

## European Commission

### Review of the Common Transport Policy

Task 2.2: Spain

August 2009

#### Prepared for:

European Commission  
Directorate-General Energy and Transport  
DM 28 - 0/110  
Avenue du Bourget, 1  
B-1049 Brussels (Evere)  
Belgium

#### Prepared by:

Steer Davies Gleave  
28-32 Upper Ground  
London  
SE1 9PD  
  
+44 (0)20 7910 5000  
[www.steerdaviesgleave.com](http://www.steerdaviesgleave.com)

## Contents

<b>1</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2</b>	<b>MARKET OPENING</b>	<b>6</b>
<b>3</b>	<b>LEVEL OF SERVICE QUALITY AND USER ASPECTS SUCH AS PASSENGER RIGHTS</b>	<b>14</b>
<b>4</b>	<b>ENVIRONMENTAL SUSTAINABILITY</b>	<b>22</b>
<b>5</b>	<b>CONCLUSIONS</b>	<b>29</b>

## FIGURES

Figure 1.1	GDP vs. growth in transportation sector [Index 100=1995]	5
Figure 2.1	Number of rail licences issued between 2005 and 2008	9
Figure 2.2	Rail freight market share between 1995 and 2007	10
Figure 2.3	Rail passenger market share between 1995 and 2007	10
Figure 2.4	Rail freight volumes between 1995 and 2007 (1995=100)	11
Figure 2.5	Rail passenger volumes between 1995 and 2007 (1995=100)	11
Figure 3.1	Delays at Madrid airport within 15 minutes of scheduled	19
Figure 3.2	Proportion of RENFE trains arriving on time	20
Figure 4.1	Trend of air emissions from transport in Spain	25
Figure 4.2	Trend of GHG emissions from transport in Spain	26
Figure 4.3	Local air quality: trend of pollutants concentrations between 1995 and 2006	27

## TABLES

Table 1.1	Passenger land transport demand 1995-2007	3
Table 1.2	Freight land transport demand 1995-2007	4
Table 2.1	Assessment of measures for market opening	6
Table 3.1	Assessment of measures for passenger rights	14
Table 4.1	Assessment of measures for environmental sustainability	22

# 1 Introduction

1.1 This paper builds on the assessment of individual objectives in Task 1 to take a more in-depth look at what the Common Transport Policy has achieved in Spain against the following objectives:

- Market Opening;
- Service Quality and User Rights; and
- Environmental Sustainability.

1.2 It concludes with a broader statement of the overall key impacts of the CTP for Spain.

1.3 For context, this introductory section presents a brief overview of Spanish transport policy and of the most significant transport trends in Spain in the past decade.

## *Institutional set up*

1.4 In Spain the responsibility of setting and implementing transport policy is allocated between national and regional authorities, according to the mode of transport and the territorial scope of the service.

1.5 The national government has exclusive competence in respect of merchant shipping, ports and airports of general interest, air traffic control, air transportation, etc. As for inland transportation, road transport and railways are dealt jointly with regional authorities, though they are considered to be the exclusive competence of the national authorities when they run through more than one region.

1.6 The institution in charge of national transportation affair is the Ministry of Public Works and Transport (Ministerio de Fomento), which is divided in four main substructures:

- Secretaría de Estado de Planificación y Relaciones Institucionales, responsible for the definition and implementation of the Ministry policy. Its activities pertain on the planning and financing of transport infrastructure.
- Secretaría de Estado de Infraestructuras, which is responsible for the road and rail sector in general. This Secretaría is structured in different bodies responsible for different transport sectors.
- Secretaría de Estado de Transportes, responsible for the sea and air sectors in general.
- Subsecretaría de Fomento which is mainly responsible for the inspection and evaluation of the transport services.

1.7 There are 48 airports of general interest, managed by “Aeropuertos del Estado y Navegación Aérea” (AENA) including the military air bases open to the civilian traffic and the Ceuta heliport. In the aviation sector DGAC (the Spanish Civil Aviation Authority), is the regulatory body responsible for air transport activities overseen by the Ministry of Transport, while AESA is the public owned company which undertakes air traffic control.

- 1.8 The network of State Ports of general interest is made up of 28 Port Authorities (Autoridades Portuarias), which are overseen by the Ministry of Transport, but enjoy considerable operational and financial independence.
- 1.9 At local level, Spain is divided into 17 Autonomous Communities comprising 50 provinces and 8,111 municipalities.
- 1.10 Regional governments are responsible for 71,000 km of road network and for regional rail services and infrastructure. Some regional authorities also oversee regional ports. The regions are also involved in the planning of regional airports and access to them.
- 1.11 Both Provinces and Municipalities have responsibilities for road infrastructure in their areas. Streets in urban areas and local crossroads are the responsibility of municipalities. Provincial administrations are in charge of the organisation of interurban public transport services. Municipal authorities look after urban public transport including the (re)structuring of municipal bus operators and tendering of services.

***Application of European policies***

- 1.12 In order to promote economic development and social and territorial cohesion, the Spanish Government approved in 2000 the Transport Infrastructure Plan 2000-2007 (Plan de Infraestructuras de Transporte, PIT), as an overall and coherent framework to ensure the stability of infrastructure and transport policy. This was superseded four years later by the Strategic Infrastructures and Transport Plan 2005-2020 (Plan Estratégico de Infraestructuras de Transporte, PEIT), which set out the basic guidelines for action on infrastructures and transport within the State's competence over a medium- and long-term horizon (2005-2020).
- 1.13 The strategic objectives of the PIT (and the subsequent PEIT), aligned with the objectives set out in the EU Transport White Paper, were to:
  - Meet transport demand and increase the quality of transport services, developing an integrated transport system in a framework of complementarity and coordination between modes of transport and infrastructures and services; optimising use of existing infrastructures, using demand management measures and promoting a policy of conservation and maintenance of infrastructure assets;
  - Enhance social and territorial cohesion by:
    - a) Ensuring equitable conditions of accessibility throughout the country and, in particular for non-mainland Spain.
    - b) Identifying the potential beneficiaries of infrastructure and transport policy, avoiding regressive transfers of income.
  - Contribute to transport sustainability in particular by pursuing the reduction of transport related greenhouse gas emissions.
  - Promote economic development and competitiveness by:
    - a) Enhancing the role of Spanish urban and metropolitan areas.
    - b) Reinforcing cross-border links.
    - c) Cementing R&D programs and technological advances applied to the management and operation of transport infrastructures and services.

- 1.14 The PIT set out the strategic infrastructure to be built in the transport sector over the 2000-2010 period, estimating an overall investment of €102.8 bil. of which €40.9 bil. was allocated to the rail sector; €39.7 bil. to the road sector (including motorways); €11.4 to air transport; €7.2 bil. to ports and €3.6 bil. to the postal and other transport sectors. This investment was to be financed both by public (€57.2 bil. of national and €31 bil. of European funds) and private resources (€14.7 bil. by private investors)<sup>1</sup>. In 2005, the PEIT updated the project programme and the cost rose to €248.9 bil. (2005 prices), of which €108.8 bil. was allocated to the rail sector (€83.45 for high speed lines); €62.8 bil. to the road sector (including motorways); €15.7 to air transport; €23.46 bil. to sea transport ports; €3.62 bil. to intermodal goods and passenger transport; €32.53 bil. to urban and metropolitan transport and €2.04 bil. to R&D.

### *Transport trends*

- 1.15 In Spain, motorways and high speed rail networks have expanded significantly since the mid '90s: in particular high speed rail network more than doubled its length, from 471 Kms in 1995 to 1,272 Kms in 2006. An additional 322 Kms have been built in the last two years. By contrast, conventional rail network and inland waterways remained stable in length.
- 1.16 As far as land passenger transport demand is concerned, in Spain all modes of transport experienced significant growth since the mid '90s (with the exception of urban rail). The dominance of the private car has been slightly reduced in modal share terms over time. Bus and coach travel has grown faster than private car use and high speed rail has contributed to overall rail growth, albeit at a lower rate than other modes. The direction of mode share is broadly consistent with policy.

**TABLE 1.1 PASSENGER LAND TRANSPORT DEMAND 1995-2007**

	Cars	Bus and coach	Railway	Of which High Speed	Urban rail
<b>Bil. passenger km (1995=100)</b>					
1995	250 (100)	40 (100)	17 (100)	1.2 (100)	4 (100)
2000	303 (127)	50 (121)	20 (121)	2 (166)	5 (125)
2007	343 (137)	59 (147)	22 (129)	6 (500)	6.4 (160)
<b>Modal share</b>					
1995	80.4%	12.9%	5.5%		1.3%
2000	80.2%	13.2%	5.3%		1.3%
2007	79.7%	13.7%	5.1%		1.5%

Note: values in brackets ( ) are indices (1995=100). Source: DG TREN-Statistical pocket book 2009

<sup>1</sup> Note: reported figures are 2001 prices.

- 1.17 Domestic and international air passenger demand grew by an average of 5% p.a. between 2000 and 2006 reaching a total volume of 191 million passengers in 2006<sup>2</sup> (provisional data).
- 1.18 In the freight market, road haulage transport volumes has more than doubled since 1995, as a consequence of the economic growth experienced by the country and the improvements made to the road network.
- 1.19 On the contrary, rail freight volumes were static overall in the 1995-2007 period, and have fallen back since 2000 which suggests the need for action to promote railfreight in line with policy aspiration. Rail freight mode share more than halved to just 4%.

**TABLE 1.2 FREIGHT LAND TRANSPORT DEMAND 1995-2007**

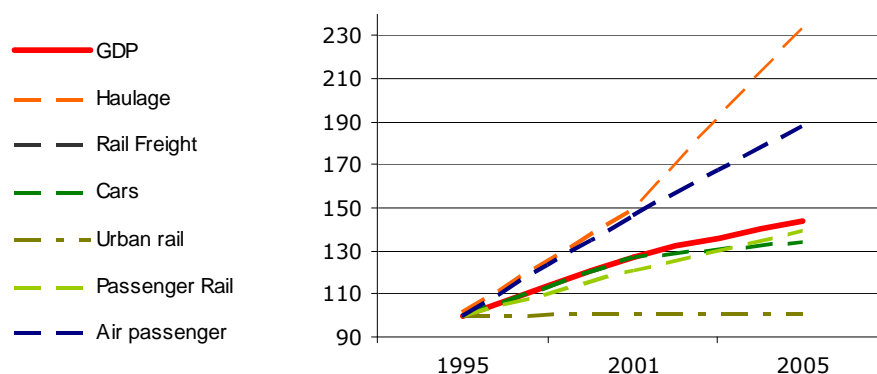
	Road haulage	Railway	Inland waterways	Pipelines
<b>Bil TKM (1995=100)</b>				
1995	102 (100)	10.96 (100)	0 (100)	6 (100)
2000	149 (146)	11.61 (106)	0 (100)	7 (117)
2007	259 (254)	11.03 (101)	0 (100)	8.95 (149)
<b>Modal share</b>				
1995	85.7%	9.2%	85.7%	5.0%
2000	88.7%	7.1%	88.7%	4.2%
2007	92.8%	4.0%	92.8%	3.2%

Note: values in brackets () are indices (1995=100). Road haulage modal share includes all activities by Spanish hauliers, undertaken inside and outside Spain, but it does not include activities by foreign hauliers inside the country. As the activities of Spanish hauliers in other countries are likely to be higher than those of foreign ones inside Spain, road haulage modal share are probably overestimated. Source: DG TREN-Statistical pocket book 2009

- 1.20 Shipping freight cargo has also grown significantly - particularly at the ports of Valencia and Bilbao, where the total amounts of freight handled in 2007 were 109% and 59% higher than the 2000 values, respectively.
- 1.21 In recent years Spain has not made general progress towards the decoupling of transport demand from GDP growth, which has clear consequences on the extent to the country has been able to reduce negative externalities from transport activities. The following figure shows that the growth rates of less sustainable transport modes such as road haulage and air transport were significantly higher than GDP ones. However, car usage grew less steeply than GDP in the period 2001-2005.

<sup>2</sup> Note: provisional data from Instituto Nacional de Estadística.

FIGURE 1.1 GDP VS. GROWTH IN TRANSPORTATION SECTOR [INDEX 100=1995]



Source: Elaboration on Spanish National Statistics

#### *Structure for the remainder of the analysis*

1.22 The purpose of the case study is to identify:

- where the responsibility for implementation of elements of the Common Transport Policy rests with the EU Member States, how effective this implementation has been; and
- whether the wider transport policy that has been followed by the Member State is consistent with the Common Transport Policy.

1.23 In what follows we will present the analysis undertaken for the following policy areas:

- Market Opening;
- Service Quality and User Rights;
- Environmental sustainability.

## 2 Market opening

- 2.1 The following paragraphs discuss the transposition and the implementation of market opening policies defined by the CTP in the Spanish legislative and regulatory framework. In some cases, such as the rail sector, Spain introduced market opening relatively late compared to the other European countries. This implies that the effects are still working their way through and it is early to draw conclusions on the effectiveness of these policies.

### *Qualitative analysis*

- 2.2 The qualitative analysis is undertaken through an assessment of the progress towards each measures identified for market opening (see Table 2.1).

TABLE 2.1 ASSESSMENT OF MEASURES FOR MARKET OPENING

Measure	Assessment
Improving the framework conditions for market opening in rail freight transport	<p>The First Railway Package was transposed in Spanish legislation in 2003 and came into force in 2005. There is separation between the infrastructure manager ADIF and the incumbent RENFE Operadora.</p> <p>However, new entrants claim that the legislative framework is still incomplete or unclear.</p>
Opening up the national and international rail freight market	<p>There is open access to the national and international freight market, through the implementation of the First and Second Railway Packages.</p> <p>International freight services are marginal and are limited by the lack of interoperability between the Spanish and French network, mainly due to the different track gauge.</p>
Opening up the international rail passenger market	<p>Law 39/2003 did not open the market for international rail passenger services and Spain has not yet transposed the Third Railway Package.</p>
Propose a common legal framework for the provision of port services	<p>Law 48/2003 liberalised port services, which are now organised and regulated by Port Authorities. However, barriers to entry still exist in relation to capacity constraints at seaports (licences granted by competitive tender), Public Services Obligations and by the lobbying activity of incumbents, mainly related to stevedoring services.</p>

- 2.3 In order to assess the effectiveness of the measures taken by Spain, we have reviewed:
- the specific measures Spain has taken to implement the EU measures discussed for market opening in Task 1;
  - other policy measures Spain has taken relating to market opening;
  - whether these policy measures have had any impact in Spain.



*Specific measures taken by Spain to implement/enforce EU legislation*

- 2.4 As in most European countries, the majority of rail services in Spain were historically provided by vertically integrated State-owned companies. The most important operators were RENFE and FEVE, operating respectively on the Iberian gauge and narrow gauge networks<sup>3</sup>. There were also small regional operators, generally owned and controlled by Autonomous Communities.
- 2.5 The opening of the rail market in Spain occurred relatively late compared to other European countries. Following Directive 91/440, various Royal Decrees had been introduced into Spanish Law, however, it was not until 2003, with Law 39/2003, that a proper national railway package was adopted.
- 2.6 Law 39/2003, which came into force on the 1<sup>st</sup> January 2005, imposed the break-up of RENFE into two separated entities: ADIF and RENFE - Operadora, respectively responsible of infrastructure management and service provision, for both the freight and passenger markets. Both companies are still publicly-owned and controlled. From 1<sup>st</sup> January 2006, all companies holding a valid licence and a safety certificate can access the Spanish rail network and provide international and cabotage freight services.
- 2.7 In 2006 a Ministerial Order FOM/233/2006 clarified the conditions and requirements for the homologation and registration of the rolling stock allowed to circulate on the railway network, as well as the tariffs to be applied in relation to access and services. Rail capacity can be allocated to: rail undertakings, international groupings, public administrations providing Public Service Obligations services and also to transport agents, hauliers and combined transport operators, provided that they have the relevant licence, issued by the Ministry of Public Works.
- 2.8 Finally, the Law set up a Committee for Rail Regulation, which has to ensure fair competition in the rail market, particularly guaranteeing transparent and non-discriminatory treatment for newcomers. The Committee also solves disputes between railway undertakings and ADIF.
- 2.9 As far as the air sector is concerned, the application of EU regulations dealing with market opening has been effective in Spain since 1993, but it was considered complete in 1999, when Iberia was privatised.
- 2.10 The transposition of Directive 96/67/EC on the liberalisation of ground handling services at airports occurred with Royal Decree 1161/1999, but this text was later modified by Royal Decree 99/2002, which reduced the number of handling companies operating at airports with low traffic.

*Other policy measures undertaken by Spain relating to market opening*

- 2.11 The coach market is in theory open to competition for the market through the bidding process for new concessions, where fares are set by public authorities. However, a recent study undertaken by Steer Davies Gleave on behalf of the

---

<sup>3</sup> The Iberian gauge is 1,668 mm, broader than standard gauge (1,435 mm). Most of Spanish narrow gauge network is instead 1,000 mm.

European Commission<sup>4</sup>, highlights that in practice this process has been identified as favouring incumbents, due to:

- long concession periods, and the tendency of regional governments to extend concession periods after the concession has been granted (for example, in 2003 the Cataluña region extended 147 concessions, for a period of 25 years each);
- differences in the extent of the information available to incumbents and new entrants, which provides incumbents with an advantage when bidding for concessions;
- complex criteria for award of new concessions, which limit the incentive for new entrants to offer lower prices or better service quality, and which allow the awarding authority significant discretion; and
- explicit discrimination in favour of the incumbent in the concession competitions (for example, the concession can be awarded to the incumbent even if another bidder scores 5% better, and the requirements regarding age of vehicles are less onerous for the incumbent).

- 2.12 However, in the next two years, most of the concessions given at national level will be once again put out to tender for period of between 8 and 10 years.
- 2.13 Road haulage in Spain is characterised by a large number of very small operators. Access is heavily regulated, and is restricted to those with a licence (limited by a quota), and the operation of services is subject to regulated rates.
- 2.14 Law 27/1992 on seaports created Port Authorities, which were set up with the functions of management and regulation bodies in the major Spanish ports. Up to 2003, port services were provided in a monopoly regime by port companies and had other barriers to entry, related to Public Service Obligations (PSOs). Law 48/2003 introduced competition in port services by allowing entry, which is now subject to obtaining the relevant authorisations (the number of which can be restricted where there are capacity constraints). However, “ancillary” port services such as piloting, towing, mooring etc. are still subject to PSOs.

### *Impact of the policy measures within Spain*

- 2.15 Given the fact that liberalisation has only taken place recently in the rail market, the effects are still working their way through and it is early to draw conclusions on the effectiveness of market opening policies. This market was effectively opened in 2006, however it was not until 2007 that some new entrants actually started providing services directly competing with RENFE. To date ten licences have been issued and another licence issued by French authorities to Euro Cargo Rail, subsidiary of EWS, was recognised (although this authorisation should not be necessary according to EU law). New entrants have found it difficult to obtain a safety certificate from ADIF, a requirement for access to the infrastructure.
- 2.16 Some new entrants argue that Spanish legislation is more restrictive than that of the neighbouring countries and makes it more difficult to homologate traction and train drivers, hindering the entry of private operators in this country. It is also argued

---

<sup>4</sup> Study of passenger transport by coach, ongoing, Steer Davies Gleave on behalf of the European Commission, Directorate General Energy and Transport.

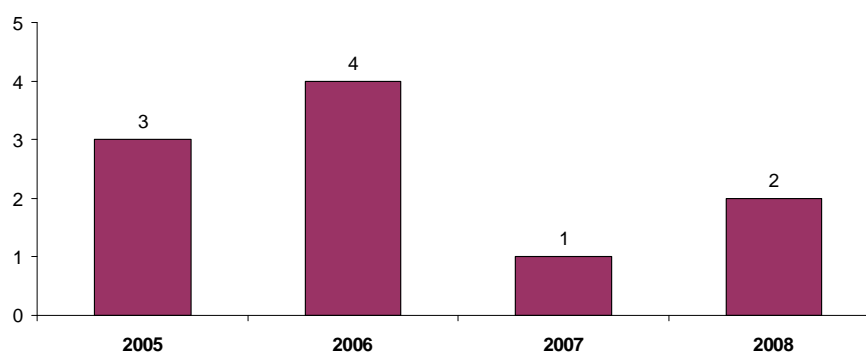
that the regulator is still unable to exert enough power to contrast the incumbent's lobbying activity. As a result some of the new entrants set up an association of private railway companies, AEFP<sup>5</sup>.

- 2.17 As pointed out above, the market for air services has been liberalised since 1993, but liberalisation only became effective following the privatisation of Iberia in 1999. Since then, Spain has seen a substantial expansion in services by low cost carriers (LCCs).
- 2.18 Looking at competition between modes, the introduction of the Spanish high speed rail service (AVE) radically transformed the market. A study undertaken by Steer Davies Gleave<sup>6</sup>, showed that on the Madrid-Seville route, AVE services achieved in 2006 a market share of 84% of the total air and rail market and a share of over 90% of the point-to-point market. This is mostly as a result of the fast journey times (halved by AVE), but also the high standard of reliability offered and the quality of the services provided. It must be noted that the presence of AVE has prevented the entrance of air LCCs on this route (at present only Air Berlin offers one flight per day on it).
- 2.19 In February 2008 AVE started operating a new high speed connection between Madrid and Barcelona. By the end of last year it carried 2 mil. passengers, a figure which includes many air travellers that have been induced to switch to the AVE service.
- 2.20 Maritime services were completely liberalised in 1999, when cabotage services between the continent and islands were finally opened.

#### **Quantitative analysis**

- 2.21 The figure below shows the trend of rail licences issued between 2005 and 2008. As mentioned above, ten licences have been issued to date. Six rail undertakings currently hold a valid certificate<sup>7</sup>, although at present there are other applications. Finally, there are four authorised applicants that can be allocated capacity, whilst two other companies are likely to follow soon.

**FIGURE 2.1 NUMBER OF RAIL LICENCES ISSUED BETWEEN 2005 AND 2008**



*Source: Steer Davies Gleave elaboration from miscellaneous sources*

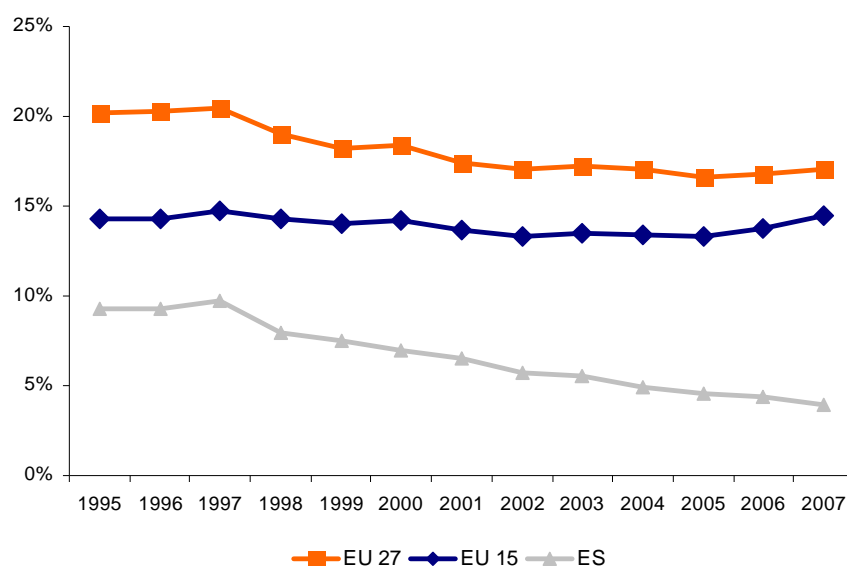
<sup>5</sup> Asociación de Empresas Ferroviarias Privadas.

<sup>6</sup> Air-Rail Competition and Complementarity, study carried on by Steer Davies Gleave for the Directorate General Energy and Transport in 2006.

<sup>7</sup> That is: Renfe Operadora, Comsa Rail Transport, Continental Rail, Acciona Rail Services, Tracción Rail and EWS.

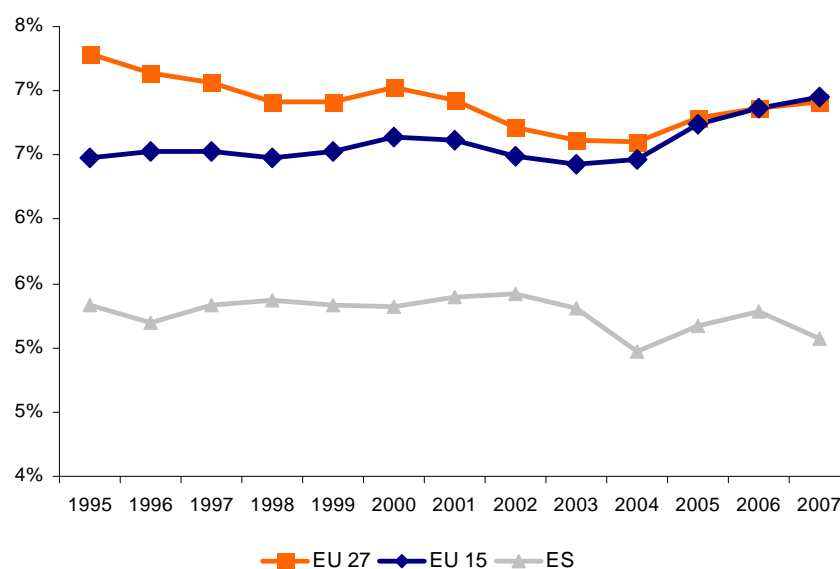
2.22 The figures below shows the change in the rail market share in the freight and passenger markets compared to other inland modes of transport. Rail freight market share more than halved between 1995 and 2007, whilst rail modal share in passenger transport has been stable at around 5.5%. It must be noted though that rail modal share is likely to be under-estimated because the available statistics tend to over-estimate figures for road haulage, as discussed above (see Table 1.2).

FIGURE 2.2 RAIL FREIGHT MARKET SHARE BETWEEN 1995 AND 2007



Note: Source: Transport statistical yearbook 2009 - DG TREN

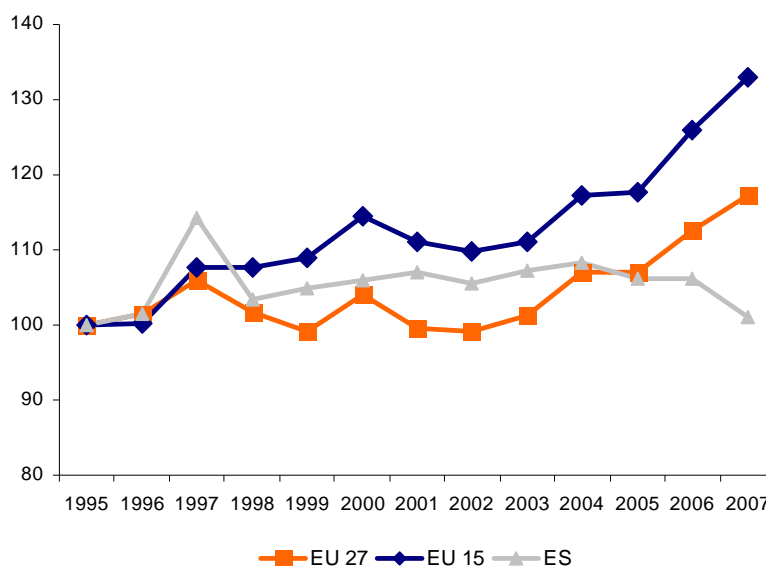
FIGURE 2.3 RAIL PASSENGER MARKET SHARE BETWEEN 1995 AND 2007



Source: Transport statistical yearbook 2009 - DG TREN

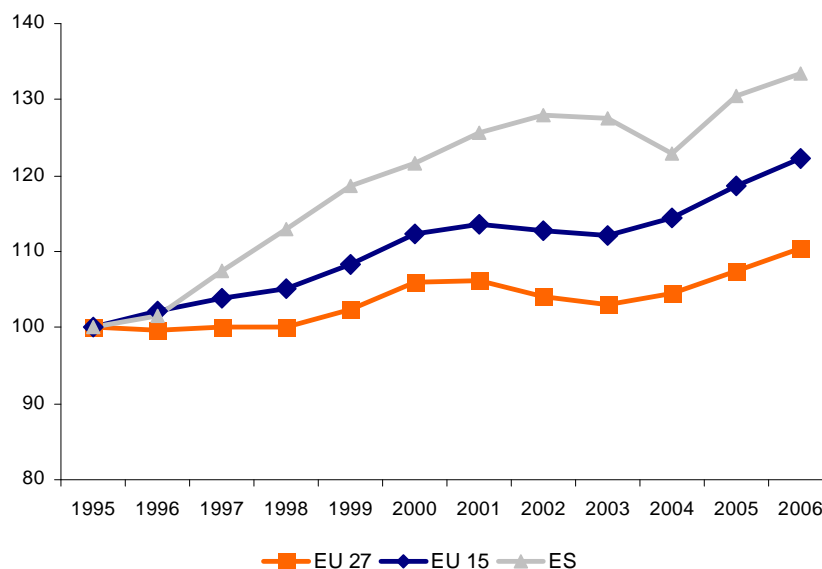
- 2.23 The following figures show the trend of freight and passenger volumes<sup>8</sup> transported by rail from 1995 onwards. While during period 1996-2004 the increase in freight volumes in Spain was higher than in EU15 countries, the improvements registered in the rest of EU15 countries since 2004 and the decline experienced by Spanish volumes reversed this trend. As a result, rail freight volumes in 2007 in Spain were actually just 1% higher than in 1995.

FIGURE 2.4 RAIL FREIGHT VOLUMES BETWEEN 1995 AND 2007 (1995=100)



Source: Transport statistical yearbook 2009 - DG TREN

FIGURE 2.5 RAIL PASSENGER VOLUMES BETWEEN 1995 AND 2007 (1995=100)



Source: Transport statistical yearbook 2009 - DG TREN

<sup>8</sup> Respectively measured in tkm and pkm.

- 2.24 As far as passenger traffic is concerned, the opening of the new High-Speed lines from Madrid to Seville and Málaga and towards Barcelona boosted volumes, which were 33% higher than in 1995. This trend is expected to continue in the coming years.

### **Conclusions**

#### *The overall impact of the policy*

- 2.25 The progressive liberalisation and integration of Spanish transport market in the EU since the 1990s has resulted in important benefits for users, in particular improved services and more competitive prices in sectors such as air transport.
- 2.26 Significant progress has been achieved in terms of rail interoperability and security, maritime security, road professional access and social clauses and air transport.
- 2.27 In the rail freight market, the level of competition is increasing: the opening of high speed lines dedicated to passenger traffic is freeing up train paths on incumbent infrastructure that can be now used for freight services, although the ongoing economic crisis may deter further entry in the short term.
- 2.28 However, the Spanish road haulage market is still restricted to those with a licence (limited by a quota) and is subject to regulated fares, with a large number of very small operators. Market opening has been limited in coach services and local public transport, still characterised by excessive fragmentation and inefficiencies, although this has not prevented significant growth in volume and mode share in road public transport.

#### *Contemporary developments*

- 2.29 Rising fuel costs is one of the reasons why the Spanish Government is looking to promote modal shift to railways, using the capacity freed up on the conventional network by the expansion of the Spanish high speed network. This led to the announcement that RENFE's freight business would soon be spun off into a stand-alone company.
- 2.30 Although 100% state-owned, it is expected that the new venture would be opened up to private capital with the aim of creating a major logistics business similar to those being set up by SNCF and DB. However, substantial investment would be required to relieve bottlenecks in the major cities, where growing suburban traffic competes for paths, and to improve access to ports.

#### *Lessons learnt and going forward*

- 2.31 Spanish transport policy as a whole seems to have a strategy based mostly on regulation, and only when compelled by the European Commission will Spain take liberalisation measures.
- 2.32 The road haulage transport market is still heavily regulated and the monopoly of RENFE in rail passenger transport has not as yet been challenged: for these sectors the CTP will take longer to achieve any results. In fact, entry into the passenger sector by new comers is not expected before 2012.

- 2.33 However, the implementation of Common Transport Policy measures is contributing to the modernisation of infrastructure and use of advanced technologies, either related to high speed trains or port services, and reinforcing security, reliability and interoperability in the different transport sector (air, surface and maritime).
- 2.34 The European Regional Development Fund (ERDF) and the Cohesion Fund (CF) contributed significantly to the development of Spanish transport infrastructures. In the 2000-2006 programming period ERDF and CF allocated €10,307 mil. and €4,814 mil. to transport projects in Spain, respectively. Most of the ERDF funds were given to road (58% of allocation) and rail projects (31% of allocation). The CF co-financed interventions on the Trans-European Networks (TEN-T), in this case the focus remained road and rail (including high speed) projects.
- 2.35 Investment in Trans-European Networks remain the key priority of the current programming period, though the strategy has shifted from the support of road interventions to other modes. In fact, the 2007-2013 Operating Programme which allocates both ERDF and CF<sup>9</sup> funds to promote convergence of less developed regions, assigned 33% of the resources to TEN-T transport projects (i.e. about €2,000 mil.) giving priority to railways, high speed connections and ports. In addition to this, other resources have been made available for transport projects through the regional operating programmes.

---

<sup>9</sup> In the current programming period, Spain is eligible as a phasing-out country for CF and it has been assigned a smaller amount of resources (about one third of that received in the previous one).

### 3 Level of service quality and user aspects such as passenger rights

- 3.1 The section presents the actions taken by Spain to implement the CTP measures discussed for level of service quality and user aspects such as passenger rights, for which Member States have the responsibility for implementation. It also provides an assessment of the wider transport policy that has been followed by Spain in this field.
- 3.2 Table 3.1 below summarises where Member States have responsibility for implementation of the CTP, and where Spain has taken other measures which are consistent with (or contradict) the policy. Subsequent text expands on this assessment.

**TABLE 3.1 ASSESSMENT OF MEASURES FOR PASSENGER RIGHTS**

Measures	Assessment
Publish information on the performance of different airlines	This action was to be undertaken by the Commission and there were no specific obligations for the States. In Spain no further actions have been undertaken.
Improve passenger protection in case of denied boarding, delays or cancellations	<p>Regulation 261/2004, which requires compensation and assistance to be provided to passengers in the event of air transport delays, cancellations and denied boarding, places a number of obligations on Member States. It requires States to create a National Enforcement Body to handle complaints; and requires the State to introduce sanctions for non-compliance which are effective, proportionate and dissuasive.</p> <p>In Spain, the enforcement body was initially the civil aviation authority (Dirección General de Aviación Civil - DGAC), part of the Ministry of Public Works (Ministerio de Fomento). This was reorganised in 2008, and enforcement is now the responsibility of the National Agency of Air Security (AESA). However as discussed below there are not at present specific sanctions in Spanish national law for non-compliance with the Regulation.</p> <p>There are similar obligations in Regulation 1371/2007, on the rights and obligations of rail passengers. This has not yet come into effect and to date no enforcement body has been designated in Spain.</p>
Ensure conditions of contract are fair	<p>There are no specific requirements relating to Member States.</p> <p>In Spanish national law, there is a requirement for airlines and travel agents to provide the final price to passengers when quoting air fares (Law 26/1984, updated by RDL 1/2007 for the Consumers and Users' Protection - Ley General para la Defensa de los Consumidores y Usuarios)</p>



Measures	Assessment
Improve enforcement of passenger rights & extend passenger rights to other transport modes	<p>As described above, Regulation 261/2004 requires States to create National Enforcement Bodies and to introduce sanctions. Regulation 1107/2006, on the rights of passengers with reduced mobility, imposes a similar requirement, as does Regulation 1371/2007 (which has not yet come into effect).</p> <p>As discussed below, there are a number of weaknesses with the enforcement process in Spain.</p>
Improve protection of passengers with reduced mobility	<p>As noted above, Regulation 1107/2006 requires Member States to create an enforcement body and to introduce sanctions for non-compliance into national law. This relates to the air transport sector only.</p> <p>As for Regulation 261/2004 the competent enforcement body in Spain is AESA.</p> <p>There is also a national law in Spain which sets basic conditions for access and utilization of all transport modes by passengers with reduced mobility (Law 51/2003 on Equal opportunities, non-discrimination and universal accessibility for disabled people, enacted in 2006 in Royal Decree 1544/2006).</p>

3.3 This identifies that the Member States have important obligations under Regulation 261/2004 and 1107/2006, having the primary responsibility for enforcing these Regulations. They will have similar responsibilities under Regulation 1371/2007, when it comes into effect, and would also have under the proposed Regulations on the rights and obligations of passengers in the maritime and international bus/coach transport sectors.

3.4 In order to assess the effectiveness of the measures taken by the Spanish government we have analysed below:

- the specific measures Spain has taken to implement the EU measures relating to passenger rights;
- other policy measures Spain has taken relating to passenger rights; and
- whether these policy measures have had any impact in Spain.

*Specific measures taken by the Member State to enforce EU legislation*

3.5 As identified above, Spain has designated a National Enforcement Body (NEB) for Regulations 261/2004 and 1107/2006. In the future it will need to designate an enforcement body for Regulation 1371/2007, but this only takes effect in late 2009, and as yet no enforcement body has been designated.

- 3.6 Spain has not introduced explicit sanctions into national law for non-compliance with Regulation 261/2004. However, DGAC already had powers to impose sanctions on airlines under Law 21/2003 (7 July 2003) on Aeronautical Security, and these powers have now passed to AESA. This law predates the Regulation and therefore does not refer to it. Nonetheless, under Article 33.13, airlines are required to respect passengers' rights, and other provisions of the Law give DGAC powers to impose sanctions for certain offences including unjustifiable delays, cancellations and non-provision of information. However, this law is considered inadequate to allow the full enforcement of the Regulation in Spain.
- 3.7 The maximum penalties for non-compliance with the requirements of Law 21/2003 are severe: the law allows for a fine of between €4,500 and €4.5 million, depending on the offence: the relatively wide range in penalties reflecting the fact that there could be significant variation in the severity of any non-compliance. These penalties are higher than those which exist in the laws of many other Member States for non-compliance with the Regulation. However, as the law also states that fines are limited to 2-3 times the amount that the airline has benefited by not complying with the provisions of this law, where it is possible to identify this amount, the fines would usually be at the lower end of the scale.
- 3.8 When we undertook a review of the implementation of Regulation 261/2004 in 2006/7, we were informed by DGAC that Spain intended to introduce explicit sanctions into national law for non-compliance with the Regulation later in 2007. However, this has still not occurred to date.
- 3.9 There are significant differences in the approach to enforcement adopted in different Member States. In Spain, the NEB may investigate individual complaints, and provide the passenger with information on whether the carrier appears to have complied with the Regulation, but if the carrier does not respond or the passenger is not satisfied with its response, it does not take further measures and the passenger is advised to take legal action. Most passengers are unlikely to do this, given the cost and difficulty of doing so. This contrasts with some other Member States in which the enforcement body will rule on individual complaints and force the airline to pay compensation.
- 3.10 To date, no sanctions have been applied on air carriers for non-compliance with either Regulation 261/2004 or 1107/2006. DGAC was in the process of investigating Air Madrid for persistent very long delays (12-24 hours) and cancellations of flights, often without provision of appropriate assistance, when the airline ceased operations at the end of 2006.
- 3.11 In a recent answer to a question in the Parliament, the Commission reported that in January 2009 it was about to initiate contacts on three files with two Member States in the 'EU Pilot' system for problem-solving. One of these complaints regarded lack of action by the Spanish NEB. Subject to the responses received from the national authorities, the Commission stated that it may open infringement procedures against them<sup>10</sup>.
- 3.12 However, there are some strengths to the system of enforcement in Spain. In particular, AESA conducts inspections at airports. These inspections seek to ensure

---

<sup>10</sup> Parliament debate, 5 February 2009

that airlines and airports are providing appropriate information to passengers and are handling passengers with reduced mobility correctly. Inspections may be a better way to collect information for enforcement than relying on passenger complaints, because passenger complaints inevitably only present one side of the argument and are unlikely to provide all the technical and legal information required. Many enforcement bodies in other Member States do not conduct inspections, or conduct very few.

*Other policy measures undertaken by the Member State relating to passenger rights*

- 3.13 There are few specific provisions in Spain to protect passenger rights. The only issues we have identified are:
- There is a requirement for airlines and travel agents to provide the final price to passengers when quoting air fares (Law 26/1984, updated by RDL 1/2007 for the Consumers and Users' Protection - Ley General para la Defensa de los Consumidores y Usuarios)
  - RENFE, the main national rail operator, adopted in 2002 a voluntary commitment (Charter on Rail Passenger Services) developed by the Community of European Railways (CER) to raise the quality standards of services provided with respect to information on passenger services and travel tickets, complaints and claims, refunds and delay.
  - In 2006 the Royal Decree 1544/2006 was enacted, complying with Law 51/2003 on Equal opportunities, non-discrimination and universal accessibility for handicapped people. This sets basic conditions for access and utilization of all transport modes by passengers with reduced mobility.
  - In December 2008, a Decree (136/2008) was enacted which regulates information rights (regarding contracts and services) for passengers of maritime transport services between the Balearic Islands provided by Community shipping companies
- 3.14 In addition, there are a number of other Spanish laws which relate to passenger rights and consumer protection, although not specifically to the objectives of the Common Transport Policy in this area:
- Law 39/2002, on protecting the interests of consumers and users.
  - Law 40/2003 (updated by RD 1621/2005), offers support to large families in various sectors, including offering discounts on transport services.
  - Order from Ministry of Public Works 3837/2006, which establishes a discount procedure on national air tariffs to members of large families.
  - Royal Decree 1340/2007 which regulates the discount in the fares of air and maritime regular services for residents in the Canary Islands, in the Balearics and in the cities of Ceuta and Melilla.
  - Law 26/1984, updated by RDL 1/2007 for the Consumers and Users' Protection - Ley General para la Defensa de los Consumidores y Usuarios, which regulates Package Holidays.
- 3.15 The national rail operator, RENFE, also applies one of the most generous policies in Europe for compensation in the event of delay (although only on its high speed AVE

services). On the Madrid-Seville route, it offers passengers a full refund if the train is delayed by more than 5 minutes. On other routes, including Madrid-Barcelona, it offers a full refund if the train is delayed by more than 30 minutes, and a 50% refund if the train is delayed by more than 15 minutes. This goes far beyond the requirements of Regulation 1371/2007 (which has not yet taken effect). On the Madrid-Seville route, RENFE obtains some of the highest levels of punctuality of any European rail service, with over 98% of trains arriving within 3 minutes.

### *Impact of the policy measures within Spain*

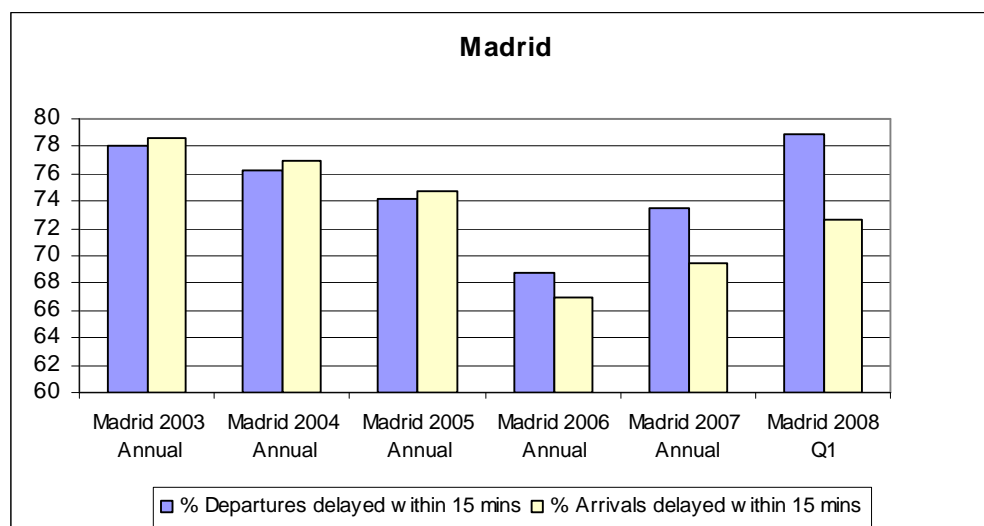
- 3.16 The impact of the policy measures within Spain has, to date, been relatively limited. In particular, it has been identified that in many cases airlines are not complying with their obligations under Regulation 261/2004, and there is some evidence that this situation has been worse in Spain than in other Member States. The authorities in Spain have received a particularly high number of complaints from passengers about non-compliance.
- 3.17 Criticisms by consumer associations also indicate that the Regulation is not working effectively in Spain:
  - Acutavc (association of consumers and users of air transport and package holidays), recently accused the Spanish airlines of not complying with their obligations except when they were taken to court, which 99% of passengers would not do.
  - The Unión de Consumidores de España (Spanish Consumers Union) has criticised the enforcement body for only transferring papers between the airline company and passenger, without actually doing anything to resolve the complaint<sup>11</sup>.
- 3.18 A study undertaken by Steer Davies Gleave in 2008 investigated the extent to which airlines had adjusted their Conditions of Carriage to be compliant with Regulations 261/2004 and 1107/2006. This found that:
  - 25% of Spanish air carriers did not mention the issues of delay, cancellation or denied boarding at all in their Conditions of Carriage, and a further 25% contained terms which were misleading about carriers' obligations. However, this was still a better level of compliance than achieved on average across all European airlines.
  - Compliance with Regulation 1107/2006 was in line with the European average, although 38% of the Spanish air carriers reviewed did not refer to the carriage of passengers with reduced mobility at all in their Conditions.
- 3.19 We have also evaluated whether the various Regulations that have been introduced have had any impact on the level of performance of transport operators in Spain. In principle, Regulation 261/2004 should, by increasing the cost to carriers of delays and cancellations, provided them with more incentive to operate all flights and operate on time. Similarly, Regulation 889/2002 (which introduced the Montreal Convention into European law), increased the level of compensation payable for lost or damaged luggage, and therefore should have provided airlines with greater incentive to handle baggage properly.

---

<sup>11</sup> Press release

- 3.20 Unfortunately, no specific data is available within Spain on the performance of airlines or for delays at Spanish airports. Therefore, we have used data from the Association of European Airlines on delays at airports in Spain, and the performance of the two main Spanish airlines Iberia and Spanair. AEA data does not include low cost carriers.
- 3.21 Figure 3.1 below shows the trend in delays at Madrid airport. The implementation of Regulation 261/2004 appears to have had no visible impact. This is not surprising as most delays are caused by factors outside airlines' direct control (such as air traffic management and weather).

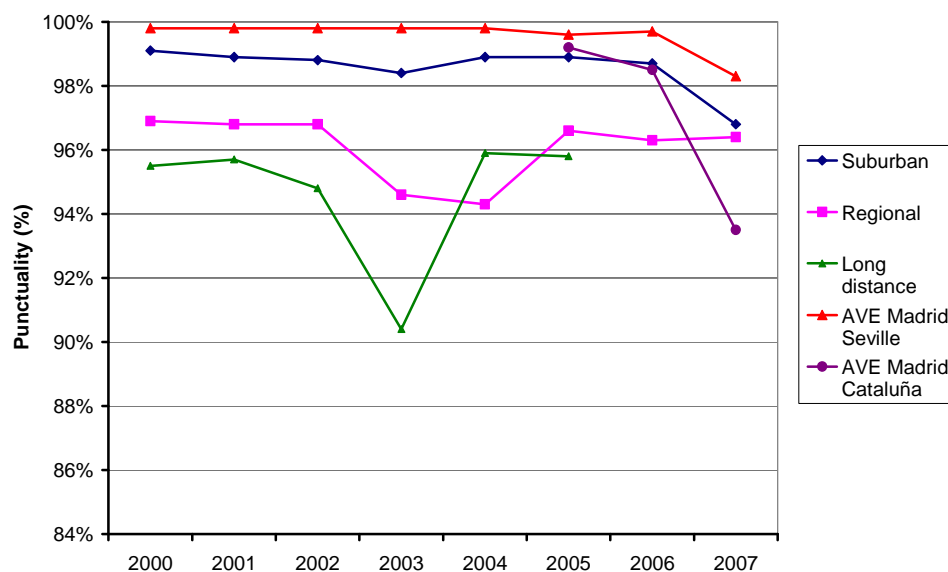
**FIGURE 3.1 DELAYS AT MADRID AIRPORT WITHIN 15 MINUTES OF SCHEDULED**



Source: AEA data, SDG analysis

- 3.22 Similarly, there is little evidence that Regulation 889/2002 has resulted in a consistent improvement in the proportion of bags which are lost or delayed. AEA statistics for Iberia and Spanair show that the ratio of bags lost or delayed per 1,000 passengers was 14.2 in 2007 and 11.1 in the first quarter of 2008, higher than the level in 2003 (10.33). However, as this data was not published before 2003, it is impossible to assess what impact this Regulation has had.
- 3.23 The legislation relating to the rail sector has not taken effect yet and therefore it is not possible to evaluate whether it has had any impact. Overall the level of punctuality on RENFE is very high compared to other European operators, as illustrated in Figure 3.2 below, although there has been no improvement in the period since 2001.

FIGURE 3.2 PROPORTION OF RENFE TRAINS ARRIVING ON TIME



Note: suburban, regional and long distance trains are considered on time when arriving within 10 minutes from scheduled time. High speed trains are considering on time when arriving within 3 minutes from scheduled time. Source: RENFE annual reports, SDG analysis

### Conclusions

3.24 European legislation has created few obligations for Member States relating to passenger rights, and the only Regulations which have created obligations for Member States are relatively recent. This means that it is difficult to draw firm conclusions on the effectiveness of the enforcement of these Regulations in Member States. However, a number of issues have been identified with the enforcement of these Regulations in Spain:

- No explicit sanctions for non-compliance with Regulations 261/2004 and 1107/2006 have been introduced into national law
- Although there is an enforcement body, it does not pursue individual complaints, and therefore passengers are advised to take legal action against carriers. Most are unlikely to do so, given the cost.

3.25 Criticisms by consumer bodies also indicate that enforcement in Spain is not effective. As a result of the failure to enforce Regulation 261/2004, the Commission has stated that it is considering infringement proceedings against Spain.

3.26 Regulation 1371/2007 creates a similar obligation for Member States to create a national enforcement body for the rail sector, and introduce sanctions into national law, when it takes effect later in 2009. The Commission has proposed that similar Regulations should be introduced for maritime and international bus/coach transport. Key lessons which can be learnt from the experience of enforcement in the air transport sector in Spain are:

- it is important that Member States should immediately comply with their obligations to designate an enforcement body and introduce sanctions into national law

- if the enforcement body is to be effective, it needs to have adequate resources (human and financial) available

3.27 There are, however, some examples from Spain of best practice in terms of passenger rights, which go well beyond the requirements of current or proposed European legislation. RENFE (the national rail operator) offers passengers on its Madrid-Seville high speed trains a full refund if the train is more than 5 minutes late, and it obtains over 98% punctuality on this route. On its other high speed routes, the compensation provisions are at present less generous, but are still significantly more generous than will be required by Regulation 1371/2007. This could serve as an example for other European rail operators

## 4 Environmental sustainability

- 4.1 In what follows, we describe the actions taken by Spain with respect to the selection of transport externalities i.e.: air quality, the protection of maritime environment, noise and greenhouse gas emissions.

### *Qualitative analysis*

- 4.2 The qualitative analysis is undertaken through an assessment of the progress towards the measures discussed for environmental sustainability. The following sections present a deeper discussion of the assessment summarized in Table 4.1.

**TABLE 4.1 ASSESSMENT OF MEASURES FOR ENVIRONMENTAL SUSTAINABILITY**

Measure	Assessment
Euro emission standards	This action was to be undertaken by the Commission and there were no specific obligations for the States. No particular action has been taken by Spain.
Air quality directive	Framework Directive 96/62/EC and limit values given in the subsequent Directives 1999/30/EC, 2002/3/EC and 2004/107/EC have been transposed into national legislation.  Progress has been made on the status of air quality in Spanish cities: however the concentration of some pollutants is still above EU limits.
Ensuring that pricing and taxation mechanisms better reflect vehicles environmental and health damages	At present there is no common EU environmental framework for road vehicles' registration and/or annual circulation taxation. A revision of the Eurovignette Directive to allow charging of Heavy Good Vehicles (HGV) for the environmental externalities produced is under discussion.  In Spain from 2008, vehicle registration tax varies according to CO <sub>2</sub> output. The Government has also introduced financial incentives to replace old vehicles with new ones with better CO <sub>2</sub> performances.
Promote the use of cleaner vehicles in urban public transport	Spain took part in several EU initiatives mentioned in the Task 1.9 (eg. CUTE and CIVITAS). In addition, there are several national programmes to promote zero emission and biofuel technologies used in urban transport.
Double hull oil tankers, penal sanctions for ship source pollution and other measures to limit maritime pollution from vessels	This action was to be undertaken by the Commission and there were no specific obligations for the States.  Yet, following the Prestige disaster in 2002, Spain created an institution responsible for the Prevention of maritime accidents



Measure	Assessment
Community support for noise charges and introduction of noise-related operating restrictions at Community airports	<p>Directive 2002/30/EC aimed at harmonising the conditions of restricted access to airports due to noise-emissions of aircrafts.</p> <p>Madrid airport is one of the five European airports that applied it. However, we have not been able to find any noise-dependent charges applied in Spanish airports.</p>

4.3 In order to assess the effectiveness of the measures taken by Spain, we have analysed below:

- the specific measures Spain has taken to implement the EU measures discussed for environmental sustainability;
- other policy measures Spain has taken relating to environmental sustainability;
- whether these policy measures have had any impact in Spain.

*The following specific measures have been taken by Spain to implement/enforce EU legislation*

4.4 The EU air quality directives have been transposed into Spanish national law<sup>12</sup>. At local level, regional authorities (Comunidades Autonomas) set up air quality plans to achieve the objectives set by the EU.

4.5 Several Spanish cities were involved in the CIVITAS project: Barcelona (CIVITAS I), Burgos (CIVITAS II), Donostia-San Sebastián, Vitoria-Gasteiz y Burgos (CIVITAS Plus). Barcelona and Madrid took also part to the CUTE project.

4.6 Spain has fully complied with the requirements of Directive 2002/49/EC<sup>13</sup> relating to the assessment and management of environmental noise. Spanish legislation requires the preparation of noise maps for roads whose capacity is above 6 mil. vehicles per year, which will then be extended to those whose capacity is above 3 mil. vehicles per year.

*Other policy measures undertaken by Spain relating to environmental sustainability*

4.7 Spain has recently taken actions in order to tax vehicles according to their emissions.

4.8 Spanish vehicle registration tax (Impuesto de Matriculación) has been recently modified to induce the purchase of vehicles with lower CO2 emissions. Since 2008, light vehicle registration tax rate on purchase price has the following structure:

- 0% for vehicles with emissions <120 g CO2/km;
- 4.75% for vehicles with emissions between 120 and 160g CO2/km;
- 9.75% for vehicles with emissions between 160 and 200 g CO2/km;

<sup>12</sup> Real Decreto 1.073/2002 transposed Directives 96/62/CE, 99/30/CE and 00/69/CE. Real Decreto 1.796/2003 transposed Directive 2000/69/EC. Real Decreto 1796/ 2003 transposed Directive 2002/3/EC. REAL Decreto 812/2007 transposed Directive 2004/107/EC.

<sup>13</sup> See the following legislative provisions: Ley del Ruido 37/2003, Real Decreto 1513/2005 and Real Decreto 1367/2007.

■ 14.75% for vehicles with emissions above 200 g CO<sub>2</sub>/km.

- 4.9 The Spanish Government has also introduced a new plan (Plan VIVE, which stands for Vehículo Innovador, Vehículo Ecológico) to promote the replacement of older vehicles with new ones with CO<sub>2</sub> emissions below 120 g/km, which also includes the release of loans up to €10,000 free of interest.
- 4.10 At local level, Urban Sustainable Mobility plans provide a wide range of actions to improve urban mobility, such as the identification of transport solutions for major organizations employing more than 250 staff. In 2004 a new observatory (“Observatorio de Movilidad Metropolitana”) was created to monitor the state of urban mobility in Spanish cities, share good practices and suggest innovative solutions.
- 4.11 As Spain is particularly exposed to the risk of maritime accidents which could have severe consequences on the environment (as happened with the Prestige disaster in 2002), an institution responsible for the prevention of maritime accidents (Centro para la Prevención y Lucha contra la Contaminación Marítima y del Litoral) was set up in 2004. This organization is responsible for a variety of tasks, such as monitoring maritime transport of dangerous goods; collecting data on maritime accidents; publishing and circulating information on relevant risks; and, promoting studies in this field.

*Impact of the policy measures within Spain*

- 4.12 The setting of EU emission standards has helped improve the importance of the air quality issue. National data for Spain show that, between 1990 and 2006, emission of acidifying substances and ozone precursors have reduced by 5.4% and 28.7% respectively. It is important to note that this was achieved although overall traffic volumes have increased. However, GHG emissions have been increasing over the same period (as shown in the quantitative analysis below).
- 4.13 At local level, NO<sub>2</sub> and PM<sub>10</sub> concentrations have been decreasing significantly since 2000, though the situation is still critical in larger urban areas where the emissions generated by diesel vehicles are mainly responsible for exceeding EU limits. In Spain ozone concentration has increased significantly since 2003, in part due to unfavourable weather conditions. Nevertheless, the number of days on which ozone concentrations have exceeded the maximum concentration allowed by the EU has always been below the ceiling of 25 days per year.
- 4.14 Following the transposition of Directive 2002/49/EC, Spain has produced a strategic mapping of environmental noise. The available data to date show, for instance, that in the regions of Asturias, Cantabria and Región de Murcia, about 212,000 people are exposed to noise levels above 55 Lden (dB).
- 4.15 Madrid approved its strategic noise mapping in January 2009, which provides detailed information on the noise levels occurring at day and night times in every district in 2006. However, the available data do not show indicators of the population affected. Barcelona does not have a noise strategic mapping yet (though some are available for other municipalities in the same province). Nevertheless, according to the municipality of Barcelona, the urban planning adopted in recent years allowed reducing noise levels with respect to those registered in the ‘90s: this mainly occurred through the construction of new roundabouts, which helped

reducing congestions, the renewal of road carriageways, the usage of noise-abating concrete to pave roads and the creation of new pedestrian areas<sup>14</sup>.

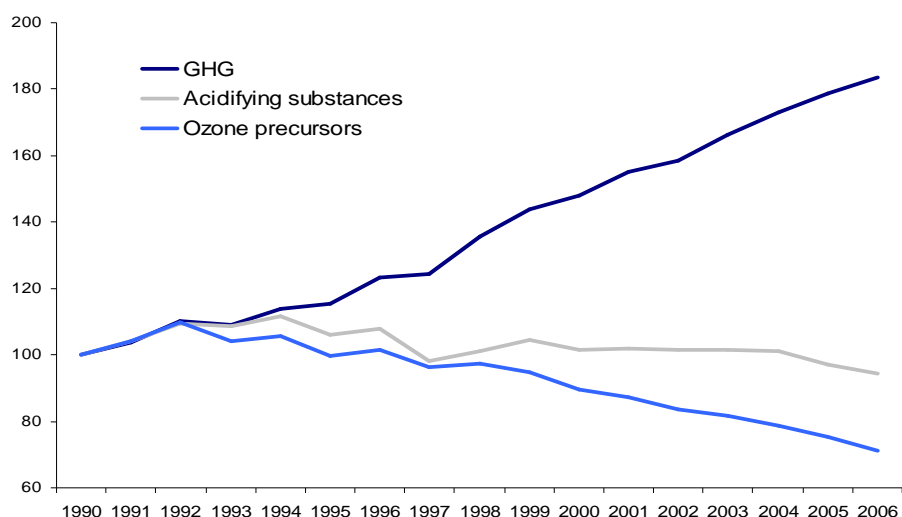
### Quantitative analysis

- 4.16 The following sections present some quantitative data used to evaluate the effectiveness of the measures described above.

### Trends in transport externalities

- 4.17 The figure below represents the trend registered in air transport emissions in Spain.

FIGURE 4.1 TREND OF AIR EMISSIONS FROM TRANSPORT IN SPAIN

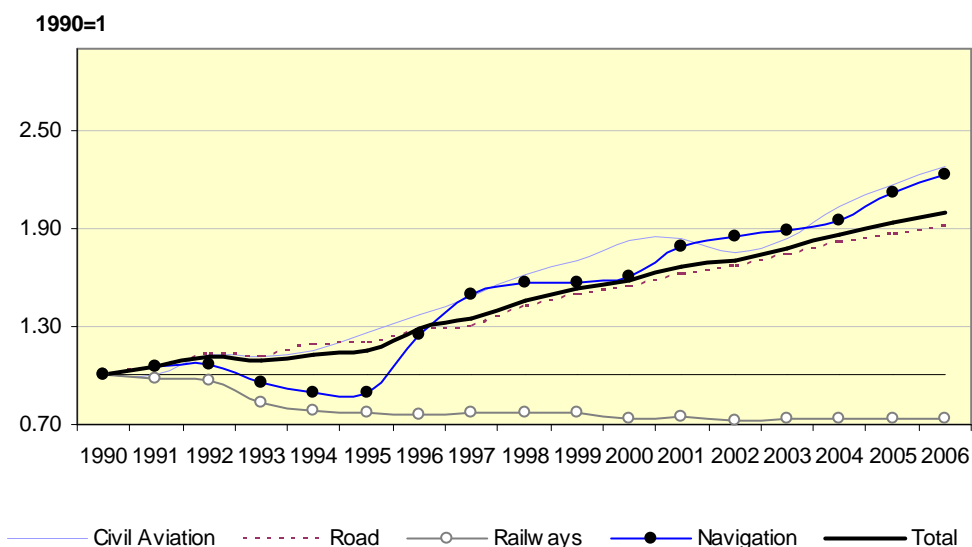


Source: Spanish Environmental Ministry, 2008. Data include emissions from road, rail, air and maritime. Note: GHG emissions include CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub>. Acidifying substances include NO<sub>x</sub>, SO<sub>x</sub> and NH<sub>3</sub>. Ozone precursors include NO<sub>x</sub>, CH<sub>4</sub>, COVNM and CO.

- 4.18 Emissions of acidifying substances and ozone precursors have decreased in the 1990-2006 period by 5.4% and 28.7% respectively. The reduction of ozone precursors has been especially remarkable in recent years as they decreased by 20% in the 2000-2006 period against a 10% decrease registered in the previous decade.
- 4.19 By contrast, GHG emissions increased by 83.5% over the 1990-2006 period, well above the total proportionate increase in GHG across Spain, which was around 50% over the same period. In the transport sector, the increase in demand for road and air transport has outweighed the GHG efficiency gains obtained through vehicle technology.
- 4.20 In 2006, transport GHG emissions accounted for 145.2 mil. tonnes of CO<sub>2</sub> equivalents in Spain, which corresponded to about 31% of total GHG emissions in this country. The road sector accounted for 67.5% of them, followed by navigation (20.2%) and aviation (12%), whilst the railway sector gave a negligible contribution of 0.2%.

<sup>14</sup> Source: [http://www.bcn.es/mediambient/cas/web/cont\\_bcn\\_soroll\\_evolu.htm](http://www.bcn.es/mediambient/cas/web/cont_bcn_soroll_evolu.htm)

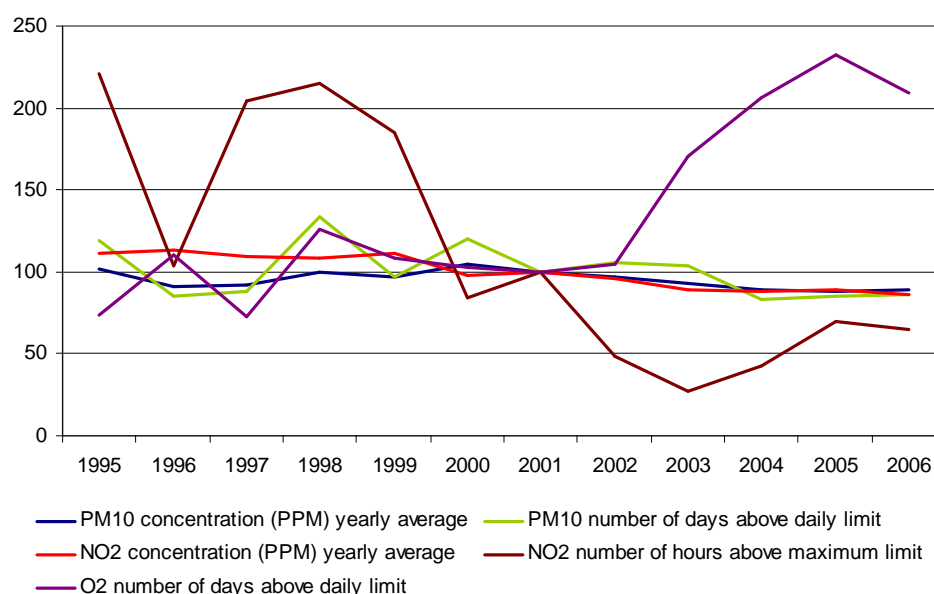
FIGURE 4.2 TREND OF GHG EMISSIONS FROM TRANSPORT IN SPAIN



Source: Transport Statistics Yearbook 2009 - DG TREN. Note: civil aviation and navigation data include international transport. The series 'other transport', which in 2006 contributed to only 0.1% of Spanish GHG emissions from transport has been removed for exposition purposes (it experience a significant growth which did not allow to show clearly the trends registered by the other sectors which account for 99% of emissions).

- 4.21 CO<sub>2</sub> is the main contributor to transport GHG emissions: in 2006 it represented 97.7% of total Spanish GHG emissions from transport activities and its emissions increased by 81.6% in the 1990-2006 period (mainly because of the 88.6% increase registered in the road sector).
- 4.22 At local level, air pollutants such as NO<sub>2</sub> and PM<sub>10</sub> show a slightly decreasing trend, while the concentration of ozone presented an increasing pattern since 2003. The trend registered by ozone was mainly due to the weather conditions experienced in 2003, which had an impact also on the level of concentrations registered in the following years. The following figure presents the development of some indicators of NO<sub>2</sub>, PM<sub>10</sub> and O<sub>3</sub> concentrations over the 1995-2006 period, using 2001 as base year.

**FIGURE 4.3 LOCAL AIR QUALITY: TREND OF POLLUTANTS CONCENTRATIONS BETWEEN 1995 AND 2006**



Note: 2001 values as based year. Source: Spanish Ministry of Environment.

### Conclusions

#### *The overall impact of the policy*

- 4.23 To date the improvements made in vehicle technology and in the introduction of cleaner fuels, have not been able to counterbalance the negative pressure on the environment generated by the increase experienced in transport demand (especially road and air transport).
- 4.24 In the road sector, the construction of new infrastructure, many of which were co-financed by EU Structural and Cohesion Funds, induced an increase in road passenger and freight demand, challenging the objective of increasing the modal share of more sustainable modes of transport such as rail.
- 4.25 Car travel demand has been increasing also in urban areas, although the type and quality of the offer of public transport has made significant progress. However, the introduction of urban mobility plans and the realization of dedicated infrastructure helped increase walking and cycling modal shares: among Spanish cities, Seville has been particular active in promoting walking and cycling through a close cooperation between the local University and the City Council.

#### *Contemporary developments- Lessons learnt and going forward*

- 4.26 GHG emissions from road and aviation are increasingly targeted as the key externalities to be addressed by the Spanish transport environmental policy. The recent changes made to the vehicle tax registration go in this direction.
- 4.27 The increase registered in air transport (current demand is almost twice that in 1990) is challenging the objective of reducing air and noise emissions from this mode of transport.

- 4.28 As part of the Agenda 21 Local initiative (Red de Redes de Desarrollo Local Sostenible), there are several ongoing actions at local level aimed at improving the environmental sustainability of transport activities.
- 4.29 Nevertheless, recently, the Commission has opened a procedure of infringement against Spain (and 9 other Member States) for not taking the actions needed (i.e. adoption of air quality plans) to apply for an extension of the timescales set for the more stringent EU air quality limits identified by Directive 2008/50/EC.
- 4.30 There is also scope for action to promote better coordination of the actions taken by different levels of government. In Spain, regional authorities are now responsible for the preparation of local mobility plans, but they often claim that the national government does not transfer them sufficient financial resources to implement them and they do not have any power of levying new taxes for this purpose.
- 4.31 With respect to freight transport, both rail and maritime transport could offer valid alternatives to road haulage in Spain. As discussed in Chapter 2 of this report, the opening of high speed lines dedicated to passenger traffic is freeing up train paths that can be now used for freight services.
- 4.32 However, significant investments in freight transport infrastructure (e.g. logistic centres) are needed. Indeed the EU is offering its contribution on this issue: for instance railways, high speed connections and ports are the priorities of the 2007-2013 Operating Programme which allocates EU funds to promote convergence of less developed regions.

## 5 Conclusions

- 5.1 Implementation of Common Transport Policy measures in Spain is contributing to the modernisation of infrastructure and the use of advanced technologies. It is also promoting the adoption of further actions in the areas of market liberalisation and protection of passengers' rights.
- 5.2 The CTP has enabled decisions to be made, which would have been postponed otherwise. This is particularly true for actions aimed at creating fairer conditions for competition, though the focus was more on competition within individual modes of transport than between them. In this sense, the CTP has contributed to the consolidation of an open air market in Spain, as well as to the beginning of liberalization of port services and rail freight.
- 5.3 However, with respect to market regulation, Spanish transport policy as a whole seems to have a strategy based mostly on regulation, and only when compelled by the European Commission will Spain take measures relating to liberalisation.
- 5.4 The road haulage transport market is still heavily regulated and the monopoly of RENFE in rail passenger transport has not as yet been challenged: for these sectors the CTP will take longer to achieve any results. In fact, entry into the passenger transport sector by newcomers is not expected before 2012.
- 5.5 In the area of protection of passenger rights, although the Commission is considering the launch of infringement proceedings against Spain relating to its failure to enforce Regulation 261/2004, the rail monopolist RENFE is actually able to provide examples of best practice which go well beyond the requirements of current or proposed European legislation, and that could serve as an example for other European rail operators.
- 5.6 At the local level, the CTP has also helped to disseminate best practice to Spanish transport policy makers of successful actions taken in other Member States, which in some cases has provided valuable inputs for the definition of the local transport strategies and plans.
- 5.7 Although this was outside the scope of this report, it must be pointed out that the development of Spanish transport infrastructures benefited substantially from the resources made available by the European Regional Development Fund (ERDF) and the Cohesion Fund (CF). In the 2000-2006 period the priority was given to road infrastructure (benefiting of 62% of ERDF expenditure) to facilitate the general economic development of the country. A significant amount of money (28% of ERDF resources) was spent also on rail infrastructure, targeted mainly at the construction of new high speed lines. In the current programming period for ERDF resources, 2007-13, the strategy has shifted to giving priority to railways, high speed connections and ports.