Recording and recovery of any archaeological remains – Archaeology Unit of local authority;
- e) Details of external and internal lighting – LPA;

In addition, all building design and construction details need to be agreed by the Building Control Department of the local authority, having regard to the Building Control Act 1984 and the Building Regulations 2000. The Regulations cover such issues as structure, fire safety, site preparation and foundations, ventilation, hygiene, drainage, access, electrical safety, fuel storage etc. Before a building can be occupied, it must have a compliance notice and a completion certificate issued by the Building Control Department.

5.4. Airport operation

5.4.1. Operating permits

The “Air Navigation Order (ANO) 2000” requires that, in the UK, flights for the public transport of passengers, or for the purpose of flying instruction, take place at a licensed aerodrome (145 in total) or at a government (ie military) aerodrome.

The CAA is required to licence aerodromes having regard inter alia to their physical characteristics. It also has powers to agree changes to proposals for airspace changes and runway use having regard to the environmental effects.

5.4.2. Airport certification

Aerodrome certification is also the responsibility of the CAA’s Aerodrome Standards Department (part of the Safety Regulation Group). The Department works with licensed aerodromes to establish efficient safety management systems and sets out the standards required at UK licensed aerodromes relating to physical characteristics, assessment and treatment of obstacles, visual aids, rescue and fire fighting services and medical services, taking into account the scale and scope of the flying activity which is to take place there.

6. AIRPORT NOISE AND AIR QUALITY

6.1. Legislation

The government has a considerable body of legislation and controls at its disposal to control noise associated with airports, particular at the larger commercial airports. These include:

- a) The Land Compensation Act 1973 and the Noise Insulation Regulations which allow grants to be made towards the cost of sound insulation to premises subject to noise.
- b) The Control of Pollution Act 1974 which contains powers for local authorities to deal with noise and vibration from demolition and construction sites.
- c) The Health and Safety at Work Act 1974 which places a duty on employers to conduct their businesses so as to ensure that their employees and others are not exposed to noisy work activities.
- d) Civil Aviation Act 1982 which allows compensation to be paid for noise insulation schemes for properties affected by aircraft operations at Heathrow and Gatwick. Section 78 of this Act also requires the designated airports to prepare 5 year noise management and monitoring plans and to have them approved.
- e) “Planning Policy Guidance Note (PPG) 24: Planning and Noise” which recommends maximum noise exposure levels for new residential developments near major noise sources including at airports.
- f) The Environmental Protection Act 1990 which provides the principal controls over so-called statutory nuisances. Under the Act local authorities have a duty to inspect areas from time to time and can serve ‘Abatement Notices’ on the person/organisation responsible. They also have powers to seize noise-making equipment and powers to carry out works in default of Notices.
- g) Aerodromes (Noise Restrictions) (Rules and Procedures) Regulations 2003. These regulations bring into UK Law the provisions of Directive 2002/30/EC⁶ (the “noise-related operating restrictions” Directive). The Regulations apply to all airports with more than 50,000 ATMs per annum, and will enable airports to introduce economic incentives as a noise

⁶ Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports

management measure and to enable the phasing out of marginally non-compliant aircraft.

- h) Directive 2002/49/EC⁷ (the “noise” Directive), which requires strategic noise mapping at all major airports from 2007 to identify day and night noise problems and, from 2008, action plans to deal with them. These requirements are also referred to in the White Paper, although the Directive has not yet been transposed.

With respect to air quality, aircraft engines contribute, along with airport traffic on local roads and surface vehicles at the airport, to the totality of emissions of air pollutants in the vicinity of airports. The most important emissions are of nitrogen dioxide (NO₂) and particulates (PM₁₀).

In the UK, there are various pieces of air quality legislation and EU directives aimed at improving air quality and ensuring that pollutant emissions into the atmosphere do not reach concentrations that would damage human health or the environment. On a national scale the contribution of air transport and associated activities to these impacts is generally small, but locally their effect can be significant.

Key legislation and directives relevant to air quality are:

- a) Environmental Protection Act 1990 which strengthened controls over sources of air pollution through local air pollution controls (LAPCs) and set environmental limits and environmental quality standards.
- b) Environmental Act 1995 which requires the UK government to prepare a National Air Quality Strategy and for local authorities to prepare Local Air Quality Management Plans.
- c) National Air Quality Strategy (2000) which sets out air quality standards and objectives for different pollutants and defines the roles of different organizations in delivering these standards, including local authorities and airport authorities.
- d) Directive 96/62/EC⁸ (the “Air Quality Framework” Directive) established a strategic framework for tackling air quality and by setting European-wide limits on 12 pollutants in a series of daughter directives, including for NO₂ and particulates.

⁷ Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

⁸ Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management

- e) PPS23: Planning and Pollution Control: This PPS sets out how pollution control including air quality needs to be taken into account in the planning system. It recognizes the need for compliance with statutory environmental standards, and in the case of air quality the importance of Air Quality Management Plans (AQMPs) in areas where air quality is likely to be low, such as around airports.

6.2. Institutions

In the UK, central government is responsible for setting environmental policy and standards and for promoting environmental legislation (some in response to EU Directives and international framework agreements) including that relating to noise and air quality.

Monitoring is generally delegated to local authorities and carried out by their Environmental Health teams.

Industries, including aviation which contribute to environmental pollution are responsible for putting place strategies for reducing these impacts and ensuring that they do not exceed international and UK standards and targets.

6.3. Instruments

With respect to air transport and airport development the UK government is committed to reducing and mitigating the environmental impacts, including aircraft noise and air quality problems. The White Paper: The Future of Air Transport sets out the government's latest policies with respect to aircraft noise and air quality.

In the White Paper the government has established the following objectives:

- To respect targets on air quality which have been agreed to protect human health and the wider environment;
- To require that airport developments are consistent with existing arrangements for the control of the noise impacts of aviation, and to develop further procedures and regimes for managing noise, including night noise.

In addition the White Paper also stated that:

- The government will monitor aviation's progress in bringing forward schemes to reduce the effects of property price blight and aircraft noise. Specifically, it will consult on the night noise regime at Heathrow, Gatwick and Stansted, and initiate a programme of actions aimed at tackling the environmental problems at Heathrow;

- The government will work to bring aviation within the European emissions trading scheme.

a) Planning

Based on research the Government has used the 57dB(A) Leq as the level of day-time noise, marking the approximate onset of significant community annoyance.

Airport operators currently operate voluntary schemes to monitor and mitigate the impact of aircraft noise.

Mandatory EU limits for levels of particulates come into effect in 2005, and for NO₂ in 2010. At UK airports monitoring has shown that no people are currently exposed to levels of PM₁₀ in exceedence of EU limits. It has also been forecast that these limits would not be exceeded for all runway options considered in the White Paper. With respect to NO₂, again no people are currently exposed to exceedences of EU limits. However, if a new runway were to be built at Heathrow, then around 5.000 people may be exposed to levels NO₂ which are above EU mandatory limits unless action is taken. It is likely that road traffic as well as air traffic impacts on local air quality in the vicinity of the UK's major airports.

In response to the framework set out in the National Air Quality Strategy, the EU Air Quality Directives and the White Paper, BAA has established its own strategies to manage air quality, particularly at the busy London airports. These include:

- a) Working with NATS and airlines to ensure that aircraft taxiing, landing and take-off procedures can operate in such a way to minimize emissions wherever possible;
- b) Introduction of an aircraft emissions charging scheme (since 2004) at Heathrow and Gatwick airports for the actual NO₂ levels of its fleet – the first scheme of its kind in the UK;
- c) Use of pre-conditioned air units which avoids unnecessary use of aircraft engines on the ground;
- d) Introduction of Fixed Electrical Ground Power Points (FEGP) to avoid aircraft having to run auxiliary engines while on stand;
- e) Reviewing its fleet of airside vehicles to reduce emissions – by 2005 40% will be alternatively fuelled by electric and liquid petroleum gas;
- f) Implementing a Clean Vehicles Programme (CVP) in association with bus and coach operators, taxi firms, retailers and freight distributors and a policy defining a clean vehicle;

- g) Investing in public transport, providing free bus travel to airport staff, investing pump-priming money in setting up new bus routes around the airports and supporting new bus routes with new low emission technology, and developing travel plans which are agreed and implemented by key businesses.

Land use restrictions

The White Paper states that to deliver its objectives, a wide ranging and balanced approach will be needed, including land use planning and management measures at and around airports, including avoiding new housing developments in areas exposed to high levels of noise.

b) Compensation

Under the White Paper, the government expects relevant operators to:

- Offer households subject to high levels of noise (69 dB(A)) assistance with the cost of relocating;
- Offer acoustic insulation to noise sensitive buildings exposed to medium and high levels of noise (63 dB(A)).

The London airports are the worst affected airports in terms area and population affected by aircraft noise, although the impacts of noise have been greatly reduced over the past 20 years or so. In response to the EU “noise” Directive and the White Paper, BAA which owns the London airports which generate the most air traffic, has set out its own noise initiatives and has also embarked on a community consultation exercise at Heathrow Airport on proposals for schemes to address current airport noise for communities close to the airport.

These initiatives include:

- Voluntary noise insulation schemes providing double and secondary glazing to homes most affected by aircraft noise;
- Assisted relocation measures for homeowners currently exposed to high measures of noise subject to outcome of community consultation exercise;
- Introducing noise and track keeping systems so that departing aircraft at lower heights keep to the noise preferential routes which avoid highly populated areas as far as possible, with fines for off-track infringements;
- Discounts on landing charges for quieter aircraft and the imposition of up to 150% higher charges for older, noisier aircraft;

- Working with air traffic control and airlines to promote continuous descent approach to keep aircraft coming into land higher for longer;
- A voluntary ban on the scheduling of the noisiest aircraft permitted to fly at night at Heathrow and Gatwick airports;
- Runway alternation to provide west London communities with predictable periods of relief;
- Managing ground noise to minimize noise in the local area;
- Working with airlines to trial innovative take-off procedures;
- Restricting operations such as engine testing at night;
- Investing in research into active noise control at Cranfield University. This uses anti sound waves to reduce the noise generated by aircraft engines.

6.4. Integration with spatial planning

Airport Master Plans, where noise maps, air quality objectives and the rest of initiatives proposed by the operators are defined, have no legal status.

Noise and air quality can be integrated into the statutory spatial planning process is through incorporating Airport Master Plans into Area Action Plans (AAPs), adopted by the Local Planning Authorities (LPAs). Then, those AAPs could become one of the Local Development Documents (LDDs) comprising a Local Development Framework (LDF).

Of course, this possibility is subject to the LPA agreeing.

Prior to the award of planning consent the LPAs can also force airport operators to enter into planning gain agreements (often referred to as Section 106 agreements) as a legally binding means of agreeing night noise quotas, operating hours etc.

6.5. Integration with development, construction or operation controls

When a planning permission for an airport development is granted, it is usually subject to a number of conditions which the airport developer will need to comply with before construction can commence.

The Local Planning Authorities (LPAs) are responsible for building control and for monitoring and implementing environmental health regulations during construction.

Track monitoring systems and air quality monitoring stations installed at several airports are the most common way to control the impacts of airport operation.

7. CASE STUDY – MANCHESTER AIRPORT

Manchester Airport is the UK's third largest airport and the world's 12th largest international airport. In 2004 it handled 21 million passengers and offered direct flights to over 180 destinations by over 90 airlines. It also handled some 150,000 tons of air freight. Total air traffic movements (ATMs) were around 180,000. It currently has two runways, three passenger terminals, an air freight terminal, and is currently developing a ground transport interchange to become a key destination on the national rail network and a major hub for bus and long distance coach travel. It can be accessed directly from the motorway network (M56).

Manchester Airport is part of the Manchester Airport Group plc (MAG) which is the second largest operator in the UK behind BAA. MAG also owns Nottingham East Midlands, Bournemouth and Humberside airports. MAG is wholly owned by the ten local authorities comprising Greater Manchester – the City of Manchester Council is the largest shareholder with 55% of the total shares.

By 2030 the airport is forecast to handle 42 million passengers, 250,000 tons of air freight and 300,000 ATMs (ie effectively doubling current throughput). The total land area of the airport is 900ha of which 625ha is defined as the operational area comprising taxiways and runways, terminals and piers, aprons, aircraft maintenance, cargo handling facilities surface access and landscape and countryside management areas. The balance represents residential and rural properties and land used for environmental mitigation purposes.

Manchester Airport provides a good example of how airport planning has been integrated with national, regional and local planning policies; on how airports need to work in partnership with the local community, various arms of government and other stakeholders with an interest in the airport; on how the planning system works when controversial proposals with significant local and regional impacts are submitted to the planning authorities for planning permission; and on how modern airports have to take a responsible approach to managing environmental issues, particular aircraft noise and air quality.

Planning Permission Case Study: Second Runway

With a few exceptions covered by the Town and Country Planning (General Permitted Development) Order 1995, development at Manchester Airport will require planning permission, which must be sought from the local planning authority(ies): City of Manchester and Macclesfield Borough Councils. In recent times one of the most controversial applications has been for a second runway (3,050 meters long). This section provides a summary of the processes involved.

Manchester Airport plc (the developers) formally applied to both planning authorities for planning permission to build the new runway in 1993.

Although they were under no legal obligation to do so the developers decided to consult and involve the public at an early stage and carried out four consultation exercises between 1991 and 1993. This included consultation on their Draft Development Strategy to 2005. Following feedback on this public consultation the developers announced in December 1991 their intention to go ahead with the proposed second runway.

In 1992, the developers announced their intention to conduct a formal environmental assessment (EA), as it was concluded that the project fell under the Town and Country Planning (Assessment of Environmental Effects) Regulations 1988. As the runway would be greater than 2,100 metres, the proposed second runway was categorized as a Schedule 1 project based on the criteria and thresholds contained in Circular 15/88 (ie an EA is compulsory).

The scope of the EA was determined by the Institute of Environmental Assessment (IEA), an independent non –profit making organisation, rather than by the developer and/or the LPA due to potential conflicts of interest.

The EA was prepared by consultants appointed by the developer, and involved significant consultation with relevant government departments and government agencies. Stage 1 of the EA addressed the need for the runway and why there were no suitable alternatives. Within the airport boundary 3 site options were examined. The Airport Board then endorsed the preferred scheme - one which offered the least environmental impact, rather than the cheapest or one giving the greatest capacity. The formal EA of the preferred site for the second runway took place.

The application together with the formal EA were submitted in 1993. Under normal procedures the LPA then has 16 weeks to reach a decision having regard to policy and responses from statutory consultees and the general public. However, the Secretary of State (for the Environment at that time) has the legal power to call in any application (but normally those of more than local significance or controversial) to enable the decision to be taken at Government level. When such applications are called in, then the Secretary of State will call a public inquiry to address the issues he considers important (he adopted a similar approach for Heathrow Terminal 5).

The public inquiry ran from June 1994 until March 1995 and was overseen by an Inspector appointed by the Secretary of State. In total 180 witnesses appeared and 14.000 written representations were made. Upon completion of the inquiry, the Inspector prepared a report with recommendations (1.289 pages in total) to the Secretary of State. The decision to grant the applications were taken jointly by the Secretaries of State for the Environment and Transport

(quite an uncommon occurrence) in January 1997, nearly 4 years after the original application had been submitted to the LPAs.

Following the decision to grant permission the developers entered into a number of legal agreements with the LPAs regarding mitigation works, a comprehensive package of guarantees and environmental safeguards addressing issues such as the ultimate capacity of the airport, sound insulation and compensation schemes and many other actions to control aircraft noise. The developers will be expected to fund and implement all these measures.

Environmental Management

Manchester Airport plc has recently published its long term strategy (or Master Plan) which sets out its vision for the development of land at Manchester Airport over the next 10-15 years.

It is one of a compendium of complimentary strategies, which include an updated Environmental Plan to 2015 setting out its agenda for controlling environmental issues. The plan covers aircraft noise, climate change, air emissions, ground transport, utility management, waste management, water quality, landscape and habitat management.

The plan also includes Key Sustainability Performance Indicators (KSPIs) and sets out Environmental Management processes. Noise and air quality are two of the greatest concerns to local residents and the airport's approach to addressing these issues is discussed below.

1. Noise

The airport has developed the Manchester Airport Noise and Track Information System (MANTIS) to provide real time monitoring of noise levels. It also models noise from aircraft to produce a noise contour within which the average aircraft noise levels exceed a set level. This is fixed at 60 dB(A) for day and night (government policy is that 57 dB(A) should be used as the standard).

The airport has set a target for the 60 dB(A) noise contour to remain lower than 1992 levels until 2011 ie 33.6km² and 13km² for day and night time noise respectively, and to keep it as low as possible thereafter (in 2002 the noise contour was well below the 1992 noise contour at 23.2km² and 7.3 km² for day and night time respectively).

To achieve and exceed its targets the airport intends introducing noise related charges during 2005 to encourage quieter aircraft, and to ensure that all Chapter 3 aircraft (an international measure of aircraft noise) are phased out in accordance with government policy. To further limit noise the airport has also imposed night time flying restrictions including restrictions on the type of aircraft

allowed to land and take off and on the use of Runway 2 except in emergencies.

Other measures to minimize noise include ensuring that aircraft use defined narrow approach/take off corridors, and ensuring that aircraft engine tests are undertaken in soundproofed test bays.

The airport authorities will pay sound insulation grants to owners of properties which are within the 62 dB(A) forecast noise contour. It also provides a vortex damage repair scheme to repair or replace residents' roofs which have damaged by aircraft wake vortices

In addition, it is considering whether to purchase or demolish properties worst affected by the highest noise/air pollution levels, in accordance with the recommendations contained in the White Paper: The Future of Air Transport.

2. Air Quality

The Plan identifies the main sources of air emissions and the UK government air quality objectives, which must not be exceeded as set down in the Air Quality (Regulations) 2000.

The airport manages an air quality monitoring station in conjunction with Manchester City Council. Monitoring shows that the NO₂ standard will not be breached in 2005 despite significant increases in road and air traffic, but that it is forecast to be breached in 2011 on the runways and taxiways.

To further improve air quality the airport authorities will press for lower emission aircraft and intend putting in place an Airfield Low Emission Zone by 2007 through the introduction of new controls and codes of practice.

COUNTRY CONTACTS

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GLOSSARY

General terms (from “The EU Compendium of spatial planning systems and policies”⁹)

Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.
Local authority/government	The lowest tier of elected government. There may be more than one tier of local government.
National government	The government of the Member State.
Planning instrument	The means by which planning policy is expressed and implemented, including plans, briefs and other map based documents, but may also include fiscal or other measures.
Planning system	The combination of legal, institutional and other arrangements in place in a country or region for undertaking spatial planning. The elements of a system may not be interdependent but will be interrelated in their impact on spatial development.
Regional government	The tier of government between national and local. There may be two tiers of “regions”.
Regional planning	Planning for a region. This is usually undertaken by regional authorities, but may also be undertaken by national government, or local authorities working jointly. It will generally be strategic planning but with different degrees of integration between land use and other sectoral planning.
Regional policy	Policy intended to bring forward measures to

⁹ European Commission, 1997. HT395 E85E9

address social and economic disparities between regions. It will usually entail promoting the economy of relatively poor regions through financial aid, training and other actions, and controlling growth in relatively rich regions. Regional policy operates at the EU and national levels although it might also operate to address disparities between sub-regions within a large “region”.

Regulatory (or detailed) plan	Instrument regulating or implementing land development, building, or changes of land and property use. Such instruments identify specific locations for development and are usually legally binding.
Spatial development	Changes in the distribution of activities in space and the linkages between them through the conversion of land and property uses.
Spatial planning	Public policy and actions to influence the distribution of activities in space and the linkages between them. It will operate at EU, national and local levels and embraces land use planning and regional policy.
Strategic planning	Preparation of strategy of framework, identifying the broad patterns for growth but not detailed land allocations or zoning. Strategic planning is generally long term and comprehensive, bringing together social, economic and spatial considerations.
Framework plan/instrument	Instrument providing a general spatial framework for a town or city. It is implemented through more detailed regulatory instruments and sometimes described as a municipal master plan.

EU Directives

The “EIA” Directive	Council Directive 85/337/EEC of 27 June 1985 on the assessment of the effects of certain public and private projects on the environment
The “IPPC” Directive	Directive 96/61/EC of 24 September 1996 concerning integrated pollution prevention and control
The “air quality framework” Directive	Council Directive 96/62/EC of 27 September 1996 on ambient air quality assessment and management
The “SEVESO II” Directive	Council Directive 96/82/EC of 9 December 1996 on the control of major-accident hazards involving dangerous substances
The “SEA” Directive	Directive 2001/42/EC of the European Parliament and of the Council of 27 June 2001 on the assessment of the effects of certain plans and programmes on the environment
The “noise-related operating restrictions” Directive	Directive 2002/30/EC of the European Parliament and of the Council of 26 March 2002 on the establishment of rules and procedures with regard to the introduction of noise-related operating restrictions at Community airports
The “noise” Directive	Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise

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