

Study on the Impact of Directive 96/67/EC on Ground Handling Services 1996-2007

Final Report

February 2009

Contact:

Airport Research Center

Bismarckstr. 61

52066 Aachen

Germany

Phone: +49 241 16843-0

Email: directive_review@arc-aachen.de

Website: www.airport-consultants.com

Version	Date	Change	Sign
V1.0	2008/09/01	Draft Version	RJ/RS/VS
V1.1	2008/11/05	Draft Version – minor adjustments on Report and Annex	RJ/RS/VS
V1.2	2009/02/13	Draft Version – revision of the report and annex	RJ/RS/VS
V 1.3	2009/03/10	Final Version – minor adjustments on Report	RJ/RS/VS

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Acronyms

ADR	Aeroporti di Roma
AENA	Aeropuertos Españoles y Navegación Aérea
ANA	Aeroportos de Portugal SA
AOC	Airport Operators Committee
ATM	Air Traffic Movements
AUC	Airport Users' Committee
BAA	British Airports Authority
BRS	Baggage Reconciliation System
CAA	Civil Aviation Authority
CBT	Computer Based Training
CSA	Czech Airlines
CUSS	Common use self service
CUTE	Common use terminal equipment
ENAC	Ente Nazionale per l'Aviazione Civile (Italian Civil Aviation Authority)
FOD	Foreign object damage
GH	Ground handling
GSE	Ground Service Equipment
IATA	International Air Transport Association

EU-OPS	Regulation 3922/91
LFV	Luftfartsverket (Swedish airport operator)
MCT	Minimum connecting time
MTOW	Maximum take-off weight of the aircraft.
NMS	New Member States
PAX	Passenger
PRM	Passenger with reduced mobility
SLA	Service Level Agreement

Glossary

Cascade sub-contracting:	The use of sub-contracting by a company, which is itself already sub-contracting.
Centralised Infrastructure / Facilities:	Facilities, which are provided by the airport and have to be used by ground handling company.
Centralised Service:	Services that are provided by the airport operator and cannot be done itself by the ground handling company.
Contestable market:	Within this questionnaire the contestable market is defined as the ramp handling market open to independent ground handling companies. The contestable market therefore excludes the market share comprised by self-handling airlines.
EU-15:	Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom.
Independent ground handling company:	Ground handling company, not linked to an airport operating company or an airline.
Market opening:	The year when the airport came under the Directive 96/67/EC (Either because of the eastern enlargement of the European Union or due to market growth of the airport).
MTOW:	Maximum take-off weight of the aircraft.
Multi station contracting:	A contract between the airline and the ground handling company, which includes the handling of an airline at more than one airport.
New Members States:	Bulgaria, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, Romania.
Ramp Agent:	Coordination and control of the handling processes on the apron.

Safety Management System (SMS):	A documented process for managing risks that integrates operations and technical systems to ensure aviation safety or the safety of the public.
Self-handling Airline:	<p>An airline that does the ground handling itself (excluding the handling of alliance partners).</p> <p>A ground handling company, which belongs to more than 50% to an airline counts as a self-handling airline.</p>
Sub-contract:	A contract assigning some obligations of a prior contract to another party.
Third party handling company:	<p>For a given airline, a company other than this airline, which is providing ground handling to this airline.</p> <p>A third party handling company can be either the airport operator, or another airline or an independent ground handling company.</p>
Third party handling airline:	Airline, which provides ground handling services for another airline.

IATA Codes and Airport Information

Region	IATA code	Airport	Country	Traffic volume in 2007		
				Pax in Mio.	cargo in (t)	ATM
EU-15	AMS	Amsterdam-Schipol	Netherlands	47,8	1.610.000	436.000
EU-15	ARN	Stockholm-Arlanda	Sweden	17,9	192.000	216.000
EU-15	ATH	Athens Eleftherios Venizelos	Greece	16,5	108.000	205.000
EU-15	BRU	Brussels Airport	Belgium	17,9	784.000	264.000
EU-15	CDG	Paris-Charles de Gaulle	France	59,7	2.053.000	544.000
EU-15	CGN	Colgone/Bonn	Germany	10,5	719.000	134.000
EU-15	CPH	Kastrup Airport Copenhagen	Denmark	21,4	396.000	288.000
EU-15	FCO	Leonardo da Vinci International (Fiumicino) Roma	Italy	32,9	155.000	335.000
EU-15	FRA	Frankfurt International Airport (Rhein-Main)	Germany	54,2	2.095.000	493.000
EU-15	HEL	Helsinki-Vantaa	Finland	13,1	145.000	178.000
EU-15	LHR	London-Heathrow	United Kingdom	67,9	1.314.000	476.000
EU-15	LIS	Lisbon TP	Portugal	13,3	829.000	140.000
EU-15	MAD	Madrid Barajas	Spain	52,1	322.000	483.000
EU-15	MAN	Manchester	United Kingdom	22,8	151.000	230.000
EU-15	VIE	Vienna-Schwechat International	Austria	18,7	272.000	255.000
NMS	BTS	M.R.Štefánika Bratislava	Slovakia	2,0	2.000*	22.000
NMS	BUD	Ferihegy Airport Budapest	Hungary	8,6	61.000	124.000
NMS	LCA	Larnaca Airport	Cyprus	no data	no data	no data
NMS	OTP	Bukarest Henri Coanda International	Romania	4,9	411.000*	71.000*
NMS	PRG	Ruzyne Internatonial Prague	Czech Republik	12,4	55.000	175.000
NMS	RIX	Riga International	Latvia	3,2	8.000	47.000
NMS	SOF	Sofia Airport	Bulgaria	2,8	17.000	43.000
NMS	WAW	Warsaw Frederic Chopin	Poland	9,3	40.000	133.000

* data from desk research

Source: Interviews performed by the Airport Research Center

Table 0-1: Airport information – Sample: visited airports in the EU

Region	IATA Code	Airport	Country	Traffic Volume in 2007		
				Pax in Mio.	cargo in (t)	ATM
EU-15	AGP	Pablo Ruiz Picasso Málaga	Spain	13,6*	6.000*	130.000*
EU-15	ALC	Alicante El Altet	Spain	9,1	5.000	80.000
EU-15	BCN	Barcelona El Prat De Llobregat	Spain	32,8	97.000	352.000
EU-15	DUB	Dublin Airport	Ireland	23,3	133.000	212.000
EU-15	DUS	Duesseldorf International Airport	Germany	17,8	58.000	222.000
EU-15	FAO	Faro	Portugal	5,5	0.7*	40.000
EU-15	FMO	Muenster/Osnabrueck Greven	Germany	1,6	14.000	39.000
EU-15	HAJ	Hanover-Langenhagen	Germany	5,7	7.000	88.000
EU-15	HAM	Hamburg Airport	Germany	12,8	37.000*	151.000
EU-15	IBZ	Ibiza Airport	Spain	4,8*	4.000*	58.000*
EU-15	LEJ	Leipzig-Halle	Germany	2,7	101.000	51.000
EU-15	LGW	London-Gatwick	United Kingdom	35,2*	171.000*	261.000*
EU-15	MAH	Menorca Mahon Airport	Spain	2,8*	4.000*	34.000*
EU-15	MUC	Munich Airport	Germany	34,0*	258.000*	410.000
EU-15	NUE	Nuremberg	Germany	4,2	107.000	81.000
EU-15	OPO	Porto Francisco Sá Carneiro	Portugal	4,0	361.000	51.000
EU-15	ORK	Cork Airport	Ireland	3,2	13.000	71.000
EU-15	ORY	Paris-Orly	France	26,4	96.000	233.000
EU-15	PMI	Son San Joan Airport Palma de Mallorca	Spain	23,2	23.000	197.000
EU-15	SNN	Shannon	Ireland	3,6	48.000	48.000
EU-15	STN	London-Stansted	United Kingdom	22,8*	203.000*	182.000*
EU-15	STR	Stuttgart Echterdingen	Germany	10,3	20.000	165.000
EU-15	SXF	Berlin-Schoenefeld	Germany	6,3	4.000	66.000
EU-15	TXL	Berlin Tegel	Germany	13,4	25.000	151.000
NMS	LJU	Ljubljana Airport	Slovenia	1,5	5.000	27.000
NMS	MLA	Malta International Gudja	Malta	3,0	no data	27.000
NMS	TLL	Ulemiste Airport Tallinn	Estonia	1,7	23.000*	39.000*
NMS	VNO	Vilnius Airport	Lithuania	1,7	6.000	33.000

* data from desk research

Source: Interviews performed by the Airport Research Center

Table 0-2: Airport information – Sample: internet survey

1 Management Summary

1.1 Introduction

Since the introduction of Council Directive 96/67/EC of the 15th of October 1996 on access to the ground handling market at Community airports, ground handling markets experienced a very dynamic phase of development and growth. Additionally, with the entrance of the New Member States into the European Union, the European air transport market has changed significantly. In preparation for a possible revision of the Directive, the European Commission assigned the Airport Research Center, in cooperation with MVV Consult, to carry out this review on the impacts of the Directive 96/67/EC on the ground handling markets at Community airports.

The main objectives of the study are to update the SH&E report (published for the European Commission in 2002) and to focus on employment, safety and security issues as well as on the ground handling markets in the New Member States, which came under the Directive in 2004.

1.2 Approach / Methodology

The study methodology comprises of 3 pillars:

Desk research and analyses: This part of the study consisted of collecting data and of analyzing the Directive 96/67/EC as well as documents (e.g. legal cases and studies).

Preparation of the questionnaire and definition of the airport sample: The study is mainly based on interviews with stakeholders from ground handling markets at European airports (airport operators, airlines, ground handling companies) as well as with associations and authorities. Since not all European airports under the Directive could be visited for on-site interviews, a representative sample of 23 airports was selected for interviews and in depth analyses of ground handling markets.

Internet survey: In parallel to the interviews questionnaires were provided for stakeholders at the remaining airports within the scope of the Directive. Furthermore, Civil Aviation Authorities (CAA) in all EU countries were contacted to submit information and comments on the Directive.

1.3 Results of the study

General Conditions in the EU Member States

In compliance with the provisions of the Directive 96/67/EC, the Member States introduced various types of liberalisation. While in some Member States the access to ground handling markets is fully liberalised (i.e. every handling provider is allowed to be active at the airport

without attending a tender procedure), in other countries the access is limited. In accordance with the Directive, in those countries, handling licences for all or some limitable categories of ground handling such as baggage (cat 3), freight and mail (cat 4), ramp (cat 5) and fuel and oil (cat 7) handling are tendered and granted for seven years in maximum. Other countries liberalised the access at selected airports.

Analyses of competition of ground handling markets

Generally, the number of self-handling airlines and third party handling companies increased since the introduction of the Directive. However, the findings vary between the airports significantly. At airports with former handling monopolies the number of third party handlers increased more than at airports which were already liberalised before the introduction of the Directive.

By analysing the restricted handling categories, similarities in the number of ground handling companies can be seen within category 3 to 5: while the number of self-handling airlines remained stable or increased slightly, the number of third party handlers increased more significantly. However, regarding fuel and oil handling the number of handlers remained stable: the opening of the market did not have a significant influence on this ground handling activity.

By comparing the changes in the EU-15 and in the New Member States, it can be concluded that the change was more significant in the EU-15 countries. This could be due to the limited time between the opening of the market in 2004 and the year of the study. Therefore the New Member States are still in the implementation phase.

In accordance with those developments in the number of handlers, the main changes of stakeholder specific market shares can be observed at airports where the airport operator was in monopoly previously. As a general rule for most airports, the market shares of independent ground handling providers increased, while market shares of airport ground handling subsidiaries and handling airlines decreased. The most important changes in the development of the market shares have taken place in the period from 1996 to 2002.

To receive a better picture of competition at the analysed airports, stakeholders were requested to estimate the size and the structure of the contestable market. The estimations of the contestable markets varied largely between the analysed airports.

However, two factors are viewed as limiting the opening of the market: a high volume handled by the main carriers; and the share of ground handling volume which the airlines handle themselves. Since the share of handling airlines is however decreasing over time, the contestable market has increased.

For the New Member States, the opening of the market at certain airports is still on-going (or for the future): and it seems that the implementation of the Directive in the New Member States is still to be enhanced.

Changes in handling prices

Although the perception of price changes differs between the stakeholders, it might be concluded, that since the introduction of the Directive, prices and the subsequent increase in competition in ground handling markets, prices have decreased, even though the Directive is not the single driver of the developments.

With a focus on the EU-15, prices decreased with a higher intensity at airports with a former handling monopoly than at airports which already had open markets. Considering the findings regarding the ground handling markets in the New Member States, it could be concluded that, in general, prices for ground handling services decreased since the introduction of the Directive. However, at some New Member States airports competition had not started yet whereby prices did not change either and could still decrease in the future.

Participation of Airport operators and airlines in ground handling markets

Due to historical and strategic reasons, many airports provide ground handling services in competition with handling airlines and independent third party handling companies. With a focus on the EU-15 Member States, the number of airports actively involved in ground handling markets did not change significantly in the time between 1996 and 2007. However, market shares in the EU-15 and the New Member States decreased and several airport operators decided to sell their ground handling activities. At airports where the airport operator stayed active, the market shares of airport handling companies decreased but remained on a high level.

Airlines participate in ground handling markets as customers as well as self handlers and third party suppliers. Due to economies of scale, most self-handling airlines provide ground handling services to other airlines. It can be noted that a generalisation of this principle is currently developing: on a reciprocal basis, some network carriers provide ground handling services for their alliance partners, while other network airlines select other suppliers.

Centralized Infrastructure / Access to installations

According to Article 8 of the Directive, Member States are authorised to reserve the management of defined infrastructure elements used for the supply of ground handling services for the airport operator or other management bodies, in case complexity, costs or environmental impacts do not allow the division or duplication.

Analysing the results from most of the airports, centralised facilities are defined (which consist mostly of baggage sorting, de-icing, water purification, fuel-distribution systems etc.), while a minority did not see a benefit to declare several elements such as centralised infrastructure even though those are provided by the airport operator.

The problems which were encountered are mostly due to capacity and space constraints at the airport and the quality of the facilities. Furthermore users of the centralised Infrastructure such as independent ground handling companies and handling airlines criticised high costs for the centralized infrastructure.

Airport Users' Committee (AUC)

In compliance with the Directive, almost all airports set up an AUC. Based on the analysed questionnaires, the AUC is mainly consulted on topics related to ground handling, charges and tender procedures. The influence of the AUC on decisions varies. While the AUC votings at all airports are not decisive, at some airports the position of the AUC might be stronger than at other airports.

Tender process

The majority of airports decided to limit the market access and set up tender procedures. Therefore at most airports two licences are tendered and at some even three for each ground handling restricted category. The duration of licence validity and the tender procedure differs significantly. At the remaining airports, self-handling airlines and ground handling suppliers could enter the ground handling markets and provide services without tender procedures. At some airports in the New Member States, no tender process which complies with the provisions of the Directive has taken place yet since the airports are still in the implementation phase.

Sub-contracting

At most airports, sub-contracting is part of the ground handling industry. Cascade sub-contracting in contrast, is only practised at a minority of airports due to safety and security concerns stated by some stakeholders.

According to the comments stated in the questionnaires, at most airports the (cascade) sub-contracting parties need to be approved by the authority or the airport management body in order to operate at the airport.

Employment

Since the implementation of the Directive as well as the differing legal framework conditions, the employment related developments in ground handling markets vary between the Member States and airports significantly. A broad variety of influencing variables (social protection, collective labour agreements, and specifications) affects social and employment conditions in ground handling at a national level, for which reason no clear conclusions on the impact of the Directive can be drawn.

Staff Safety

According to the analysis of the submitted benchmarks, a majority indicated increasing or stable levels of safety issues since the introduction of the Directive (i.e. the number of safety issues increased over time).

The increase could have been due to the implementation of the safety management system which could have led to more events being reported. But it could also have been due to increasing traffic volume at airports.

Security

Due to the absence of data provided by stakeholders, no analysis of the security impacts of the Directive could have been carried out in the framework of this study.

2 Objectives and methodology of the study

With the adoption of the Directive 96/67/EC in October 1996, the liberalisation of the ground handling markets at Community airports was initialised. Between 1997 and 2000 the EU-15 member states transposed the opening of ground handling markets by implementing the Directive into the national legal framework. The 12 New Member States applied and respectively prepared the application of the Directive since their entrance into the European Union between 2004 and 2007.

In accordance with the liberalisation of the air transport market in the European Union, the Directive 96/67/EC focuses on the strengthening of competition and by implication

- to increase the efficiency within the ground handling sector,
- to decrease the average costs,
- to increase the quality levels of service,
- to enhance the choice for airlines.

With the objective to review the impact of the Directive, the European Commission appointed SH&E International Air Transport Consultancy (SH&E) in 2001 to undertake a 'Study on the quality and efficiency of ground handling services at EU airports as a result of the implementation of Council Directive 96/67/EC. The central findings of the impact assessment, completed in 2002, are in summary:

- decrease in terms of price for ground handling services,
- since the perception of the stakeholders vary significantly, no conclusions on developments regarding quality are drawn,
- increase of competition by an increasing number of independent third party handling companies and stagnation in the number of self-handling airlines

Since the completion of the SH&E report ground handling markets experienced a very dynamic phase of development and growth. Additionally, with the entrance of the New Member States to the European Union from 2004, the common European air transport market has changed significantly.

The present study is carried out by ARC, in conjunction with MVV consulting. Undertaken on behalf of the European Commission, it provides a factual review of the impacts of the Directive 96/67/EC on the ground handling market at Community airports from 1996 to 2007.

2.1 Task

The objective of this study is to update the SH&E report and additionally to focus on employment, safety and security issues as well as on the ground handling markets in the New Member States, which came under the Directive from 2004.

Therefore the impact of the Directive on airports, airlines, ground handling companies and their employees are analysed within the scope of the initial study:

- Number of ground handling service providers
- Price developments in ground handling markets since implementation of the Directive
- quality developments of ground handling services
- level of competition

Furthermore the study considers additional categories in relation to the ground handling services:

- Ground handling staff safety
- Security at airports
- Employment conditions for ground handling staff

Regarding the ground handling services, defined within the Directive, the study focuses on limitable categories:

- Baggage handling
- Ramp handling
- Freight and mail handling
- Fuel and oil handling

In compliance with the Directive services such as passenger handling (e.g. Check-in etc.), aircraft maintenance, ground administration and supervision, flight operations and crew administration, surface transport, other aircraft services need to be fully liberalised. Therefore those categories are not considered within this study.

2.2 Approach / Methodology

According to the work plan the study is based on the following work phases:

- Desk research and analyses: Data collection and analysis of the Directive 96/67/EC as well as documents (e.g. legal cases) and studies prepared in this context. As this study is prepared as an update of the SH&E report, the findings and the methodical approach are reviewed in detail.

- Preparation of the questionnaire and definition of the airport sample: Due to the proposed methodology the study is based on interviews and an internet survey with stakeholders from ground handling markets at European airports as well as with associations and authorities. Since not all European airports under the Directive can be visited for on-site interviews, a representative sample of airports needs to be defined. In consulting with the Commission, 15 major airports in EU-15 Member States and eight representative airports located in the New Member States are selected for interviews and in depth analyses of ground handling markets. In order to assure a comprehensive methodological approach and compatibility with results from the previous study, the selection of EU-15 airports is harmonized with the airport sample selected by SH&E in 2002.

In the prearrangement for the interviews, two draft questionnaires are set up. Even though both are thematically identical, one is dedicated to stakeholders at airports in EU-15 Member States and covers the time between 1996 and 2002 according to the study of SH&E and additionally until 2007. The other questionnaire provided for stakeholders at airports in the New Member States covers the time between 2004 and 2007. After discussions with associations and stakeholders, both questionnaires were adjusted and finalized. The questionnaires are provided within the Annex.

- On-site interviews: Based on the questionnaires this work phase consists of interviews with airport operators, airlines, ground handling companies and their associations. To ensure the accuracy of the information, gathered during the interviews, and to avoid any misinterpretations, following every meeting, we provided the interviewees with minutes. Moreover, we encouraged the stakeholders to submit additional information, which highlighted their point of view. The schedule of the on-site interviews is summarised in Table 2-1 and Table 2-2 below.

Region	Airport	Date of visit	Stakeholders consulted		
			Airport operator	Airlines/AUC/AOC	Independent ground handling providers
EU-15	AMS	17.04.2008	Schiphol Group	Martinair, KLM Jet Center, KLM Ground Services	---
EU-15	ARN	28.05.2008	LFV Group	SAS Ground Services	---
EU-15	ATH	02.07.2008	Athens International Airport S.A.	Aegean, Olympic Airways	Swissport, Goldair Handling
EU-15	BRU	14.05. / 26.05.2008	The Brussels Airport Company	United Airlines	Aviapartner, Flightcare
EU-15	CDG	23.05.2008	Aéroports de Paris Group	---	Group Europe Handling
EU-15	CGN	22.04.2008	Flughafen Köln/Bonn GmbH	---	Aviapartner
EU-15	CPH	24.04.2008	Københavns Lufthavne A/S	---	---
EU-15	FCO	20.05.2008	Aeroporti di Roma ADR	Alitalia Handling	FlightCare Italia, Aviapartner
EU-15	FRA	29.04. / 12.06.2008	Fraport	Lufthansa	Acciona
EU-15	HEL	29.05.2008	Finavia, Airpro	Blue1	Servisair Finland Oy*
EU-15	LHR	05.06. / 06.06.2008	BAA	Air Canada	Aviance UK, ServisAir
EU-15	LIS	05.05. / 06.05.2008	ANA Aeroportos de Portugal, Portway	---	GroundForce
EU-15	MAD	27.05.2008	AENA	---	---
EU-15	MAN	04.06.2008	Manchester Airport Group	---	ServisAir
EU-15	VIE	21.05.2008	Flughafen Wien AG	Austrian Airlines	Fraport Austria*
NMS	BTS	21.05.2008	Airport Bratislava, a.s. (BTS)	Slovakia Air Services	---
NMS	BUD	22.05.2008	Budapest Airport Zrt.	Malev Ground Handling	Celebi
NMS	LCA	01.07.2008	Larnaca International Airport	---	2 Serve
NMS	OTP	no meetings could be arranged			
NMS	PRG	29.05.2008	Prague International Airport, Prague Airport Handling	Czech Airlines	---
NMS	RIX	18.07.2008	Riga International Airport RIX	---	---
NMS	SOF	30.05.2008	Sofia Airport	---	---
NMS	WAW	15.05.2008	Polish Airports' State Enterprise, Warsaw Airport Services	---	---

* Participation at the internet based survey

Table 2-1: Overview of visited airports and consulted stakeholders

Association		Date of visit	Represented Stakeholder			
			Airports	Airlines	Independent ground handling providers	Unions
Airports Council International (Europe)	ACI-Europe	19.05.2008	X			
Arbeitsgemeinschaft Deutscher Verkehrsflughäfen	ADV	30.04.2008	X			
Association of European Airlines	AEA	19.05.2008		X		
European Transport Workers' Federation	ETF	03.06.2008				X
International Air Carrier Association	IACA	26.05.2008		X		
International Aviation Handlers' Association	IAHA	14.04.2008			X	

Table 2-2: Overview of consulted associations and unions

- Internet survey: In parallel, both questionnaires are provided for stakeholders at the remaining airports within the scope of the Directive. Furthermore, Civil Aviation Authorities (CAA) in all EU countries are contacted to submit information and comments on the Directive.

Region	Airport	Participation internet based survey		
		Airport operator	Airlines/AUC/AOC	Independent ground handling providers
EU-15	AGP	AENA	---	---
EU-15	ALC	AENA	---	---
EU-15	BCN	AENA	---	---
EU-15	DUB	Dublin Airport Authority plc	---	---
EU-15	DUS	Flughafen Düsseldorf GmbH, Flughafen Düsseldorf Ground Handling GmbH	AUC	---
EU-15	FAO	ANA	---	---
EU-15	FMO	FMO Flughafen Münster/Osnabrück GmbH	---	---
EU-15	HAJ	---	AUC	---
EU-15	HAM	Flughafen Hamburg GmbH	---	Acciona Airport Services
EU-15	IBZ	---	---	Acciona Airport Services SA
EU-15	LEJ	PortGround GmbH	---	---
EU-15	LGW	BAA	---	---
EU-15	MAH	---	---	Acciona Airport Services SA
EU-15	MUC	Munich Airport International - Business Division Ground Handling	AOC	---
EU-15	NUE	Flughafen Nürnberg GmbH	AUC	---
EU-15	OPO	ANA	---	---
EU-15	ORK	Cork Airport Authority	---	---
EU-15	ORY	AEROPORTS DE PARIS	---	---
EU-15	PMI	AENA	---	Acciona Airport Services SA
EU-15	SNN	Shannon Airport Authority	---	---
EU-15	STN	BAA	---	---
EU-15	STR	Flughafen Stuttgart GmbH	AUC	---
EU-15	SXF	---	AUC	Acciona Airport Services
EU-15	TXL	---	---	Acciona Airport Services
NMS	LJU	Aerodrom Ljubljana, d.d.	---	---
NMS	MLA	Malta International Airport plc	---	---
NMS	TLL	---	Estonian Air	---
NMS	VNO	SE Vilnius International Airport	---	---

Table 2-3: Overview of internet survey participants

- Analyses of the findings: All information is summarised and reviewed according to the completeness, representation and plausibility. Based on this collected and compiled data the findings on every category are analysed and assessed. With a focus on the airports in the EU-15, the analyses consider the years 1996, 2002 and 2007, to ensure compatibility with the SH&E report as well as to cover the years since the introduction of the Directive. Concerning the airports in the New Member States, analyses are carried out for the period 2004 and 2007.

Even though all airports and stakeholders under the Directive are contacted and requested to submit information on this impact study, the analyses will focus on findings and insights received in the on-site interviews, because the number of different stakeholders as well as their geographic distribution were set in an objective

of representativeness. The study will be completed by the results and insights received from the internet based survey.

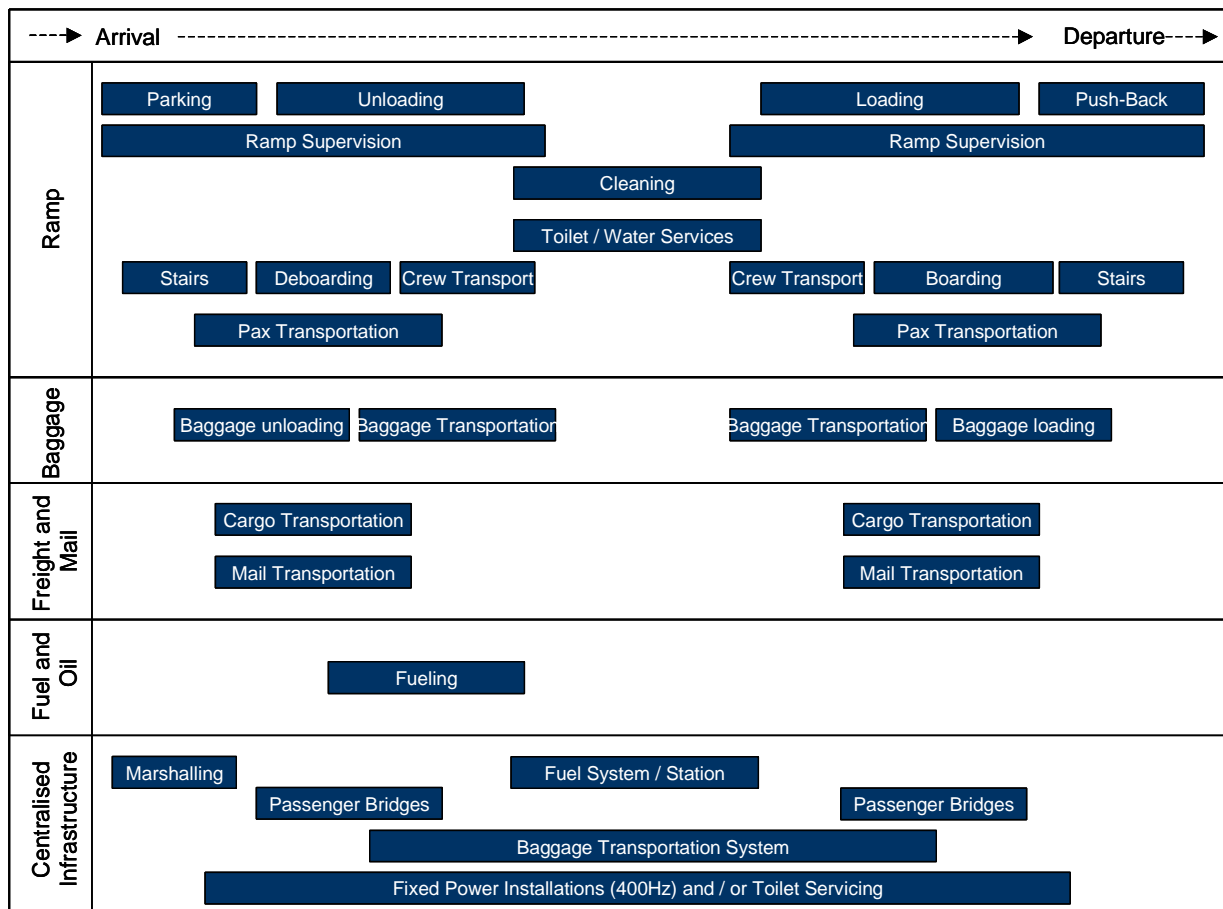
- Preparation of the report: All findings are compiled and summarized within the present report. More details about the presentation of results in the report can be found in the introduction of chapter 4.2.
- Limits of the approach: Besides the regulatory framework, the European ground handling markets are subject to a wide range of influencing variables, which effect growth, competition and structural changes. As a very dynamic sector, ground handling markets change frequently and gathered information could change its validity. Furthermore deviating legal frameworks and provisions at national levels affect the impacts of the Directive. Considering these limiting factors, changes, developments, trends and tendencies are highlighted.

The study consists of three sections. In the first part (chapter 3) the general provisions of the Directive 96/67/EC as well the main findings of the SH&E report are shown. Part two (chapter 4) summarises the results of the impact assessment. The last part gives the main conclusions. Complementary documents are given in Annex.

3 Background of the ground handling market in the EU

3.1 The structure of ground handling markets – overview

Between arrival and departure, an aircraft is subject to various ground handling services. In correspondence to the categories of ground handling, defined in the Directive, types of air side related ground handling services are presented in Figure 3-1.



Source: C. Templin: www.dvbwg-rhein-main.de/060530_templin_DeregulierungBVD.pdf

Figure 3-1: Overview on airside related ground handling services.

Beside others, airport operators, airlines and independent ground handling companies are the most important stakeholders in ground handling markets. Generally, airport operators provide the infrastructure and in some cases they provide ground handling services to airlines. The role of airports is discussed within chapter 4.6. Airlines are involved as clients for ground handling services. Some carriers, especially network carriers, supply themselves as self-handler, mostly at their home base. Moreover, most self-handling airlines provide ground handling services to other airport users as a third party supplier. The role of airlines is discussed within chapter 4.7. Independent ground handling companies focus only on the ground

handling business and are not controlled by either airports or airlines. A simplified structure of the ground handling markets is shown in Figure 3-2.

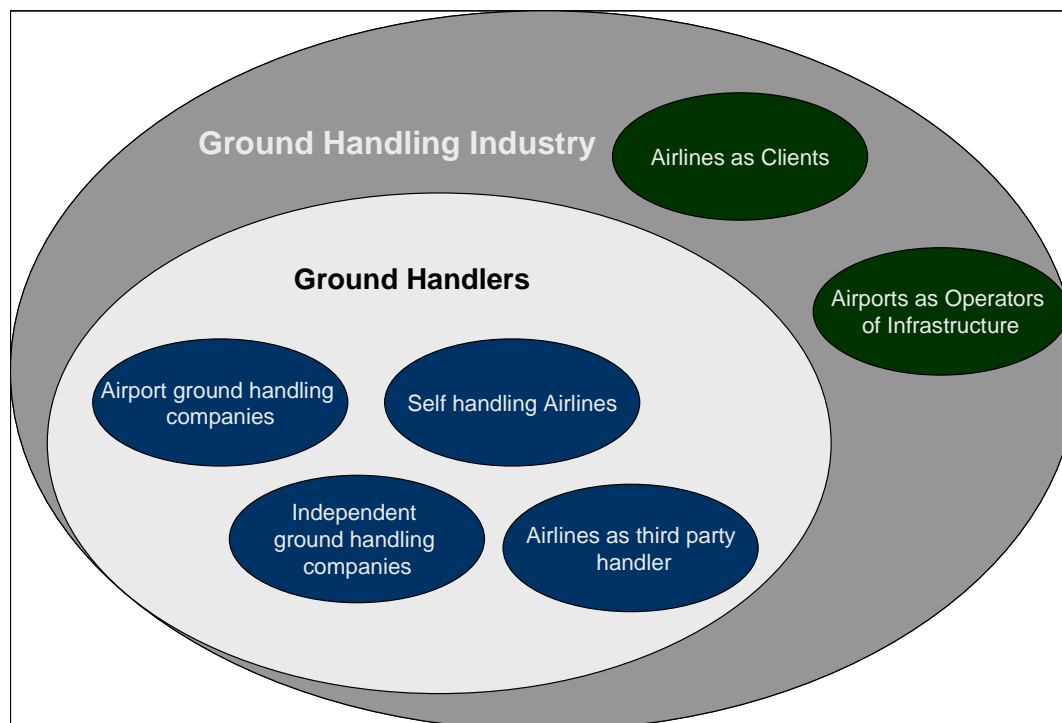


Figure 3-2: Overview on ground handling industry

3.2 The Council Directive 96/67/EC

In coherence with the gradual introduction of the common European air transport policy, in October 1996, the Council of the European Union adopted the Directive 96/67/EC on ground handling markets. Within a time-span between 1997 and 2000, the EU-15 Member States implemented the Directive into the national legal framework while the New Member States applied and respectively prepared the application of the Directive since their entrance into the European Union between 2004 and 2007.

The objective of the Directive is to increase efficiency, quality and competition as well as to reduce the average prices, related to ground handling activities at Community airports.

As key essentials the application of the Directive 96/67/EC requires the following

1. Freedom of third party handling (Article 6): At airports with a traffic volume of two million passengers or 50.000 t of freight per annum, the Member States are allowed to limit the number of suppliers for ground handling services to no fewer than at least two for the following categories:
 - Baggage handling (category 3),
 - Ramp handling (category 5),
 - Fuel and oil handling (category 7),

- Freight and mail handling (category 4).

Additionally, at least one of the suppliers must be independent from the management body of the airport and any dominant airline (market share of more than 25 percent of total airport passengers during one year period) at the specific airport.

2. Freedom of self-handling (Article 7): The provision of self-handling applies to every airport in the Community, regardless of its specific traffic volume. Moreover, for airports with more than 1 million passengers, respectively 25.000 tonnes of cargo, member states are allowed to limit the number of self-handling airlines to no fewer than at least two for the following categories:

- Baggage handling (category 3),
- Ramp handling (category 5),
- Fuel and oil handling (category 7),
- Freight and mail handling (category 4).

3. Exemptions (article 9): At an airport, where there are specific constraints of available space or capacity, arising in particular from congestion and the area utilization rate, make it impossible to implement the provision of the Directive, the Member States are allowed to limit the number of suppliers for ground handling services. Therefore ground handling services, provided by third party handling companies, could be reserved to one single supplier regarding the listed categories. For all other categories of ground handling, the number of suppliers can be limited, but to no fewer than two for each category of which one needs to be independent.

In respect to self-handling, the Member States may decide to ban or limit any activities, related to the above listed categories of ground handling to one single user. For all other categories of ground handling, the number of self-handling airlines can be limited.

Generally, every exemption can be approved for a limited time. The Member States, which decide to constrict market access more than foreseen by the articles on the freedoms on self- and third party handling, need to consult the European Commission and indicate the temporary character. Every exemption needs to be assessed and admitted by the European Commission.

Airport	Date of decision of Commission	Type of exemption	Exemption granted until
Frankfurt	14 January 1998	To reserve the categories 3, 5.4, 5.5, 5.6 and the handling of freight and mail to Frankfurt airport in parts of Terminal 1; one airport user should be allowed the right to self-handle	1 January 2001
Hamburg	30 October 1998	To prohibit self handling for category 5.4 as from 1 January 1999 where the German authorities have not notified the Commission by that date that a user has begun self-handling operations in the space available	31 December 2000
Stuttgart	30 October 1998	To prohibit self handling for baggage transport between the air terminal and the aircraft as defined in category 5.4 To limit self handling to a single user for the categories 4, 5.5, 5.6 and 5.4	31 December 2000
Cologne/Bonn	30 October 1998	To limit self handling to a single user for the categories 3, 4 and 5	Not granted
Paris CDG	27. April 1999	Terminal CDG 2: To ban self handling and to reserve for the airport the provision of services for category 5.4 (excluding halls A, B, D and F)	31 December 2000
		Terminal T 9: - To reserve for the airport the provision of services to third parties for category 3 - To limit to two the number of service providers and users authorised to self handle for category 2	1. April 2000
Berlin Tegel	27. April 1999	To ban self handling for the categories 3, 5.4 and 5.6 To reserve for Berlin Tegel airport the provision of services to third parties for the categories 4, 5.4 and 5.6	31 December 2000
Dusseldorf	14 January 1998	To ban self handling for the categories 5.1, 5.2, 5.4, 5.5 and 5.6 To limit self handling to two users for the categories 6.1, 6.2 and 6.3 To reserve for Dusseldorf airport the provision of services to third parties, for the categories 5.1, 5.2, 5.4, 5.5 and 5.6 To limit to two the suppliers of handling services for third parties for the categories 6.1, 6.2 and 6.3	31 December 2000
	5 January 2000	To ban self handling To reserve for Dusseldorf airport the provision of services to third parties, for the categories 4.1, 5.4, 5.5 and 5.6	31 December 2001
Funchal	10 January 2000	To restrict self-handling to a single user for the categories 3, 4 and 5.4	31 December 2000
Oporto	10 January 2000	To limit to four the number of users authorised to self-handle for category 2	Not granted

Source: DG TREN, SH&E report (2002)

Table 3-1: Exemptions at airports under the Directive since 1996.

4. Centralised infrastructures (Article 8): The Member State is allowed to reserve the management of defined infrastructure elements, used for the supply of ground handling services such as the baggage handling system, for the airport operator or other management bodies in case that costs are incurred or there is environmental impact which does not allow for division or duplication. As a result it could be defined as compulsory for suppliers of ground handling services, to use these infrastructure elements. The Member State shall ensure, that the management of the centralised

infrastructure is transparent and objective and that the access is non discriminatory for all airport users.

For any further analyses in depth and information on detailed provisions, the Directive 96/67/EC is provided as a document within the Annex.

In respect to the dynamic traffic growth of many Community airports, the number of airports above the thresholds of one million and two million passengers respectively 25.000 and 50.000 tonnes of freight per annum, defined in the Directive, changes over time. For information purposes, every year the European Commission publishes a table, which indicates the airports under the Directive, according to their traffic volume. For the year 2007, the list of airports, categorized in correspondence to the thresholds, is presented below.

Region	Country	Airports > 2 million passengers / 50.000 tons of freight	Airports > 1 million passengers / 25.000 tons of freight
EU-15	Austria	Vienna	Salzburg
EU-15	Belgium	Brussels, Charleroi, Oostende-Brugge, Liège	
EU-15	Denmark	Copenhagen	Billund
EU-15	Finland	Helsinki	
EU-15	France	Paris-CDG, Paris-Orly, Nice, Marseille, Lyon, Toulouse-Blagnac, Bâle-Mulhouse, Bordeaux, Nantes, Strasbourg	Pointe-à-Pitre-Le Raizet, Montpellier, Fort de France-Le Lamentin, Beauvais, Chalons-Vatry, St. Denis, Tahiti
EU-15	Germany	Berlin-Schoenefeld, Bremen, Dortmund, Berlin-Tegel, Hamburg, Duesseldorf, Frankfurt/Main, Hahn, Hanover, Leipzig-Halle, Stuttgart, Munich, Nuremberg, Cologne-Bonn	Dresden, Munster/Osnabrueck, Paderborn-Lippstadt
EU-15	Greece	Athens, Iraklion, Salonika, Rhodes, Kerkira	Chania, Kos
EU-15	Ireland	Cork, Dublin, Shannon	
EU-15	Italy	Roma-Fiumicino, Roma-Ciampino, Milano-Malpensa, Milano-Linate, Napoli, Bologna, Catania, Palermo, Bergamo, Venezia, Torino, Verona, Cagliari, Pisa	Olbia, Firenze, Bari, Lamezia, Genova, Treviso, Alghero
EU-15	Luxembourg	Luxembourg	
EU-15	Netherlands	Amsterdam	Maastricht-Aken , Rotterdam
EU-15	Portugal	Lisboa, Faro, Funchal, Oporto	
EU-15	Spain	Alicante, Barcelona, Bilbao, Fuertaventura, Girona, Gran Canaria, Ibiza, Lanzarote, Madrid, Malaga, Minorca, Palma de Majorca, Seville, Tenerife Norte, Tenerife Sur, Valencia	Valencia, Almeria, Asturias, Jerez, Murcia, La Palma, Reus, Santiago, Vigo, Vitoria, La Coruna
EU-15	Sweden	Stockholm-Arlanda, Gothenburg-Landvatter	Stockholm-Bromma, Stockholm-Skavsta, Malmo-Sturup
EU-15	United Kingdom	Aberdeen, Belfast-International, Belfast-City, Birmingham, Bristol, Edinburgh, East-Midlands, Glasgow, Liverpool, London-Heathrow, London-Gatwick, London-Stansted, London-City, Luton, Manchester, Newcastle, Leeds-Bradford, Nottingham East Midlands, Prestwick	Cardiff, Southampton
NMS	Bulgaria	Sofia	Varna, Burgas
NMS	Cyprus	Larnaca	Paphos
NMS	Czech Republic	Prague	
NMS	Estonia		Tallinn
NMS	Hungary	Budapest	
NMS	Latvia	Riga	
NMS	Lithuania		Vilnius
NMS	Malta	Luqa-Malta	
NMS	Poland	Warsaw, Krakow	Katowice, Gdansk
NMS	Romania	Bucharest Henri Coanda	
NMS	Slovakia	Bratislava	
NMS	Slovenia		Ljubljana

Source: Official Journal of the European Union

Table 3-2: EU-Airports under the Directive 96/67/EC.

3.3 SH&E report (2002)

In 2001 the European Commission appointed the Consultancy SH&E Limited to carry out the 'Study on the quality and efficiency of ground handling services at EU airports as a result of the implementation of Council Directive 96/67/EC'. Methodically, besides desk research and analyses, the study is based on interviews and a postal survey. Stakeholders at 33 European airports as well as associations and authorities were visited for interviews, additionally stakeholders at 48 airports were considered by the postal survey. After the submission of the draft report and discussion with the stakeholders, the study was finalized and published in 2002.

Summarising the results, the SH&E study gives an overview on the impacts of the Directive 96/67/EC and highlights the developments of European ground handling markets (EU-15) for the period from 1996, when the Directive was adopted, until the year of reference in 2001.

The main findings of the report are:

- Number of handlers: Generally, with the opening of the ground handling markets the number of suppliers for restricted services increased. Therefore, the number of third party handling companies at Community airports increased, while the number of self-handling airlines remained stable.
- Changes in handling prices: The prices for ground handling services decreased throughout the EU. Moreover, in Member States with former handling monopolies prices decreased more significantly than in states which already had open markets.
- Changes in handling quality: The perception of quality changes varies between airports and stakeholders so therefore no general conclusion is drawn.

Within the full report, besides others, more findings on the transposition of the Directive into national legislation, the tender process, the centralised infrastructure and the contestable market are introduced. Even though some results are valid more universally, in many cases the views on the topic differed between the suppliers of ground handling services, airport operators and air carriers that self-handle or provide handling services to third parties respectively.

The full report of SH&E on ground handling services at EU airports can be found on the website of the Commission.

3.4 Report from the Commission / Draft report European Parliament resolution (2007)

In compliance with Article 22 of the framework, the European Commission set up a report on the application of the Directive 96/67/EC in 2007 (the report is available on the European Commission website ¹). Referring to the SH&E study, the Commission highlights the impacts of the Directive on ground handling markets at Community airports. In addition, the report focuses on the implementation process in the New Member States as well as on ground handling and security.

- Application of the Directive in the 10 New Member States since their admittance in 2004: According to the thresholds, defined in the Directive, 13 airports in 9 New Member States came under the Directive since 2004. Furthermore, the Commission states, that in the majority of these Member States the application appears to comply fully with the provisions of the Directive. In those cases, where the compliance with the Directive seems to be insufficient, the Commission underlines its willingness to achieve the full application of the Directive.
- Ground handling and Security: Based on security inspections and annual reports on national quality control, the Commission states, that no indications could be found, which prove any correlation between the number of ground handling providers and the number of security events. The Commission points out, that common security requirements for staff and vehicles in the field of aviation security are laid down in the Regulations (EC) No 2320/2002, (EC) No 622/2003 and (EC) No 1138/2004. Those regulations require, beside other measures, physical screenings of staff and vehicles as well as background checks, identity controls and security training of staff entering security - sensitive areas. The common security requirements have proven, that an adequate level of security is ensured, irrespective of the number of ground handling suppliers at an airport.

Finally, the report of the Commission provides an outlook on the possible revision of the Directive. Under consideration of comments received from stakeholders and Member States during the last years, the Commission proposes to improve the Directive by the introduction of simplifications and clarifications on several provisions. A future proposal could aim to provide a further market opening accompanied by requirements on insurance cover, quality standards applicable at airports and improvements of the selection procedure of service suppliers.

In reference to the report of the Commission on the application of the Directive, the European Parliament applied to a motion for a European Parliament Resolution on airport capacity and

¹ <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52006DC0821:EN:HTML:NOT>

ground handling: towards a more efficient policy (2007/2092(INI)) in 2007. Considering the statements, provided in the report from the Commission, the European Parliament welcomes the positive impacts of the Directive 96/67/EC but notes that some difficulties and uncertainties concerning the interpretation and transposition into national legislation still remain.

Regarding the considerations on the revision of the Directive, the European Parliament recommends concentrating on the following aspects:

- Clarification of advantages of further liberalisation: Before any decisions on the revision of the Directive are to be made, the benefits of further liberalisation should be assessed. In the case, when more value can be expected by further opening of the markets, the European Parliament suggests to increase the number of ground handling providers in the limited categories at larger airports (e.g. < 10 million passengers/year) and at airports with a substantial contestable market.
- Consideration of airport users` interests / opinions within the procedure of selection of service suppliers: The choice of new entrants at limited markets is made by the airport and the authority, while the contracts of supply are made between the service providers and the airlines. Regarding the revision of the Directive, the European Parliament suggests the introduction of a more user-oriented policy, which reflects on a larger scale the position of the airport user within the selection procedure of service suppliers.
- Provision of minimum quality standards: As prices for ground handling services decrease minimum levels of quality as well as security and safety levels should be safeguarded. Therefore, the European Parliament proposes to establish a licensing process in order to guarantee a minimum level of quality and sustainability, which should become mandatory for any ground handling provider. In addition, the revised Directive could foresee that every airport can define minimum quality standards that need to be considered within the tender process as well as in the contracts between airlines and ground handling providers. Furthermore, to secure a minimum level of safety and to guarantee fair competition, some provisions could be introduced that require the prior identification of any sub-contractors.
- Social issues: The turnover of staff from a former provider of ground handling services to a new selected supplier could limit the market access and could have implications on social conditions as well as on safety, rules for the transition process should be examined. Moreover, to ensure a certain level of quality as well as to consolidate the position of staff, a reasonable level of training should be required for all employees of ground handling providers.

3.5 Ecorys Study: Social developments in the EU air transport sector

Ecorys carried out a study for the European Commission about the social developments in the EU air transport sector - a study of developments in employment, wages and working conditions in the period 1997-2007. (The summary of the report is available on the European Commission Website ².)

This study can give an insight on general developments in the air transport sector and therefore also in the ground handling sector. It however needs to be noted that stakeholders expressed within the interviews done by Airport Research Center, that the working conditions differ between the stakeholders involved in ground handling (airport operators, airlines and independent ground handling companies).

For this reason the main objectives and the results in regard to the ground handling sector are highlighted in the following chapter.

The main objectives of the study were:

- To evaluate the principal tendencies of the development of air transport within the European Union since the full opening of the market, in 1997, and its impact in terms of direct jobs (on board staff, jobs in the airport, air traffic controllers, air transport companies).
- To determine the developments in terms of working conditions and of wage conditions over the same period in the EU.
- To determine these tendencies and developments in comparison to major events which could have a positive or negative impact (effects of competition, external events, and perspectives related to the agreements with 3rd countries).

In general we can conclude that the developments in employment, wages and working conditions are related to the economic trends that the sector has experienced in the past ten years. It is plausible that the increase in employment in the past ten years is strongly related to the increase in air traffic in the EU. Also it is very plausible that the financial crisis that the sector experienced between 1999 and 2004 through the efforts to increase productivity, has had an impact on employment, wages and working conditions such as operational pressure.

To filter out the extent to which the developments in employment, wages and working conditions were directly or indirectly caused by the EU liberalisation of the sector, is virtually impossible since there are many explanatory factors that are intertwined with each other and above all also intertwined with the effects of EU liberalisation. However, it is clear that the new context created by the liberalisation and deregulation provided new opportunities which are an important explanation for the recent developments.

² http://ec.europa.eu/transport/air/studies/doc/internal_market/2008_01_social_study_summary.pdf

Development in relation to the EU liberalisation

Another point that is clear is that the introduction of competition has had an important impact on recent developments in the ground handling market. Moving from a monopoly or duopoly market towards more competition, the position of employees in this part of the sector is changing rapidly. More flexibility is demanded from the companies operating in ground handling and therefore also of their staff. This for instance has a direct impact on the contracts employees are hired under and their job security.

Development of employment

The number of persons employed by independent ground handling companies clearly increased significantly in the past ten years. However, exact figures for this trend are not available.

Development of wages and contractual conditions

For cabin crew and especially ground handling staff the results of the study on the point of remuneration are inconclusive. Many national employers' organisations report in the survey that in their organisation the wages have increased in line with the national average wage increases. According to trade unions, however, remuneration has lagged behind inflation and the national average wage increases in the past ten years. The -minority of- employers agreeing with them is larger by employees in ground handling than in cabin crew.

Overall there is a trend in the sector towards more flexibility in contracts. In this the sector is not unique. Also in many other sectors flexibility in contracts is increasing.

The trend towards more flexibility in contracts is most visible for ground handling staff. The introduction of competition in the ground handling sector means that service providers need to react faster to changes in the level of their activities. A flexible workforce is an important condition for this. As a result the use of fixed term and temporary contracts for ground handling staff has increased in the past ten years.

Development of working conditions

In view of the lack of other sources available at EU level, the study for this subject has to rely heavily on the survey and interviews conducted with employer and employee representative organisations. It is to be expected that employers and trade unions often have diverging opinions on such subjects; this is also the case when discussing about the development of working conditions in general. Trade unions generally feel that working conditions have deteriorated in the past ten years. Employers state that working conditions on a whole have improved. Nonetheless, the study also shows that the opinions of employers and trade unions amongst themselves vary according to the profession under review and that for certain professions, in certain areas of working conditions, some convergence appears.

In most professions employers are positive while trade unions are negative about the developments in health and safety. For the ground handling occupations, however, employers are

somewhat less positive than other professions. This profession was also an area for much concern for trade unions during the in-depth interviews.

3.6 Legal cases / Directive 96/67/EC

During the last years the implementation of the Directive 96/67/EC has been a contentious issue between the Commission of the European Communities and Member States on one side and between airports and airlines on the other side. Main points of litigations had been the access to installations on Community airports and questions about social and environmental protection. In the following the main legal cases and their sentences are summarised.

Before going into details of the litigations concerning social protection it should be clarified at the outset that the Directive 96/67 is without prejudice to the effective application of the Council Directive 2001/23/EC of 12th March 2001 on the approximation of the laws of the Member States relating to the safeguarding of employees rights in event of transfers of undertakings, business or parts of undertakings or business (see Article 18 of the Directive 96/67EC but also cases C-460/02 and C386/03). This fact should be the starting point and also explains why the latter cases only related to situations not falling within the Scope of Directive 2001/23/EC.

In case C-386/03 the Commission of the European Communities against the Federal Republic of Germany, the Commission claimed that some paragraphs in the German regulations concerning ground handling services at airports, are not compatible with Articles 16 and 18 of the Directive 96/67/EC. The German regulations had imposed incentives on ground handling providers to take on staff from former ground handling companies. Furthermore the regulations enabled the airport operators to acquire charges from self-handling airlines and ground handling providers for not taking over workers in addition to other airport charges.

The Court of Justice of the European Communities came to the ruling that the right of Member States to ensure an adequate level of social protection for the staff of ground handling services, cannot be used in a way which hinders the application of the Directive 96/67/EC and the access to ground handling markets. Therefore providers of ground handling services cannot be obliged to take over workers employed by other (former) suppliers.

It must be pointed out, however, that the judgement applies only to cases that are beyond the scope of the application of Council Directive 2001/23/EC (see para. 23 and 24 of the judgment). In other words, when the change of an employer in the ground handling sector can be considered as a transfer in the meaning of the Directive, it must be ensured, so far as possible, that the rights of employees are safeguarded by allowing them to remain in employment with the new employer on the terms and conditions agreed with the old employer. Article 4(1) of the Directive expressly states, that the transfer does not itself constitute grounds for dismissal (although this provision does not stand in the way of dismissals for economic, technical or organisational reasons entailing changes in the workforce).

In 2004 the European Court of Justice came to a comparable ruling in the case C-460/02 the Commission of the European Communities against the Italian Republic, where the Italian law provided some not compatible articles on social protection.

Other cases had been conducted between airports and airlines. Therefore the focus had been on a free access to installations on community airports.

The legal case (C-363/01) Hanover airport against Deutsche Lufthansa AG contains mainly the question of a free access to airport installations. A point of contention was the nature of the access charges between Lufthansa and Hanover airport, which had the position that the charges had to be seen as charges for providing airport users with economic access to ground handling markets. In opposition Lufthansa refused this position and took the view that charges need to be service related. In 2003, the European Court of Justice ruled that Article 16(3) does not enable the airport operator to impose charges on airport users and ground handling providers only for the access to the market. It is clarified that charges for the use of airport installations must be determined according to the criteria laid down in Article 16(3).

The current legal proceedings between Lufthansa AG and Aeroportos de Portugal SA (ANA) focus on charges for ground administrative assistance and supervision. In this case (C-181/06) the reference for a preliminary ruling concerns the interpretation of Articles 6 and 16(3) of Directive 96/67/EC.

Community law precludes rules of national law which provide for the payment of a fee for ground administration and supervision by providers of ground handling services to the airport managing authority, unless the fee for ground administration and supervision provided for by that legislation is payable as the consideration for some or all of the services defined in paragraph 1 of the Annex to Council Directive 96/67/EC and does not constitute a second charge for services already paid for through another fee or tax. If the examination carried out by the referring court discloses that that fee constitutes a fee for access to the airport installations, it is a matter for that court to ascertain whether the fee at issue meets the criteria as specified in Article 16(3) of Directive 96/67/EC.

4 The impact assessment

4.1 General Conditions and specifics of national legislation in the EU Member States

In compliance with the provisions of the Directive 96/67/EC, the Member States introduced, through the national measures of transpositions of the Directive, various types of liberalisation. While in some Member States such as the United Kingdom the access to ground handling markets is fully liberalised, in other countries such as Germany the access to ground handling markets is limited. In accordance with the Directive in those countries handling licences for all or some limitable categories of ground handling such as baggage handling, freight and mail handling, ramp handling and fuel and oil handling are tendered and granted for 7 years maximum. In Italy and France the access to some ground handling markets is fully liberalised while for other ground handling markets the access is restricted. Figure 4-1 gives an overview on the types of liberalisation of ground handling markets in the EU according to the national legislative frameworks.

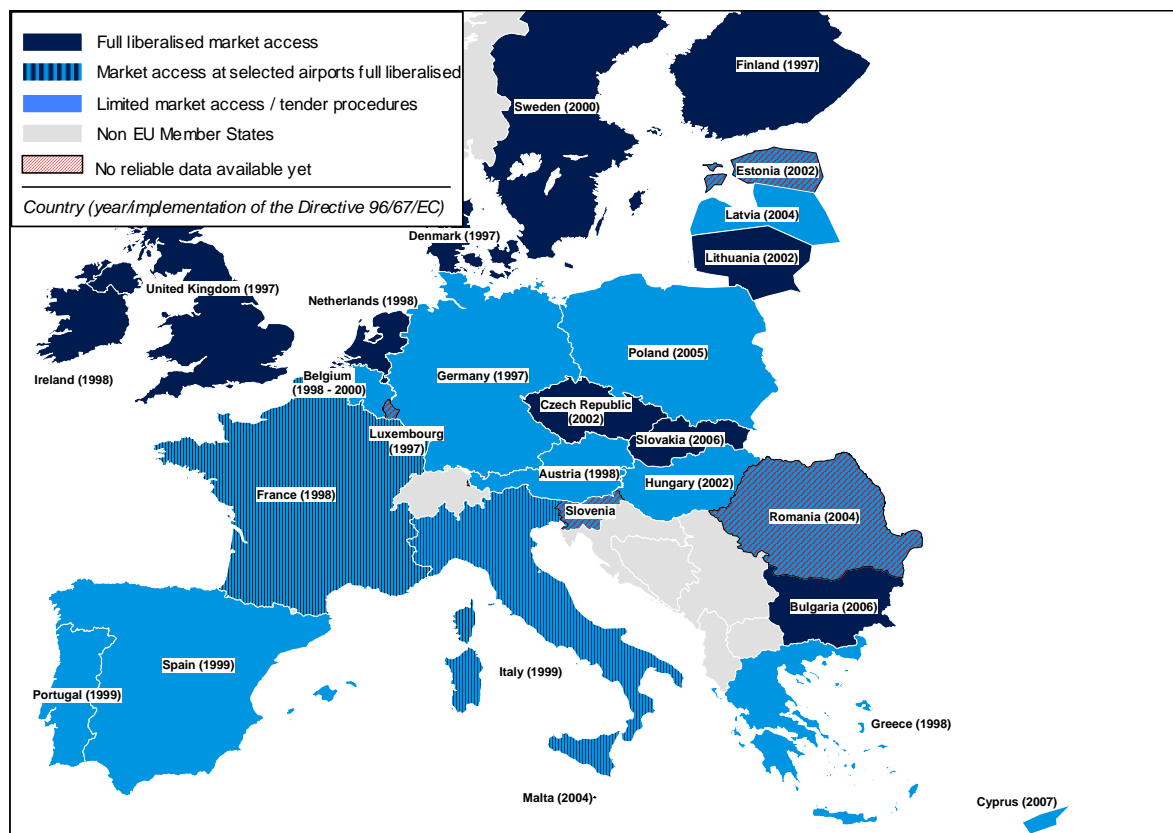


Figure 4-1: Overview on types of liberalisation in the EU according to the national legislative framework

“Full liberalised market access” is used for Member States where at all airports an unlimited number of ground handling companies can be active in each ground handling category (e.g. all airports in Sweden or the Netherlands). Member States corresponding to a “limited market” are those where at least at one of the airports ground handling companies need to attend a tender procedure to receive a handling licence for at least one ground handling category. Those handling licences are limited to a certain number, depending on the national legislation: the determination of this number differs from one country to another. For instance, German national legislation specifies that at all German airports, there are 2 licences for each of the restricted ground handling categories, whereas in the case of France, the national legislation defines a different number of licences according to the airport and to the ground handling category. In certain cases, national legislation only sets that the number of licences is limited and leaves it to the airport to define the number of licences, according to airport specific rules (e.g. Madrid airport).

For more detailed information on the implementation of the Directive in the EU Member States, authorities in charge were requested to submit information on this issue. (Questionnaire submitted to the Authorities, which can be found in the Annex.) In case the Authority did not provide country specific information, details were excerpted from the interviews (Belgium, Italy, Cyprus, Denmark, Estonia, Ireland, Latvia and the Netherlands). The exception is Romania where due to the lack of information, desk research delivered the following information. For Luxemburg some information was excerpted from the SH&E report.

Country	Authority	Participation internet survey
Austria	Bundesministerium für Verkehr, Innovation und Technologie	X
Belgium	Service public fédéral Mobilité et Transports	
Bulgaria	Bulgaria's Civil Aviation	X
Cyprus	Department of Civil Aviation Cyprus	
Czech Republic	Civil Aviation Authority Czech Republic	X
Denmark	The Danish Civil Aviation Administration (CAA-DK)	
Estonia	Estonian Civil Aviation Administration	
Finland	Finish Civil Aviation Authority	X
France	La direction générale de l'Aviation civile	X
Germany	Luffahrt Bundesamt	X
Greece	Hellenic Republic Civil Aviation Authority	X
Hungary	National Transport Authority	X
Ireland	Irish Aviation Authority	
Italy	Italian Civil Aviation Authority	
Latvia	Civil Aviation Agency	
Lithuania	Civilines Aviacijos Administracija	X
Luxembourg	Direction de l'Aviation Civile	
Malta	Department of Civil Aviation Malta	X
Netherlands	Ministerie van Verkeer en Waterstaat	
Poland	Civil Aviation Office	X
Portugal	Instituto Nacional de Avicao Civil, I.P.	X
Romania	Government of Romania Ministry of Transports	
Slovakia	Ministerstvo Dopravy Post a Telekomunikacii Slovenskej Republiky	X
Slovenia	Government of the Republic of Slovenia, Ministry of Transport	X
Spain	Gobierno de Espana, Ministerio de Fomento	X
Sweden	Swedish Civil Aviation Authority	X
United Kingdom	UK Civil Aviation Authority	X

Figure 4-2: Consulted authorities and overview on participation in the internet survey

Region	Country	Airports > 2 million passengers / 50.000 tons of freight
EU-15	Austria	Vienna
EU-15	Belgium	Brussels, Charleroi, Oostende-Brugge, Liège
EU-15	Denmark	Copenhagen
EU-15	Finland	Helsinki
EU-15	France	Paris-CDG, Paris-Orly, Nice, Marseille, Lyon, Toulouse-Blagnac, Bâle-Mulhouse, Bordeaux, Nantes, Strasbourg
EU-15	Germany	Berlin-Schoenefeld, Bremen, Dortmund, Berlin-Tegel, Hamburg, Duesseldorf, Frankfurt/Main, Hahn, Hanover, Leipzig-Halle, Stuttgart, Munich, Nuremberg, Cologne-Bonn
EU-15	Greece	Athens, Iraklion, Salonika, Rhodes, Kerkira
EU-15	Ireland	Dublin, Shannon, Cork
EU-15	Italy	Roma-Fiumicino, Roma-Ciampino, Milano-Malpensa, Milano-Linate, Napoli, Bologna, Catania, Palermo, Bergamo, Venezia, Torino, Verona, Cagliari, Pisa
EU-15	Luxembourg	Luxembourg
EU-15	Netherlands	Amsterdam
EU-15	Portugal	Lisboa, Faro, Funchal, Oporto
EU-15	Spain	Alicante, Barcelona, Bilbao, Fuertaventura, Girona, Gran Canaria, Ibiza, Lanzarote, Madrid, Malaga, Minorca, Palma de Majorca, Seville, Tenerife Norte, Tenerife Sur, Valencia
EU-15	Sweden	Stockholm-Arlanda, Gothenburg
EU-15	United Kingdom	Aberdeen, Belfast-International, Belfast-City, Birmingham, Bristol, Edinburgh, East-Midlands, Glasgow, Liverpool, London-Heathrow, London-Gatwick, London-Stansted, London-City, Luton, Manchester, Newcastle, Leeds-Bradford, Nottingham East Midlands, Prestwick
NMS	Bulgaria	Sofia
NMS	Cyprus	Larnaca
NMS	Czech Republic	Prague
NMS	Estonia	Tallinn*
NMS	Hungary	Budapest
NMS	Latvia	Riga
NMS	Lithuania	Vilnius*
NMS	Malta	Luqa-Malta
NMS	Poland	Warsaw, Krakow
NMS	Romania	Bucharest Henri Coanda
NMS	Slovakia	Bratislava
NMS	Slovenia	Ljubljana*

* Biggest Airport in the country but counts less than 2 Mio. Pax in 2007

Source: Official Journal of the European Union

Figure 4-3: Airports under the Directive with more than 2 Mio. Pax in 2006

The country specific key findings are presented below. Figure 4-3 gives an overview of all airports under the Directive 96/67/EC (the year of reference for traffic figures is also given).

Austria:

- Date of implementation of the Directive 96/67/EC into national legislation: 1998
- Responsible authority: Federal Ministry for Transport, Innovation and Technology.
- Airport with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Vienna airport (traffic 2007)
- Type of liberalisation: Limited market access; the number of handling licences at Vienna airport is limited to two licences for limitable categories (cat. 3, 4 and 5) including one licence for an independent handling company (the other licence is reserved for the airport operator), due to limited space for equipment. At Salzburg airport the freedom of self-handling is safeguarded.
- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: Experience, references to assess to the quality of services, working funds, organisation of the supplier, quality management system, offering several handling activities, sufficient insurance cover, voting of the airport and AUC.
- Sub-contracting: Not indicated during the tender process. Choice for sub-contractors is limited to suppliers who already have a licence for third party handling. Services such as cleaning, toilet/water and catering transport are for example sub-contracted to Vienna Airport Ground Handling at Vienna Airport.
- Specifics: Historical very strong market position of airport operator.

Belgium:

- Date of implementation of the Directive 96/67/EC into national legislation: Due to the federal system in Belgium the Regions are responsible for the implementation of the Directive into legislation. In the Brussels-Capital Region the provisions of the Directive were implemented into legislation in 1998 (Region Brussels), in the Flemish Region in 1999 and in the Walloon Region in 2000.
- Responsible authority: Ministry of Transport, Flemish and Walloon government.
- Airport with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Brussels, Charleroi, Oostende, Liege (traffic 2007)
- Type of liberalisation: Limited market access due to Belgian law; The Royal Decree of 1998 that transposes Directive 96/67 in Belgian law limits the restricted categories to 2 handlers as a maximum. Self-handling is also limited to 2.
- General requirements for ground handling operations: No information available.

- Decisive criteria in the tender process: Cost basis, use of airport infrastructure, operational plan and business plan.
- Sub-contracting: Sub-contracting was indicated during tender and exists e.g. for cleaning at Brussels Airport.
- Specifics: Since the bankruptcy of Sabena, the amendment foresees the possibility to transfer ground handling licences.

Bulgaria:

- Date of implementation of the Directive 96/67/EC into national legislation: 2007 in the “Regulation No. 20/1999 on the certification of the operational worthiness of civil airports, airfields, ground services systems and facilities, and on licensing airport and airport handling operators and the access to ground services market at the airports.” There the Directive 96/67/EC is literally transmitted and supervises all international airports in Bulgaria (Sofia, Varna, Bourgas, Plovdiv and Gorna Oriahovitza).
- Responsible authority: Civil Aviation Administration.
- Airport with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Sofia (traffic 2007)
- Type of liberalisation: Full liberalised access at airports with more than 2 million passengers per year (Sofia).
- General requirements for ground handling operations: Approval from the CAA is granted if a company can demonstrate its competence in respect of experience, financial resources, equipment, organization, staffing, maintenance and operating procedures. The licence will be renewed every year due to an audit of the CAA
- Decisive criteria in the tender process: Subject to future amendment in Civil Aviation Act.
- Sub-contracting: Sub-contracting exists e.g. at Sofia airport.
- Specifics: The access to the ground handling market at SOF is theoretically totally opened, but due to the strong role of the Bulgarian Law, the number of full service suppliers is limited up to two licences plus few self-handling activities.

Cyprus:

- Date of implementation of the Directive 96/67/EC into national legislation: Ministerial Decree 406 of 2007 – Civil Aviation. The decree was published on October 19th 2007.
- Responsible authority: Department of Civil Aviation

- Airport with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Larnaca (traffic 2006)
- Type of liberalisation: Limited market access (Larnaca, Paphos). (2 self-handling licenses and 2 third party handling licences due to space and capacity constraints at the airport)

After a competitive tender in 2008, LGS (Louis Aviation Services, Goldair Handling and Servisair) and Swissport-GAP secured the seven year licence to provide ground handling operations.

- General requirements for ground handling operations: No information available
- Decisive criteria in the tender process: Operational concept, technical and professional solvency, financial solvency and business plan, quality proposal.
- Sub-contracting: Sub-contracting needs to be approved by the CAA. Right now however, sub-contracting is not practised at Larnaca airport.
- Specifics: New airports are being built in Larnaca and Paphos.

Ground handling providers holding a licence to operate at Larnaca airport need to provide handling services at Paphos airport, as well.

Czech Republic:

- Date of implementation of the Directive 96/67/EC into national legislation: 2002
- Responsible authority: Civil Aviation Authority.
- Airport with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Praha/Ruzyně airport (traffic 2007)
- Type of liberalisation: Full liberalised market access at airports with more than 2 million passengers per year (Prague). Liberalisation of ground handling market since 2001, only minimum requirements (safety, environmental, insurance) must be fulfilled.
- General requirements for ground handling operations: Every applicant who meets the requirements in the civil aviation law must be licenced. The airport operator has no influence on the decision of the CAA and has no right to comments or stop application processes. General CAA requirements: safety, equipment, level of insurance.
- Decisive criteria in the tender process: Due to national legislation there has never been a tender process.

- Sub-contracting: Within sub-contracting the sub-contractor needs to get a licence from the CAA. The responsibility for the sub-contractor is imposed on the full service supplier.

Denmark:

- Date of implementation of the Directive 96/67/EC into national legislation: 1997
- Responsible authority: Danish Civil Aviation Administration.
- Airport with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Copenhagen Kastrup and Billund
- Type of liberalisation: Fully liberalised access to ground handling markets.
- General requirements for ground handling operations: No tender process as the market is open. Every ground handler approved by the CAA can apply and gets a concession contract from the airport. However, the airport verifies if the ground handling applicant has a proper business plan. All other (financial) negotiations are made between airline and ground handler.

Once the ground handler has a general handling licence it needs to meet the airport rules. If there are violations of those rules the ground handler will be interviewed and the airport can apply sanctions like return of airport access pass, direct control of employees, ask for additional (mandatory) training.

- Decisive criteria in the tender process: No tender.
- Sub-contracting: Sub-contracting for security control staff is not allowed (which is not part of the ground handling). Regarding other activities, CPH only approves the sub-contractor in regards of safety and security.

Estonia:

- Date of implementation of the Directive 96/67/EC into national legislation: 18 July 2000 by Government of the Republic Regulation No. 240
- Responsible authority: Civil Aviation Administration
- Airport with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: None in 2007
- Type of liberalisation: The number of suppliers of the specified services shall not be limited to fewer than two for each category of ground handling service if the annual traffic volume is not less than two million passengers.
- General requirements for ground handling operations: No information available.

- Decisive criteria in the tender process: There has never been a tender process in Estonia.
- Sub-contracting: Sub-contracting does exist (e.g. at Tallinn airport).
- Specifics: No Estonian airport has more than 2 Mio. Passengers (e.g. TLL only had 1,8 Mio. Pax in 2007)

Finland:

- Date of implementation of the Directive 96/67/EC into national legislation: 1997
- Responsible authority: Finnish Civil Aviation Authority (FCAA).
- Airport with more than 2 Mio passenger traffic or more than 50.000 tons of freight: Helsinki-Vantaa airport
- Type of liberalisation: Fully liberalised access to ground handling markets.
- General requirements for ground handling operations: None; there are no licenses for the ramp issued by the FCAA. The airport operator may organise ramp traffic rule courses and issues ID-cards. The airport operator at Helsinki airport thinks about setting minimum service levels for ground handling at the airport, but there is no decision about it yet.
- Decisive criteria in the tender process: No tender.
- Sub-contracting: Sub-contracting is generally allowed at Finnish airports. At Helsinki airport for example some subcontractors are providing services to more than one company. The handler must report the sub-contracting activities to the airport once a year. A decrease of sub-contracting activities at Helsinki airport can be noticed.

France:

- Date of implementation of the Directive 96/67/EC into national legislation: 1998
- Responsible authority: Direction Générale de l'Aviation Civile (DGAC).
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight : Paris-CDG, Paris-Orly, Nice-Côte d'Azur, Lyon-Saint Exupéry, Marseille-Provence, Toulouse-Blagnac, Bâle-Mulhouse, Bordeaux-Mérignac, Nantes-Atlantique, Beauvais-Tille
- Type of liberalisation: All airports are fully liberalised, except Paris-CDG, Paris-ORY and Nice. Three licences for third party handling and self-handling per terminal for each of the airside categories at CDG airport.

- General requirements for ground handling operations: A licence to provide services of non restricted categories is given to any company with sufficient insurance and financial soundness.
- Decisive criteria in the tender process: Performance in safety, security and environmental fields; economic guarantees; human resources and available equipment; social policy; internal procedures for quality control.
- Sub-contracting: Cascade sub-contracting possible, sub-contracting was not indicated in the tender procedure.
- Specifics: Explicit, the French legislation foresees the possibility to restrict the access to ground handling markets in case of capacity and space constraints as well as for safety reasons.

Germany:

- Date of implementation of the Directive 96/67/EC into national legislation: 1997
- Responsible authority: Federal Ministry for Transport, Building and Urban Affairs.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight : Berlin-Tegel, Berlin-Schoenefeld, Hamburg, Dortmund, Duesseldorf, Frankfurt/Main, Frankfurt Hahn, Hanover-Langenhagen, Leipzig-Halle, Stuttgart, Munich, Nuremberg, Cologne-Bonn
- Type of liberalisation: The market access is limited due to German legalisation for ground handling categories number 3, 4, 5 and 7. Limitation to 2 suppliers each self-handling and third party handling per category.
- General requirements for ground handling operations: Quality of services and finance reliability.
- Decisive criteria in the tender process: Experience, quality of services, business plan based on flight schedule, prices; offering of several handling activities.
- Sub-contracting: Not indicated in the tender process, cascade sub-contracting is possible.
- Specifics: Due to historic reasons, all operators of German airports with more than two million passengers are involved in ground handling. Due to specifics in national legislation, not only the baggage handling system but also the service at baggage handling installations is defined as centralised at many airports.

Greece:

- Date of implementation of the Directive 96/67/EC into national legislation: 1998
- Responsible authority: Hellenic Civil Aviation Authority.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Athens, Thessalonica, Rhodes, Corfu and Heraklion
- Type of liberalisation: Limited market access for airports with more 2 million passengers per year (Athens, Thessalonica, Rhodes, Corfu and Heraklion) for ground handling categories number 3, 4, 5 and 7. At airports with less than 2 Mio. passengers per year, the national flag carrier (Olympic Airways) has a monopole, self-handling is permitted at these airports, but no third party handling licence is admitted. However certain categories such as 1, 7, or 11 have always been liberalised.
- General requirements for ground handling operations: safety management, security, organisation of applicant, training of personnel, financial status, environmental protection, and quality.
- Decisive criteria in the tender process: Equipment, experience, quality, organisation.
- Sub-contracting: Sub-contracting is prohibited by the Authority.

Hungary:

- Date of implementation of the Directive 96/67/EC into national legislation: 2002
- Responsible authority: National Transport Authority Directorate for Air Transport.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Budapest Ferihegy airport
- Type of liberalisation: Limited Market access at all Hungarian airports. 3 self-handling and 5 third party handling at BUD. All other airports are not over the threshold of 2 Mio PAX.
- General requirements for ground handling operations: Complete qualified ground handling staff, infrastructure, equipments and documentation of procedure.
- Decisive criteria in the tender process: No information available.
- Sub-contracting: Sub-contracting exists in PRM assistance and security services.

Ireland:

- Date of implementation of the Directive 96/67/EC into national legislation: 1998
- Responsible authority: Commission for Aviation Regulation (CAR).
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Dublin, Shannon, Cork (traffic 2007)
- Type of liberalisation: Full liberalised market access at all airports.
- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: No tender.
- Sub-contracting: Yes, to a minor degree.

Italy:

- Date of implementation of the Directive 96/67/EC into national legislation: 1999
- Responsible authority: Civil Aviation Authority (ENAC).
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Roma-Fiumicino, Milano-Malpensa, Milano-Linate, Venezia, Catania Fontanorossa, Napoli Capodichino, Bergamo, Roma-Ciampino, Palermo, Bologna, Pisa San Giustio, Verona, Torino, Cagliari, Bari Palese (traffic 2007)
- Type of liberalisation: Some airports as Roma-FCO provide fully liberalised access to ground handling markets. No detailed information about other airports available.
- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: No tender of third party handling licences.
- Sub-contracting: At the time of the tender processes in FCO sub-contracting was not allowed. On 19th December 2006 the Italian Civil Aviation Authority issued a regulation enabling sub-contracting at Italian airports.

Latvia:

- Date of implementation of the Directive 96/67/EC into national legislation: 2007
- Responsible authority: Ministry of Transport.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Riga International (traffic 2007)
- Type of liberalisation: Limited market access. Ramp handling is performed solely by the airport ground handling company at RIX. The access to the GH market / airside

will be liberalized in 2008. The tender for the 2nd ramp handling license (valid for a 7 years period) will be organized by the ministry of transport by the end of 2008.

- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: No tender has taken place yet.
- Sub-contracting: In case of any advantages sub-contracting will be possible between licensed main contractors and the sub-contractor (only one stage sub-contracting). Requirement for sub-contracting: Certification of the CAA due to safety, security etc.
- Specifics: At Riga airport no tender has taken place but will be prepared in near future.

Lithuania:

- Date of implementation of the Directive 96/67/EC into national legislation: 2002
- Responsible authority: Ministry of Transport and Communications.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: none.
- Type of liberalisation: Full liberalised market access for Airports with more than 1 million passengers per year (Vilnius).
- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: There has never been a tender.
- Sub-contracting: No information available.

Luxembourg:

- Date of implementation of the Directive 96/67/EC into national legislation: 1999
- Responsible authority: Ministry of Transport.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Luxembourg airport (traffic 2007) (due to freight)
- Type of liberalisation: Limited market access. Before the Directive came into force, the only handler at Luxembourg was Luxair, providing full range of handling services. The airport operator is not involved in ground handling activities. There was a tender process by the end of 2008. (Swissport won a 7 years license.)
- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: No information available.

- Sub-contracting: No information available.

Malta:

- Date of implementation of the Directive 96/67/EC into national legislation: S.L.232.15 enacted on February 18th 2003, amended on February 17th 2004
- Responsible authority: Department of Civil Aviation.
- Airports with more than 2 Mio. passenger traffic or more than 50 000 tons of freight: Luqa-Malta (traffic 2007)
- Type of liberalisation: Limited market access at Luqa-Malta airport, due to small volume of traffic and therefore a small handling volume which does not justify too many handlers. Civil Aviation Act (CAP. 232) ensures “free access for not more than two suppliers for each category of airside service. and at least one of the authorised suppliers may not be directly or indirectly controlled by: (a) the managing body of the airport, (b) any airport user who has carried more than 25% of the passengers or freight recorded at the airport during the year preceding that in which those suppliers were selected, (c) a body controlling or controlled directly or indirectly by the managing body or any such user.”
- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: No information available.
- Sub-contracting: Limited. Sub-contractor needs an approval by the airport operator.

Netherlands:

- Date of implementation of the Directive 96/67/EC into national legislation: 1998
- Responsible authority: Ministry of Transport, Public Works and Water management.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Amsterdam-Schiphol, Maastricht-Aachen (traffic 2007)
- Type of liberalisation: Full liberalised market access at all airports.
- General requirements for ground handling operations: General requirements to get approved by the CAA.
- Decisive criteria in the tender process: Due to the national legislation there has never been a tender.
- Sub-contracting: No information available.

- Specifics: When the Directive was issued, competition was already in place for a long time in ground handling at Amsterdam Airport Schiphol.

Poland:

- Date of implementation of the Directive 96/67/EC into national legislation: General Provisions were implemented in April 2004 by the amendment to Polish Air Law, the detailed proceedings were adopted by the Regulation of the Minister of Infrastructure on 21st of June 2005.
- Responsible authority: Civil Aviation Office.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Warszawa-Okecie, Kraków-Balice (traffic 2007)
- Type of liberalisation: The number of licences is generally limited at all airports in Poland. The legislation foresees for Warsaw-Okęcie Airport and Kraków-Balice Airport a limitation of Categories 3-5 and 7 to four handlers. At all other airports limitation is not subject to execution. The market access is limited according to the Art. 6 and 7 of Directive. No tender until 2007. But in respect to the Directive the first tender will be prepared for the near future.
- General requirements for ground handling operations: Entrepreneurs have to meet general requirements from Air Law: Obtaining certification and fulfill the financial, security, good reputation.
- Decisive criteria in the tender process: No tender has taken place yet.
- Sub-contracting: Sub-contracting is limited to the first level due to safety / security reasons (cascade sub-contracting is not practised).
- Specifics: There has never been a tender process at Polish airports.

Portugal:

- Date of implementation of the Directive 96/67/EC into national legislation: 1999
- Responsible authority: Portuguese Civil Aviation Administration (INAC).
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Lisbon (Portela), Faro e Porto (Sá Cameiro), Funchal e Porto (Sá Cameiro) (traffic 2006)
- Type of liberalisation: Limited market access. In Lisbon, Oporto and Faro, the services related to category 3, 4, 5. are restricted to two suppliers through specific legislation –Orders 18 068/99 and 18 069/99, published in the National Official Journal of

17th September of 1999 and Order 18 118/99 published on the 18th September 1999. Liberalised market at other airports.

- General requirements for ground handling operations: Checks of ground handling staff and their equipment, analysis and monitoring of the financial situation. Overall, a strong focus on security and safety issues.
- Decisive criteria in the tender process: Conditions and technical specifications for the tender process are set by the managing body of the airport after consultation with the AUC and confirmation of the Portuguese Civil Aviation Administration (INAC).

The Selection of suppliers of ground handling services is done by INAC, after consultation with the AUC, whenever the airport operator controls a ground handler, providing services similar to the services included in the tender process.

- Sub-contracting: Sub-contracting is common at LIS airport.

Romania:

- Date of implementation of the Directive 96/67/EC into national legislation: 2004
- Responsible authority: Ministry of Transport
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Henri Coanda – Bucuresti airport
- Type of liberalisation: No information available.
- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: No information available.
- Sub-contracting: No information available.

Slovakia:

- Date of implementation of the Directive 96/67/EC into national legislation: 1st of January, 2006.
- Responsible authority: General Directorate of Civil Aviation, Ministry of Transport, Posts and Telecommunications of the Slovak Republic.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Bratislava (traffic 2007)
- Type of liberalisation: Full liberalised market access at airports with more than 2 million passengers per year (Bratislava). There are two handlers active at Bratislava airport since 1994.

- General requirements for ground handling operations: Criteria are specified by CAA of the Slovak Republic.
- Decisive criteria in the tender process: There has never been a tender since 2004, since Bratislava airport only reached 2 Mio. Pax in 2007.
- Sub-contracting: It generally exists at BTS airport, whereas cascade Sub-contracting is not performed

Slovenia:

- Date of implementation of the Directive 96/67/EC into national legislation: 2001
- Responsible authority: Ministry of Transport.
- Airports with more than 2 Mio. passengers traffic or more than 50.000 tons of freight: None
- General requirements for ground handling operations: Fulfillment of standard conditions and technical specifications. There has to be preliminary consultations between the Managing Body of the Airport and the Airport Users' Committee (AUC) (Except, if the Ministry of Transport is involved.)
- Decisive Criteria in the tender process: Not applicable. A call for tenders has not been realised yet.
- Sub-contracting: Generally sub-contracting exists at LJU airport.
- Specifics: At the smaller airports in the Republic of Slovenia, there is no interest in ground handling services (for third parties and self-handling). Therefore ground handling services are provided only by the airport operator.

Spain:

- Date of implementation of the Directive 96/67/EC into national legislation: 1999
- Responsible authority: Civil Aviation Administration
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Alicante, Barcelona, Bilbao, Fuerteventura, Girona, Gran Canaria, Ibiza, Lanzarote, Madrid, Málaga, Menorca, Murcia/San Javier, Palma de Mallorca, Santiago, Sevilla, Tenerife North, Tenerife South, Valencia (traffic 2007)
- Type of liberalisation: Limited market access at airports with more than 2 million passengers per year (Alicante, Barcelona, Bilbao, Fuerteventura, Girona, Gran Canaria, Ibiza, Lanzarote, Madrid, Málaga, Menorca, Palma de Mallorca, Sevilla, Tenerife North, Tenerife South, Valencia). National law establishes second ramp operator at

airports with more than 1 million passengers or 25.000 tons of cargo. (Royal Decree 1161/1999).

AENA may propose a higher number if the volume of traffic and the airport conditions call for it.

- General requirements for ground handling operations: No information available.
- Decisive criteria in the tender process: Beside others quality level, human and technical resources, environmental care, PRM (passengers with reduced mobility) assistance, economic operational and quality improvements.
- Sub-contracting: Sub-contracting ramp services are not allowed. It is also not allowed to sub-contract self-handling services. However, for specializations and economies of scale, cleaning services are usually sub-contracted.

Cascade subcontracting is not practiced: There is a concern of negative effects on safety, security, quality, environment, training, equipment.

Sweden:

- Date of implementation of the Directive 96/67/EC into national legislation: 2002
- Responsible authority: Civil Aviation Authority.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Gothenborg-Landvetter, Stockholm-Arlanda (traffic 2006)
- Type of liberalisation: Full liberalised access at airports with more than 2 million passengers per year (Gothenburg-Landvatter, Stockholm-Arlanda).
- General requirements for ground handling operations: All ground handling operators need a license agreement with the airport before operations can commence. This agreement stipulates in a general way how to behave and operate at the airport.

Additionally there was an auditing process implemented in 2004/2005: It consists of an audit before the ground handling company starts its operations at the airport in regard to safety, security and environment. This is repeated every 2 years.

Additionally a reporting system exists where it is mandatory for all companies to report. There is no punishment if a case is not reported, but rather an encouragement to report (but no incentives).

Mandatory education in safety and security is required (CBT) before entering service. This applies to all personal. Every two year this education must be renewed (CBT).

- Decisive criteria in the tender process: No information available.

- Sub-contracting: Sub-contracting is allowed and exists to fulfill contractual obligations. But at Arlanda Airport the sub-contractor also needs a license, which is connected to a fee the sub-contractor has to pay to operate. Therewith LFV tries to reduce sub-contracting.
- Specifics: At other small Swedish airports the local airport authority has a monopoly on ramp handling.

United Kingdom:

- Date of implementation of the Directive 96/67/EC into national legislation: 1997
- Responsible authority: Civil Aviation Authority.
- Airports with more than 2 Mio. passenger traffic or more than 50.000 tons of freight: Aberdeen, Belfast-International, Belfast-City, Birmingham, Bristol, Cardiff Wales, Edinburgh, Glasgow, Liverpool, London-Heathrow, London-Gatwick, London-Stansted, London City, Luton, Manchester, Newcastle, Leeds-Bradford, Nottingham East Midlands, Prestwick (traffic 2007)
- Type of liberalisation: Full liberalised access at airports with more than 2 million passengers per year; the number of licenses is not limited by the CAA.
- General requirements for ground handling operations: There is no national licensing system for ground handlers in the UK.
- Decisive criteria in the tender process: not applicable.
- Sub-contracting: The handling license at LHR does not permit any sub-contracting.

From a summary of the last chapter it can be noted that the legislation for ground handling differs in the various countries.

The variations will be highlighted in the following chapters by evaluating the answers of the interviews and the internet survey. The chapters are categorized in the same way the questionnaire was structured. For more detailed information about the questionnaire please see the Annex.

4.2 Analyses on competition of ground handling markets

In this section the central findings of the competition analysis of ground handling markets are shown. According to the methodological approach the analysis is based on the data and information received from the on-site interviews and the internet survey. A number and airport of on-site interviews were chosen to represent the whole European Union, whereby the data can be seen as representative for the developments in the whole Union.

As previously defined the results for the EU-15 airports are presented for the years 1996, 2002 until 2007, while the findings for New Member States airports are shown for the period 2004 until 2007.

If there was no data available the airport is marked with a star in the following figures. The number in brackets indicates the year of the missing data. In all other cases where no graph is shown, the handler count is zero.

The following chapters focus on the categories which are defined as limitable by the Directive 96/67/EC (baggage, freight and mail, ramp and fuel and oil handling). Indeed, it was considered that ground handling categories which are totally liberalised according to the Directive (such as passenger handling, ground administration...) are less interesting to study regarding competition issues.

For restricted categories, the developments in the number of self- (airlines) and third party handlers (airport ground handling subsidiary, independent ground handlers, third party handling airlines) are summarized. Finally the developments of stakeholder specific market shares are shown.

Generally chapter 4.2.1 to 4.14 are regionally separated. The first section considers airports in the EU-15, the second airports in the New Member States. At the beginning of each section an overview of several airport specific developments is given. Two conclusions for each of the two different regions follow. One considers all airport data received by on-site interviews and the internet survey. The second conclusion is only based on the interview data, since it reflects a representative data sample in contrast to the whole study data sample, which over represents the developments at German and Spanish airports. To draw a data consistent picture of the developments this conclusion could only consider airports providing data for all three requested years.

Following the analysis of stakeholder or airport specific developments some opinions stated by stakeholders are shown. **These statements engage only the authors' positions and should not be seen in any way as EC opinions.**

The following definition applies for the whole report:

- Since almost all airlines which are self-handling suppliers also provide third party handling for other airlines (exceptions are e.g. DHL or Pegasus Airlines) they are named handling airlines. They are separately examined from other third party handling parties as airports or independent ground handling companies in the following figures.
- Ground handling companies which are partly owned by an airline (more than 50% of the shares belong to an airline) are counted as handling airlines.

Resulting from these definitions slight differences can be discovered by comparison with the data in the SH&E report. Furthermore the following data is only derived from the mentioned interviews and internet survey, and could not be completed by SH&E data due to the mentioned definition differences.

4.2.1 Baggage handling (category 3)

The definition of baggage handling as given by the Directive is as follows " handling baggage in the sorting area, sorting it, preparing it for departure, loading it on to and unloading it from the devices designed to move it from the aircraft to the sorting area and vice versa, as well as transporting baggage from the sorting area to the reclaim area."

The outcomes of the analysis on the number of baggage handling providers are presented in the Figure 4-4 and Figure 4-5 below.

In general, the market is dominated by third party handling providers, while a few handling airlines, especially network carriers at their home bases (e.g. Air France at Paris-CDG), provide baggage handling.

Developments at EU-15 airports

In the following chart some German airports such as MUC and NUE and also ATH and VIE airports are marked because they define the baggage handling system including the service at the system, as Centralized Infrastructure. Therefore all handling providers need to make use of this service. This implies that only the airport operator is allowed to handle the baggage at the system and then hands it over to the handling provider at a defined interface (e.g. the terminal edge). From this point on, the handling agent is responsible for the transportation of baggage to the aircraft and the loading/unloading.

By analysing Figure 4-4 it is conspicuous that there are always two handlers active at German airports. As already mentioned in chapter 4.1 this is due to German legislation which foresees two handling licences for third party handling providers as well as handling airlines for each of the limitable categories.

Regarding the situation in Spain AENA decides individually for every airport about the number of handling licences by considering the airport and traffic structure. This leads to the

situation that at those airports there are two third party handling providers (except BCN) whereas a high number of handling airlines are active. At MAD, AGP and ALC airport the number of handling airlines has increased extensively since 2002.

This is contrary to the situation in Germany, where no handling airline is active except some cargo airlines at HAM, LEJ, MUC.

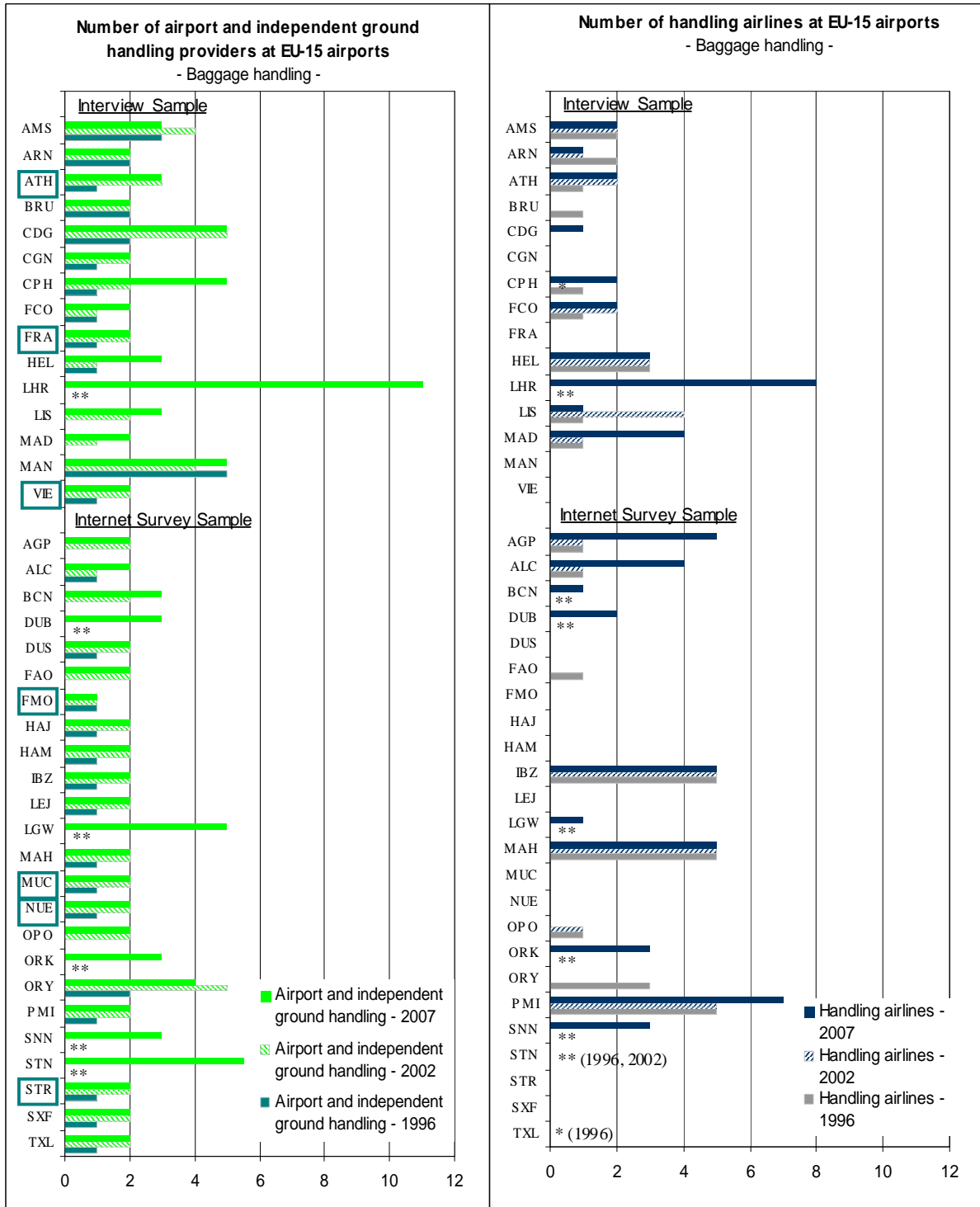
At the majority of airports where data was given, there are two third party baggage handling providers active. At some airports additionally handling airlines handle their own baggage. Handling airlines however, only count for one third of all handling providers.

At airports, such as AMS, ARN or MAN, which have already been liberalised before 1996, the number of handlers seemed to be more or less stable since the implementation of the Directive.

Considering all airports, which participated in the study, the number of third party handling providers increased by 44 handlers, which means that the number more than doubled in the time between 1996 and 2007. Comparing those developments with the change in the number of handling airlines, it can be concluded that there was a smaller increase of 24% during the same time.

Considering the representative sample (visited airports), the biggest growth in the number of third party handlers can be seen in the time between 1996 and 2002. There were an additional 12 handlers, which counts for a growth of 57%. In the following period up until 2007 the number increased only by 24% to 41 third party handlers in 2007.

For handling airlines the development was not as extensive: in the first period (1996-2002) there was only a slight increase of three airlines (25%), which resulted in 15 airlines being active in 2002. Up until 2007 the number increased only by one at the visited airports.



* Data for one year not available

** Data for two years not available

Airport with centralised baggage handling system including service at the system

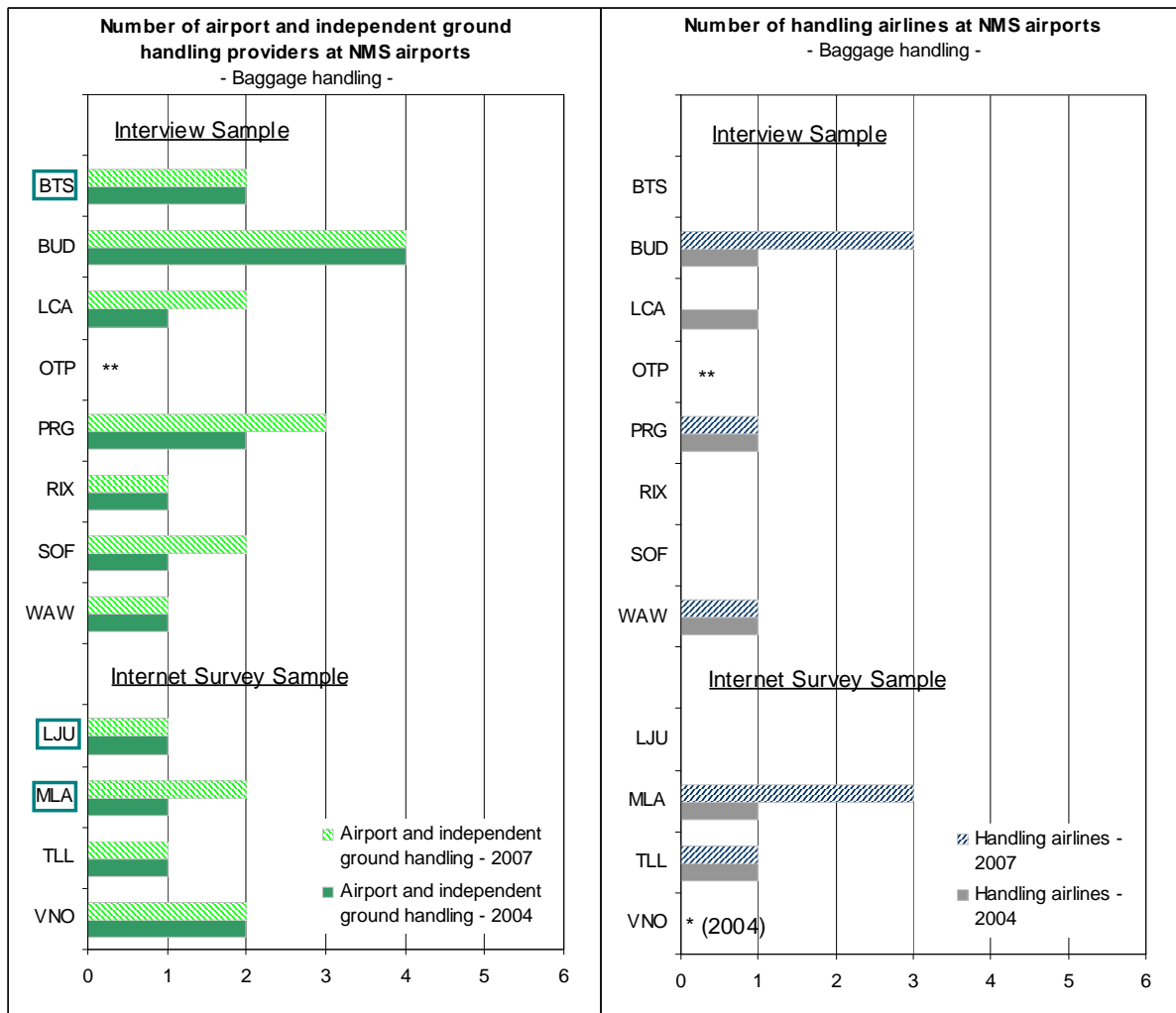
Figure 4-4: Number of baggage handling providers in 1996, 2002 and 2007 – EU-15

Developments at New Member States airports

Figure 4-5 below shows the developments in the number of baggage handling providers in the New Member States between 2004 and 2007. Since OTP airport did not submit any data, no results can be shown.

Compared to the EU-15 airports, there is less growth intensity at airports in the New Member States. Considering the data from all airports participating in the study, the number of third party handling providers increased from 17 to 20 handlers (+17%). However, the growth of handling airlines was 50%, even higher than the growth of handling airlines in the EU-15.

Since some of the participating airports are not above the threshold of 2 Mio. Pax or 25.000 t cargo yet, such as TLL or LJU airport, it is possible that handling monopolies still exist at airports participating in the study.



* Data for one year not available

** Data for two years not available


 Airport with centralised baggage handling system including service at the system

Figure 4-5: Number of baggage handling providers in 2004 and 2007 – New Member States

Another factor why the change in the number of third party handling providers was less intensive, is the time since the opening of the market. Since most of the States just entered the European Union in 2004 or even in 2007, the Directive was only implemented three years prior to this study at the earliest. Therefore some airports could not organize a tender procedure yet. But even if those factors may have influenced the developments at the airports and may be responsible for parts of the differences between the EU-15 and the New Member States, there were a lot more factors (historical background, political systems etc.) which could have played a role in the developments. Therefore a direct comparison of the two geographic regions is not possible.

As already mentioned in the section about the EU-15 airports, baggage handling system including the service is also defined as Centralized Infrastructure at some airports in the New Member States. Therefore at those airports only one handler (the airport operator) can handle baggage at the system.

In summarizing data of the representative sample of interviewed airports, it can be concluded that the number of third party handling providers increased by two agents to 14 (16%) in 2007, the number of handling airlines grew by one to 5 airlines (25%).

Conclusions about baggage handling competition

- The number of baggage handling providers has generally increased at European airports following the introduction of the Directive, in the EU-15 airports as well as in NMS airports.
- An average growth of 95% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines could post a growth of 33% in the same time. (Due to the representativeness, results are only derived from the data of interviewed airports.)
- The growth of third party handling agents in the New Member States accounted for 17% between 2004 and 2002, the growth of handling airlines 25%.
- It needs to be noted that the absolute change in the number third party handling parties in the New Member States as well as in the EU-15 was higher compared to the change in the number of handling airlines.
- With the exception of two airports the change (at MLA and BUD airport two handling airlines entered the market) in the number of handlers per airport did not exceed one handler.
- The absolute change in the number of third party handling suppliers per airport was higher in the EU-15 Member States than in the New Member States with the exception of German and Spanish airports.

4.2.2 Freight and mail handling (category 4)

The definition of freight and mail handling as given by the Directive is:

- "for freight: physical handling of export, transfer and import freight, handling of related documents, customs procedures and implementation of any security procedure agreed between the parties or required by the circumstances;
- for mail: physical handling of incoming and outgoing mail, handling of related documents and implementation of any security procedure agreed between the parties or required by the circumstances."

As the warehouse handling of freight and mail at most airports is fully liberalised, respectively not limited, the analysis focuses on the number of ground handling suppliers, providing transportation and loading services on the apron. Considering this clarification, changes in the number of freight and mail handling providers are presented in the Figure 4-6 and Figure 4-7 below.

Developments at EU-15 airports

Considering EU-15 airports the development shows a similar pattern as already described for baggage handling. This follows from the fact that most of the third party handling providers and handling airlines perform the three categories baggage, freight and mail and ramp handling.

More precisely the number of third party handlers at all airports providing data rose from 32 to 52 (63%) until 2002 and again by eight handlers (15%) until 2007. This stands for a growth of 86% between 1996 and 2007

The number of handling airlines in contrast decreased between 1996 and 2002 by 6 airlines (26%), but increased by eight airlines until 2007 again. Summarized, this implies a moderate growth of 9% between 1996 and 2007.

The difference between third party handling providers and handling airlines results mostly from the fact that there was and is no airline active at German airports (except NUE, LEJ and HAM, where DHL handles its own cargo).

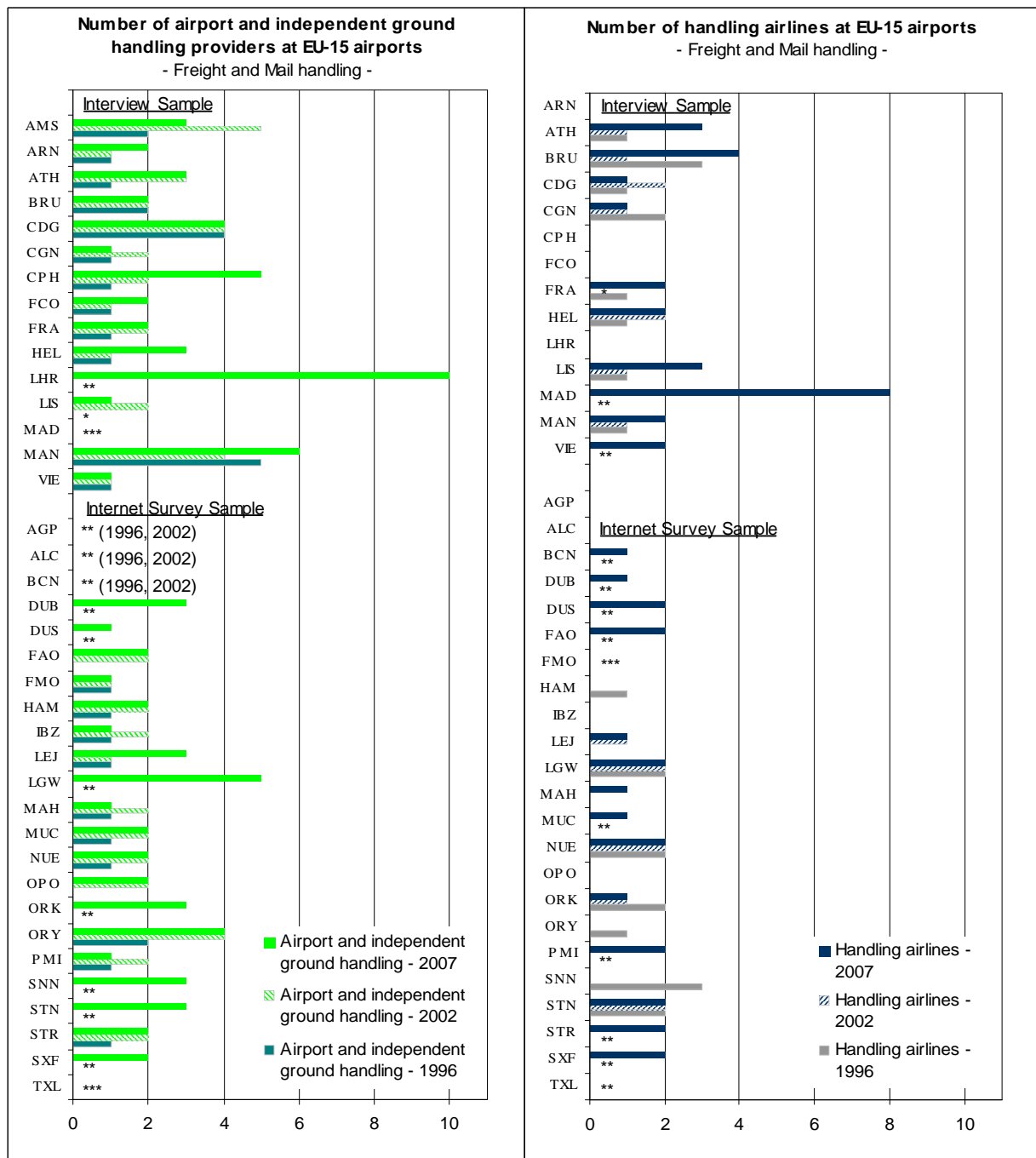


Figure 4-6: Number of freight and mail handling providers in 1996, 2002 and 2007 – EU-15

By analysing the representative sample (on-site interviews) and therefore excluding the over representation of some country specifics, the development shows a more homogeneous picture: the number of third party freight and mail handling providers as well as handling airlines grew between 1996 and 2007 by 60%. However, the development within those years differs: until 2002 third party handlers increased by 33% whereas the number of handling airlines

decreased by 10%. In the following period until 2007 the number of third party handlers increased by 21% due to the limited number of airlines, which in contrast increased by 77%.

Today there are in average 2,8 (for comparison 1996: 1,8) third party handling providers active at each airport out of the representative sample of EU-15 airports and 1,3 (1996: 0,8) handling airlines.

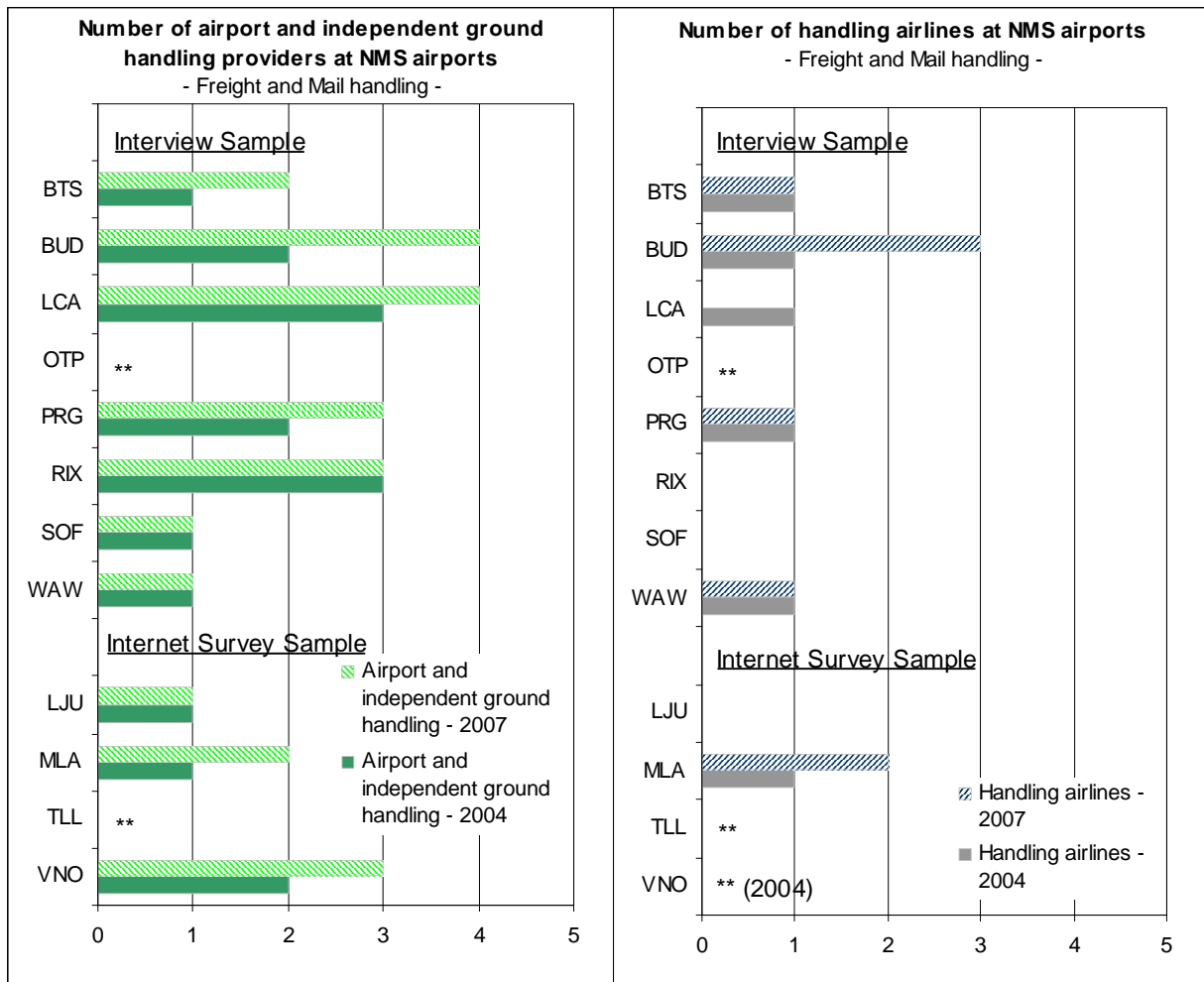
Developments at New Member States airports

Generally, the development of freight and mail handling providers does not differ extremely from the developments in baggage handling: at the majority of airports the number of handlers increased since 2004. However, it can be seen, that only at a minority of airports a monopoly existed before the opening of the market in 2004. Mostly there were at least one third party handling provider plus one handling airline active.

Analysing the changes of suppliers at all participating airports in the New Member States the number of freight and mail handling providers (transport and loading on the apron) increased by 41% (2004: 17; 2007: 24) and handling airlines increased by 33% (2004: 6; 2007: 8).

Comparing it with the growth of the representative sample it is similar but slightly higher. At the visited airports the number of third party handling providers increased from 13 to 18 handlers (38%) whereas the number of handling airlines increased from 5 to 6 (20%) in the time between 2004 and 2007.

Today there are in average 2,6 (2004: 1,9) third party handling providers active at each airport from the representative sample of NMS airports and one (2004: 0,8) handling airline.



* Data for one year not available
 ** Data for two years not available

Figure 4-7: Number of freight and mail handling providers in 2004 and 2007 – New Member States

Conclusions about freight and mail handling competition

- Following the introduction of the Directive, the number of freight and mail handling providers has generally increased at European airports (in the EU-15 airports as well as in NMS airports).
- An average growth of 62% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines could post a growth of 60% in the same time. (Due to the representation given, results are only derived from the data of interviewed airports.)
- The growth of third party handling agents in the New Member States accounted for 39% between 2004 and 2002, the growth of handling airlines 20%.

- It needs to be noted that the absolute change in the number of third party handling providers in the New Member States as well as in the EU-15 was higher compared to the change in the number of handling airlines.
- With the exception of one airport the change (at BUD airport two handling airlines as well as two third party handling agents entered the market) in the number of handlers per airport did not exceed one handler.

4.2.3 Ramp handling (category 5.4)

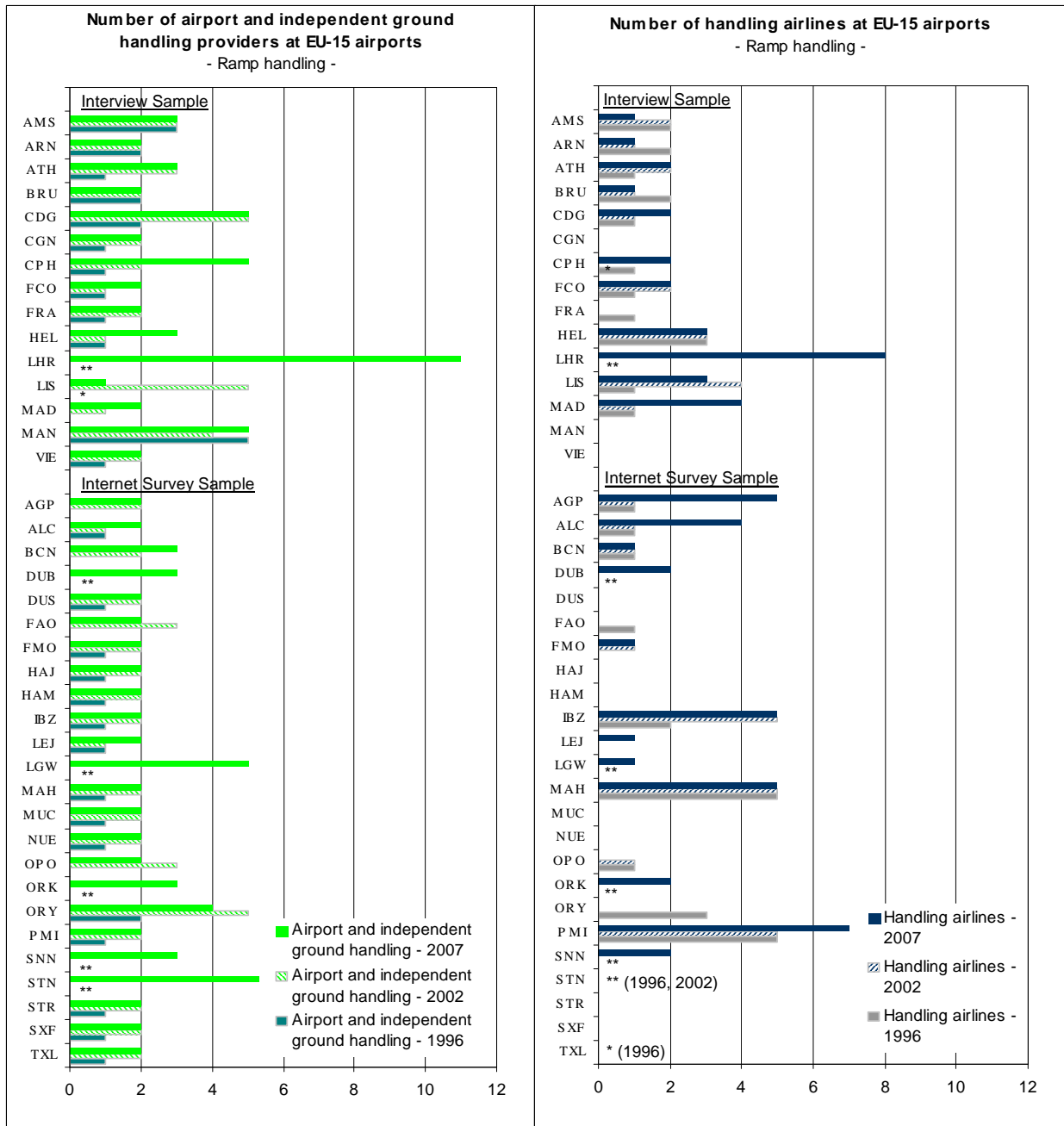
The definition of ramp handling as given by the Directive comprises:

- " marshalling the aircraft on the ground at arrival and departure;
- assistance to aircraft packing and provision of suitable devices;
- communication between the aircraft and the air-side supplier of services;
- the loading and unloading of the aircraft, including the provision and operation of suitable means, the transport of crew and passengers between the aircraft and the terminal, as well as baggage transport between the aircraft and the terminal;
- the provision and operation of appropriate units for engine starting;
- the moving of the aircraft at arrival and departure, as well as the provision and operation of suitable devices;
- the transport, loading on to and unloading from the aircraft of food and beverages."

Changes in the number of handling airlines and third party suppliers providing ramp handling are presented in the Figure 4-8 and Figure 4-9 below.

Developments at EU-15 airports

Considering the time before the opening of the market a monopolistic situation can be found at many airports across the EU-15 Member States. Only a few of them had a fully open ramp handling market such as AMS, ARN, MAN, PMI or HEL airport. At those there were in sum at least four handlers (including handling airlines) active.



* Data for one year not available
 ** Data for two years not available

Figure 4-8: Number of ramp handling providers in 1996, 2002 and 2007 – EU-15

The situation changed in the period between 1996 and 2002: regarding the data of all airports participating in the study the number of third party handling providers almost doubled from 37 to 71 (92%). Handling airlines instead had only a moderate growth of 9% from 34 to 37 airlines in this time frame. In the following period between 2002 and 2007, handling airlines also expanded their activities by 30%. The number of third party providers increased with less intensity by 13% from 71 to 79 handlers.

Regarding the results of the representative sample and therefore the more general trends in the European Union, the growth showed a different pattern: the number of third party handlers grew less in the first period (43%), but more in the second phase (27%) than compared to the data from all airports.

This results in a constant growth of one handler at airports from the internet sample whereas in the representative sample some of the airports were already liberalised before 1996 (AMS, ARN, MAN) and showed a zero growth or even a decrease in the number of third party handlers between 1996 and 2002.

Concerning handling airlines, the number grew within the representative sample by two airlines in both periods of time instead of being stable respectively growing by seven airlines when considering all airport data.

Developments at New Member States airports

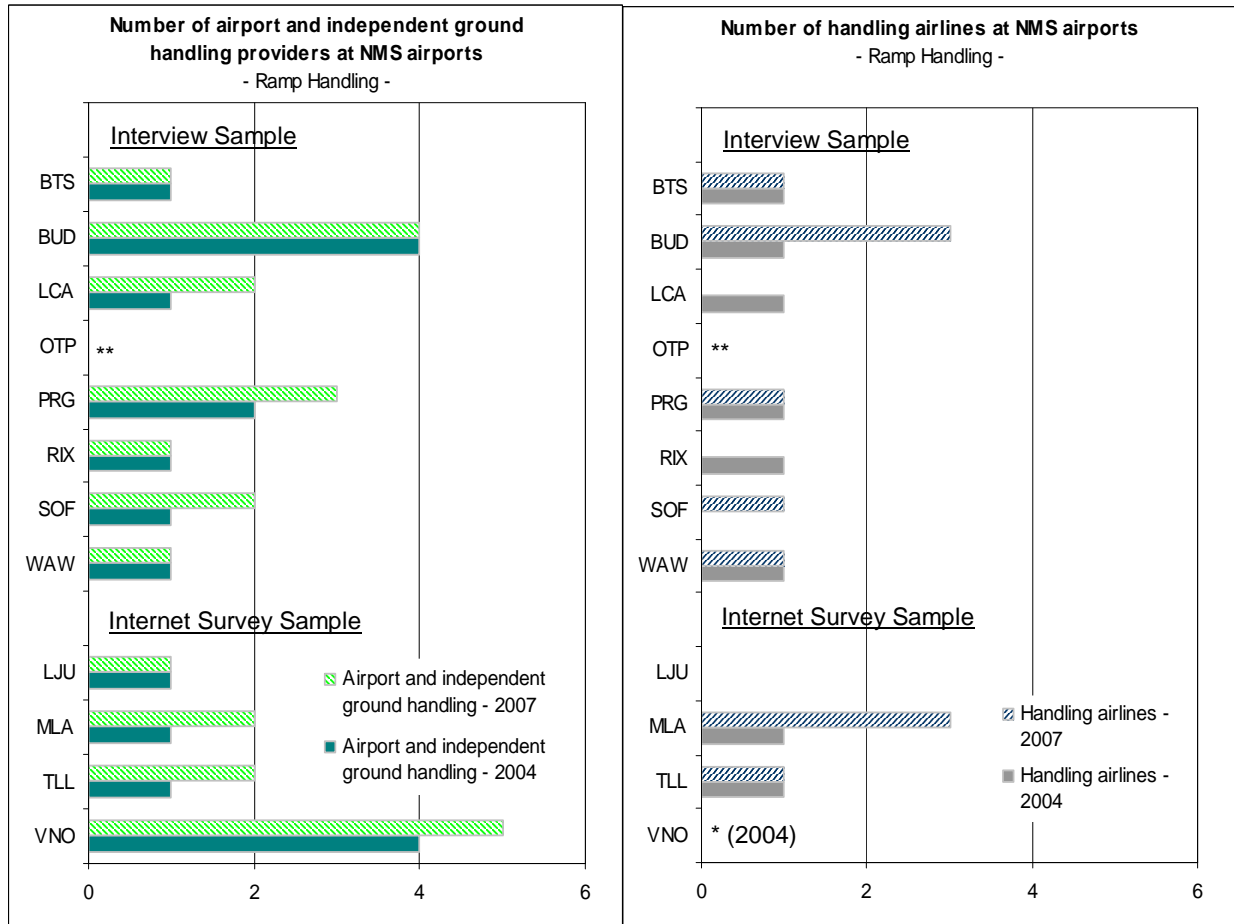
Analysing the findings, shown in Figure 4-9 below, the number of third party ramp handling providers at all participating airports in the New Member States increased by seven companies (27%) and the number of handling airlines grew by four airlines (40%).

It can also be seen that the number of additional companies only rose by one at each airport or remained stable between 2004 and 2007. This means that there were rather less intense changes in the market structure at those airports. This may result from the size of the airports and their traffic volume, which is relatively small in comparison to airports in the EU-15 (like ORY, CPH or CDG), where more handling companies started their operations after the opening of the market.

A higher growth can be seen in the number of handling airlines. At LCA and SOF airport one new airline entered the ramp handling market, at BUD and MLA airport even two airlines started their operations since the opening of the market.

The development within the representative sample (visited airports) in the New Member States shows a very similar pattern as the described development at all participating airports: there was a general increase of third party and handling providers. More precisely, the number of third party handlers increased by 27% (three companies) while handling airlines increased by 40% (two airlines).

This implies an average number of third party handling providers at each airport of 1,6 in the year 2004 and of 2,0 in 2007. The average of handling airlines is less. It counts for 0,8 airlines in 2004 and 1,2 in 2007 at the representative sample of airports in the New Member States.



* Data for one year not available
 ** Data for two years not available

Figure 4-9: Number of ramp handling providers in 2004 and 2007 – New Member States

Conclusions about ramp handling competition

- The number of ramp handling providers has generally increased at European airports following the introduction of the Directive, in the EU-15 airports as well as in NMS airports.
- An average growth of 81% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines could post a growth of 27% in the same time. (Due to representation given, results are only derived from the data of interviewed airports.)
- Between 2004 and 2007 the growth of third party handling agents in the New Member States accounted for 27%, the growth of handling airlines 40%.
- It needs to be noted that the absolute change in the number of third party handling providers in the New Member States as well as in the EU-15 was higher compared to the change in the number of handling airlines.

- With the exception of two airports the change (at MLA and BUD airport two handling airlines entered the market) in the number of handlers per airport did not exceed one handler.
- The absolute change in the number of third party handling suppliers per airport was higher in the EU-15 Member States than in the New Member States with the exception of German and Spanish airports.

4.2.4 Fuel and oil handling (category 7)

The definition of fuel and oil handling as given by the Directive comprises:

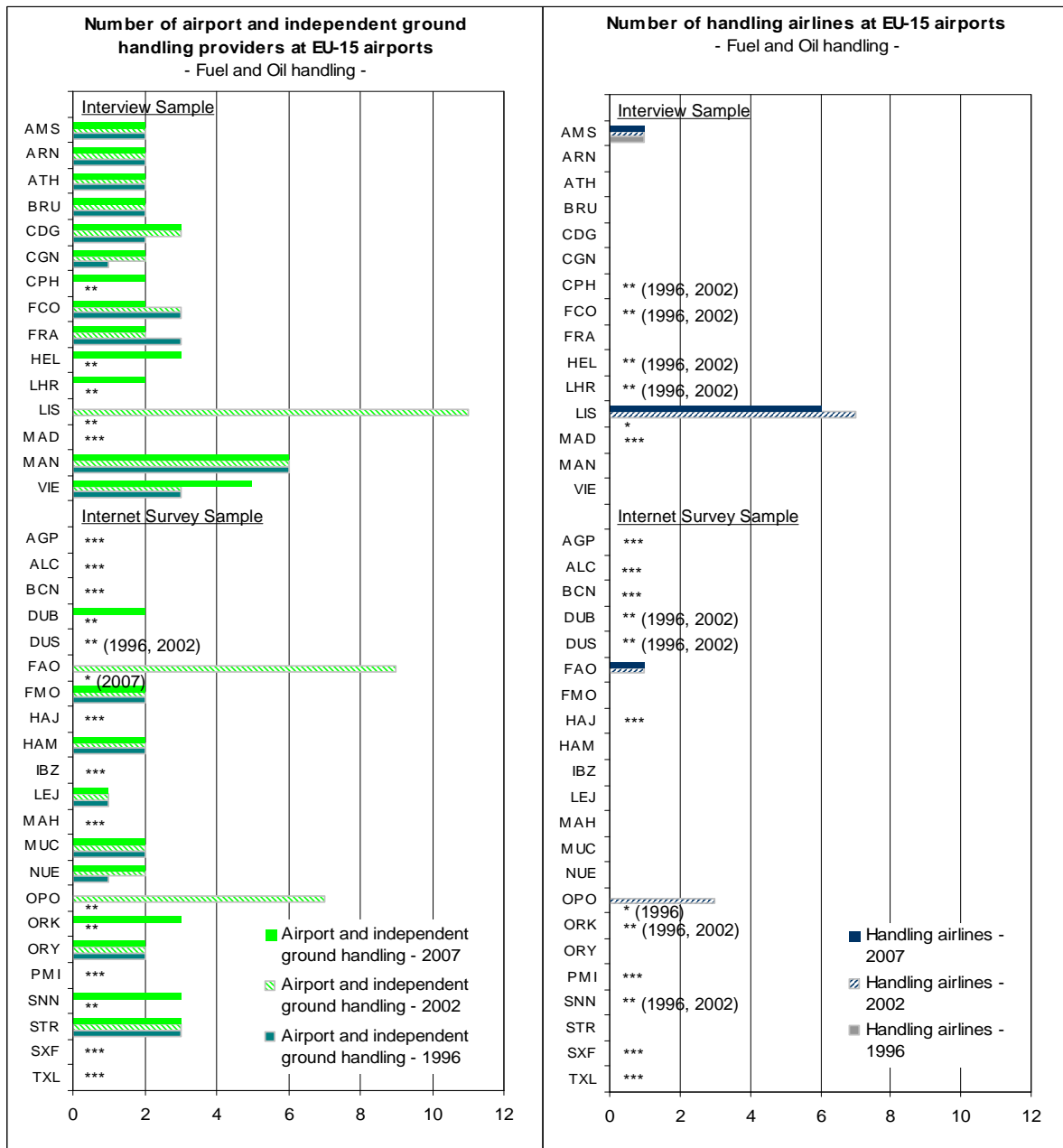
- "the organization and execution of fuelling and defuelling operations, including the storage of fuel and the control of the quality and quantity of fuel deliveries;
- the replenishing of oil and other fluids."

Changes in the number of handling airlines and ground handling suppliers providing fuel and oil services are presented in the Figure 4-10 and Figure 4-11 below. As the market for fuel and oil handling seems to be dominated by petroleum companies only a very limited number of handling airlines operates in this market. This is also the reason for many participating ground handling companies not knowing details about the number of fuel and oil handling providers. No stakeholder of airports in the EU-15 having participated in the study provides fuel and oil handling himself. Only a few handlers in the New Member States are active.

Developments at EU-15 airports

Considering all airports in the EU-15 providing data the number of third party providers as well as the number of handling airlines remained stable. Compared to 1996 the quantity of self-handlers in 2002 increased by one, while the number of third party handlers increased by two. In the following period until 2007 the number of handling airlines stayed on the same level while the number of third party handlers increased by one.

By only taking the representative sample into account the developments seem to be almost identical. While the number of handling airlines remained stable in the whole period of time, the number of third party handlers increased by one in each time frame.

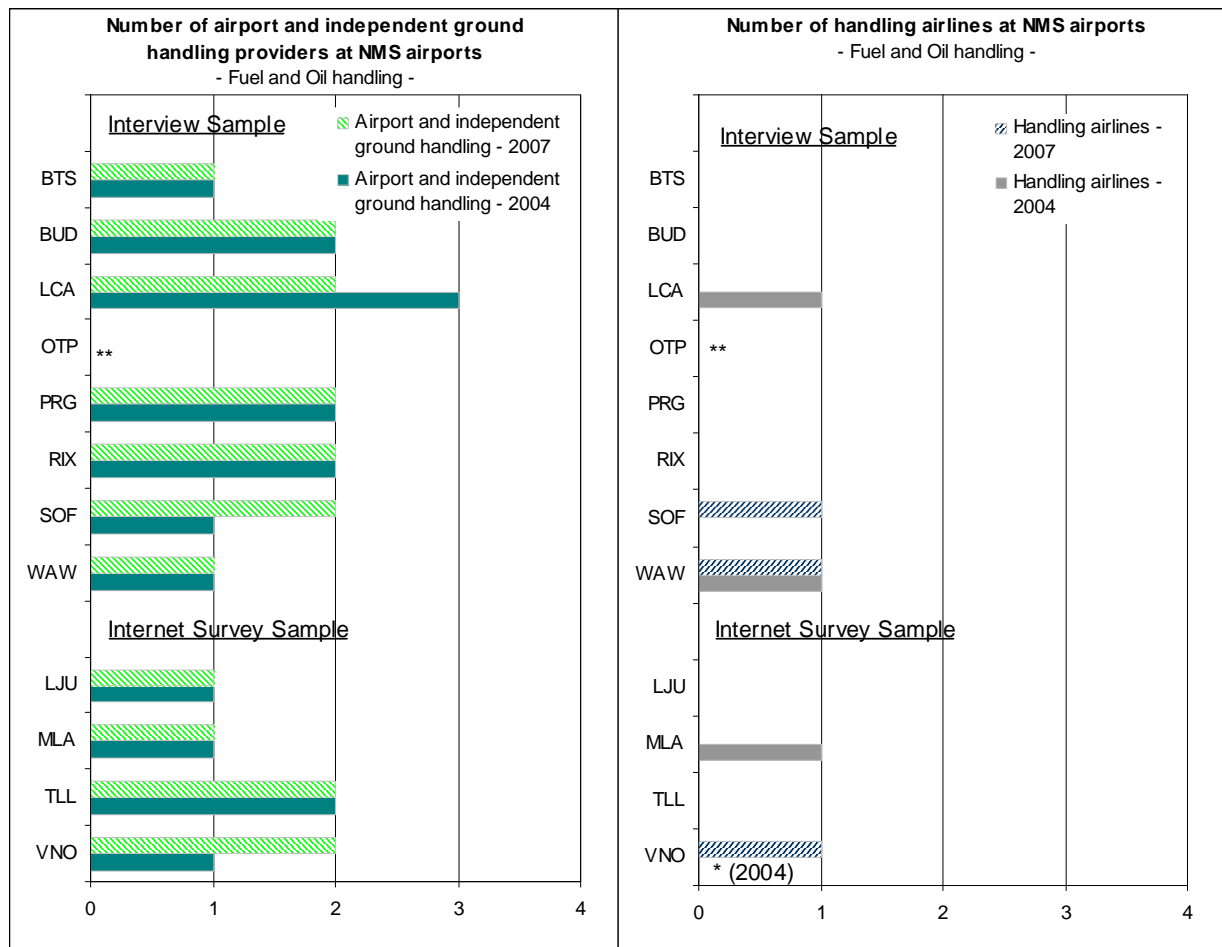


* Data for one year not available
 ** Data for two years not available
 *** Data for three years not available

Figure 4-10: Number of fuel and oil handling providers in 1996, 2002 and 2007 – EU-15

Developments at New Member States airports

In regard to the findings of the airports in the New Member States the number of fuel and oil handling third party suppliers as well as the number of handling airlines remained stable.



* Data for one year not available
 ** Data for two years not available

Figure 4-11: Number of fuel and oil handling providers in 2004 and 2007 – New Member States

Conclusions about fuel and oil handling competition

- In contrast to category 3,4 and 5 the number of fuel and oil handling companies did not homogeneously increase at the interviewed airports. Only the number of third party handling providers in the EU-15 could post an increase.
- An average growth of 8% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines did not show a change in the same time. (Due to the representation given, results are only derived from the data of interviewed airports.)
- In the New Member States no change could be seen in the number of third party providers as well as handling airlines.

Conclusions about ground handling competition

The following elements can be pointed out regarding the development in competition ground handling:

Table 4-1 gives an overview of the developments at the airports of the representative sample (Note: the data could only be considered if it was available for all three requested years). It can be concluded that the number of third party handling provider increased in each of the limitable categories whereas the growth between 1996 and 2002 was higher than in the period between 2002 and 2007.

The number of handling airlines increased as well, with a slight exception in the freight and mail handling category between 1996 and 2002, where one handler left the market; and in the fuel and oil handling category, where one airline left the market in the second period.

EU-15 (Representative Sample)							
Third Party Handling				Self Handling			
	1996	2002	2007		1996	2002	2007
Baggage handling	21	33	41	Baggage handling	12	15	16
Freight&mail handling	21	28	34	Freight&mail handling	10	9	16
Ramp Handling	21	30	38	Ramp Handling	15	17	19
Fuel&Oil Handling	26	27	28	Fuel&Oil Handling	1	1	1

Table 4-1: Overview of developments in the number of handlers in the EU-15

New Member States (Representative Sample)					
Third Party Handling			Self Handling		
	2004	2007		2004	2007
Baggage handling	12	14	Baggage handling	4	5
Freight&mail handling	13	18	Freight&mail handling	5	6
Ramp Handling	11	14	Ramp Handling	5	7
Fuel&Oil Handling	12	12	Fuel&Oil Handling	2	2

Table 4-2: Overview of developments in the number of handlers in the New Member States

4.2.5 Performance of stakeholder specific market shares in ground handling

In coherence with the analysis of the number of ground handling parties, developments and structural changes of the stakeholder specific market presence in terms of market shares are assessed.

Since all participating handling companies are active in ramp handling but not in all of the other three limitable categories, the following chapters are based on the received data on ramp handling (market shares in handled aircrafts). As already done in the chapter before, the results are presented for the EU-15 and New Member States ground handling markets separately.

Even though we did not receive reliable data, on the development of the stakeholder specific market shares in ramp handling (based on volume aircraft handled) from the 22 visited airports, some trends and tendencies might become clear.

EU-15 Member States

Generally, since the opening of the ground handling markets in the EU-15 countries the market shares of the independent ground handling providers increased while the market shares of the airport ground handling subsidiaries remained stable or decreased. The shares of handling airlines stagnated or decreased. The developments seem to be reasonable, since some airport operators (e.g. airport operators at several German airports) respectively airlines (Olympic Airways at Athens Airport), lost their ground handling monopolies and new independent ground handling providers entered the market. Additionally, some airport operators decided to sell their handling subsidiary (e.g. Roma-Fiumicino Airport) to independent ground handling providers. Another development has taken place at Portuguese airports LIS, OPO and FAO, where the airport operator set up its own handling subsidiary in 2000 and gained market shares while the handling subsidiary of the main carrier lost shares.

Furthermore, it can be highlighted that the substantial changes in the EU-15 have taken place in the first period between 1996 and 2002. The following developments were not as much about companies leaving or entering the market, but more about already active companies gaining or losing parts of their market shares.

A change of -100% in market share for an airline means that, the airline lost all of its market shares between 1996 and 2002 e.g. at LIS airport, and therefore the airport ground handlers and independent ground handling companies gained in total 100% of the airport ground handling market.

The findings related to the EU-15 ground handling markets are presented in Figure 4-12 and Figure 4-13.

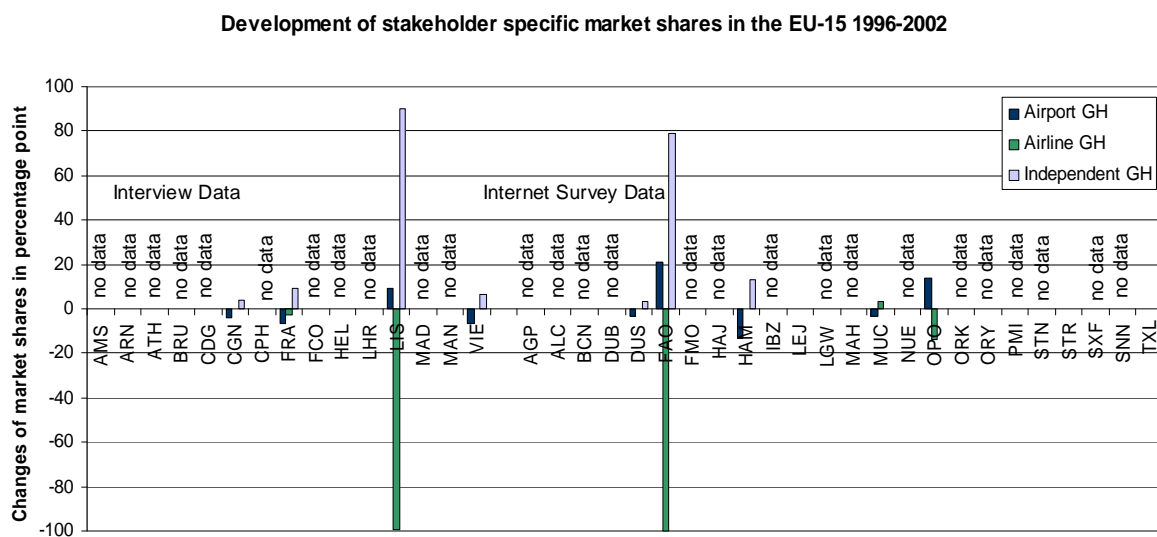


Figure 4-12: Performance of stakeholder specific market shares in ground handling between 1996 and 2002 – EU-15

Development of stakeholder specific market shares in the EU-15 2002-2007

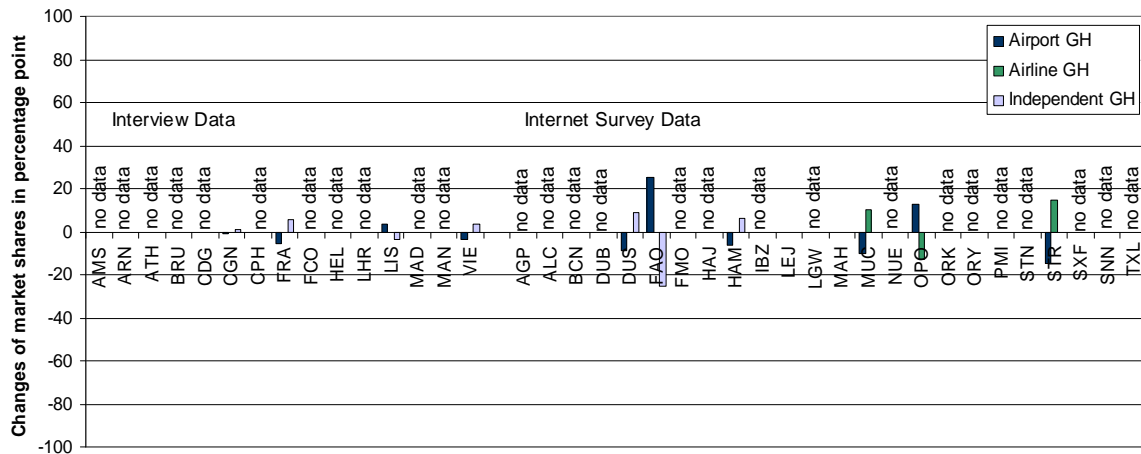
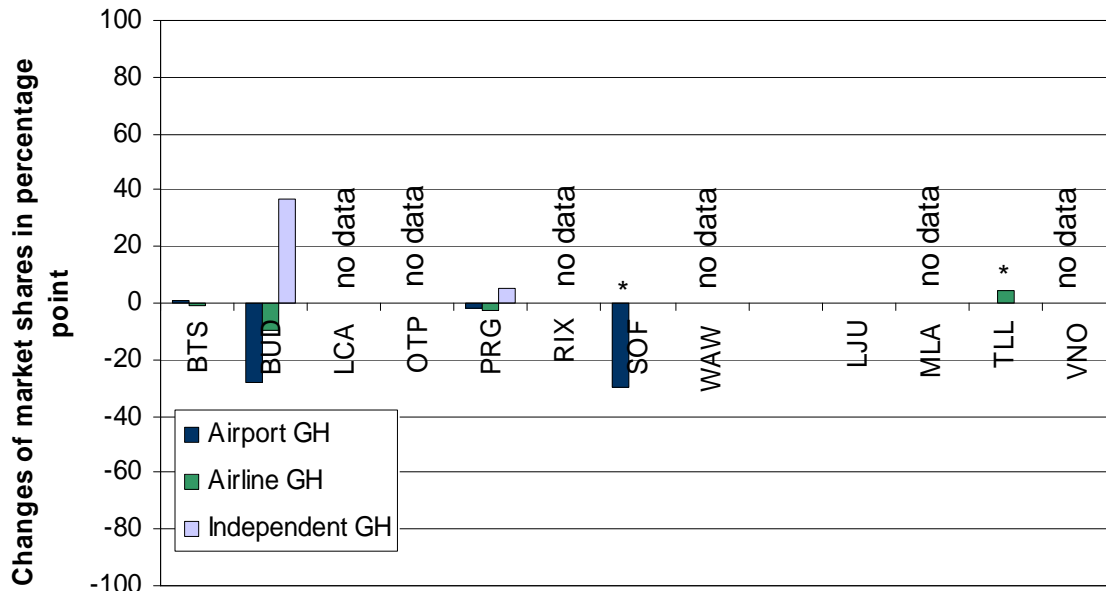


Figure 4-13: Performance of stakeholder specific market shares in ground handling between 2002 and 2007 – EU-15

New Member States

Since the opening of the ground handling markets in the New Member States, the stakeholder specific market shares in ramp handling changed similar to the developments in the EU-15. Generally, the market shares of independent ground handling providers increased more or less significantly, while market shares of airport ground handling subsidiaries and handling airlines decreased. The findings seem to be reasonable since ground handling monopolies were opened (e.g. Sofia Airport) and ground handling subsidiaries of airports sold (e.g. Budapest Airport) as well as new independent ground handling providers entered the markets. The results of the analysis are summarised in the figure below.

Development of stakeholder specific market shares in the NMS 2004-2007



* Data only available for one stakeholder

Figure 4-14: Performance of stakeholder specific market shares in ground handling between 2004 and 2007 – New Member States

Conclusion about stakeholder specific market shares in ground handling

The main results are the following:

- In terms of market shares, the main changes can be observed in airports where the airport operator was previously in monopoly, and where the market was opened following the introduction of the Directive. Due to the implementation of the Directive monopolies do not exist any more.
- As a general rule, the market shares of independent ground handling providers increased while market shares of airport ground handling subsidiaries and handling airlines decreased.
- The most important changes in the development of the market shares have taken place in the period from 1996 to 2002 when the markets were opened, new handling agents entered the market and competition started to increase.
- Developments in the EU-15 and the New Member States are similar.

4.3 Contestable markets

Preliminary remark

At many airports, airlines self-handle and provide handling services for other airlines. Especially at major hub airports like Madrid-Barajas or Paris-CDG, where the dominant air carriers operate the majority of the total handling volume via self-handling and third party handling for alliance partners. Since the self-handled traffic volume is not open for third party handling providers, the engagement of handling airlines limits the contestable market for competitors as well as largely influencing the cost structures due to economies of scale.

For the underlying approach the contestable market is defined as the market open to third party ground handling providers. The contestable market therefore excludes the handling volume, which is self-handled by airlines. Vice versa the third party handling volume that an airline operates for other airlines (e.g. provided for alliance partners) is considered as contestable.

However, it should be noted that some independent ground handling companies also stated that the handling volume, which is provided for other airlines, is not contestable either. But this objection is not included in the definition, which is underlying in this report.

Considering this definition, the stakeholders were asked to estimate the size of the contestable market for ramp handling at the airports and to indicate its development since the introduction of the Directive. The contestable market gives a more realistic picture on the situation at the airports and the chances for new handling companies to gain market shares.

In the following figures an estimation of the contestable market given by two different stakeholders is shown. If the airport is marked with a star then only one stakeholder has provided an answer. If there is a star and no bar shown then the estimate of the stakeholder who answered is zero (e.g. FMO and LEJ). Two stars point out that no answer was provided (e.g. LEJ and TXL for the year 1996). Not more than two different answers were given.

EU-15 Member States

Figure 4-15 to Figure 4-16 present the findings of EU-15 airports and give an overview of the estimates different stakeholders have given.

A 100% contestable market means that no handling airline is active at the airport and therefore the whole market is contestable for other ground handling companies. Vice versa a contestable market share of 0% describes a situation where only handling airlines are active at the airport.

The results show that the stakeholders' estimates vary extremely in some cases. This is mainly due to the fact that the stakeholders have different opinions about the power of a main carrier and therefore the contestability of its market share.

In general airport operators and airlines tend towards higher estimates, while independent ground handling providers indicate smaller portions of the contestable markets. Therewith

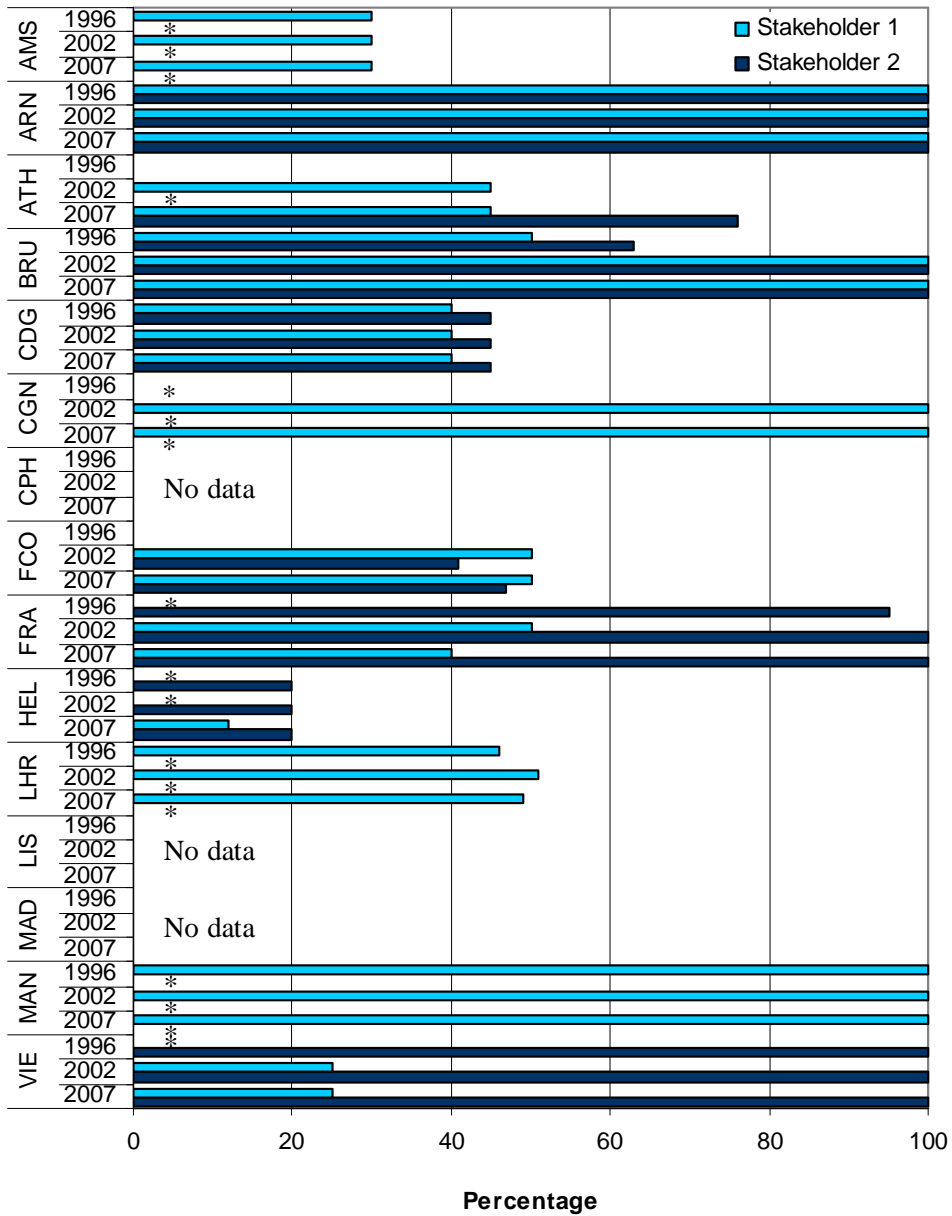
those stakeholders expressed their view, that due to long-term contracts the total portion of the contestable market is not accessible under a short and medium term perspective.

This can for example be seen at Frankfurt airport: one stakeholder rates the share of Lufthansa as contestable since the airline is not self-handling but handled by Fraport, which makes the whole market at FRA airport contestable. The other stakeholder however has a different view: he rates the market share for 50%. Due to the fact that Lufthansa has a high traffic volume at this airport it is operationally not possible for a new market entrant or a small handling company to operate such a high volume. Therefore the market share of Lufthansa can not be seen as contestable. Therefore, the same situation can be seen differently at the same airport. The same situation can also be noticed at Vienna airport.

Beside the differences between the stakeholders' estimates, the figures show that the size of the contestable markets changed over time at airports where the contestable market was relatively small by the time of the opening of the market. This is due to the fact that handling airlines left the market or lost parts of their market shares. This can be seen at BRU airport where Sabena left the market in 2001 and therefore the contestable market reached 100% in 2002.

On the contrary there are also airports at which the handling airline remained powerful over the whole period of time as well. This can be seen at HEL airport, where the stakeholder estimates the size of the contestable market for 20% of the whole market due to the high market volume of Finnair which is handled by Finnair's ground handling subsidiary Northport. The same situation can be observed at AMS airport where KLM has a high traffic volume, which reduces the share of the contestable market to approximately 30%.

**Estimates on the contestable markets at EU-15 airports -
Representative Sample**



* Data of second stakeholder not available

Figure 4-15: Contestable market estimates for ramp handling at EU-15 airports - Representative Sample

**Estimates on the contestable markets at EU-15 airports -
Internet survey data**

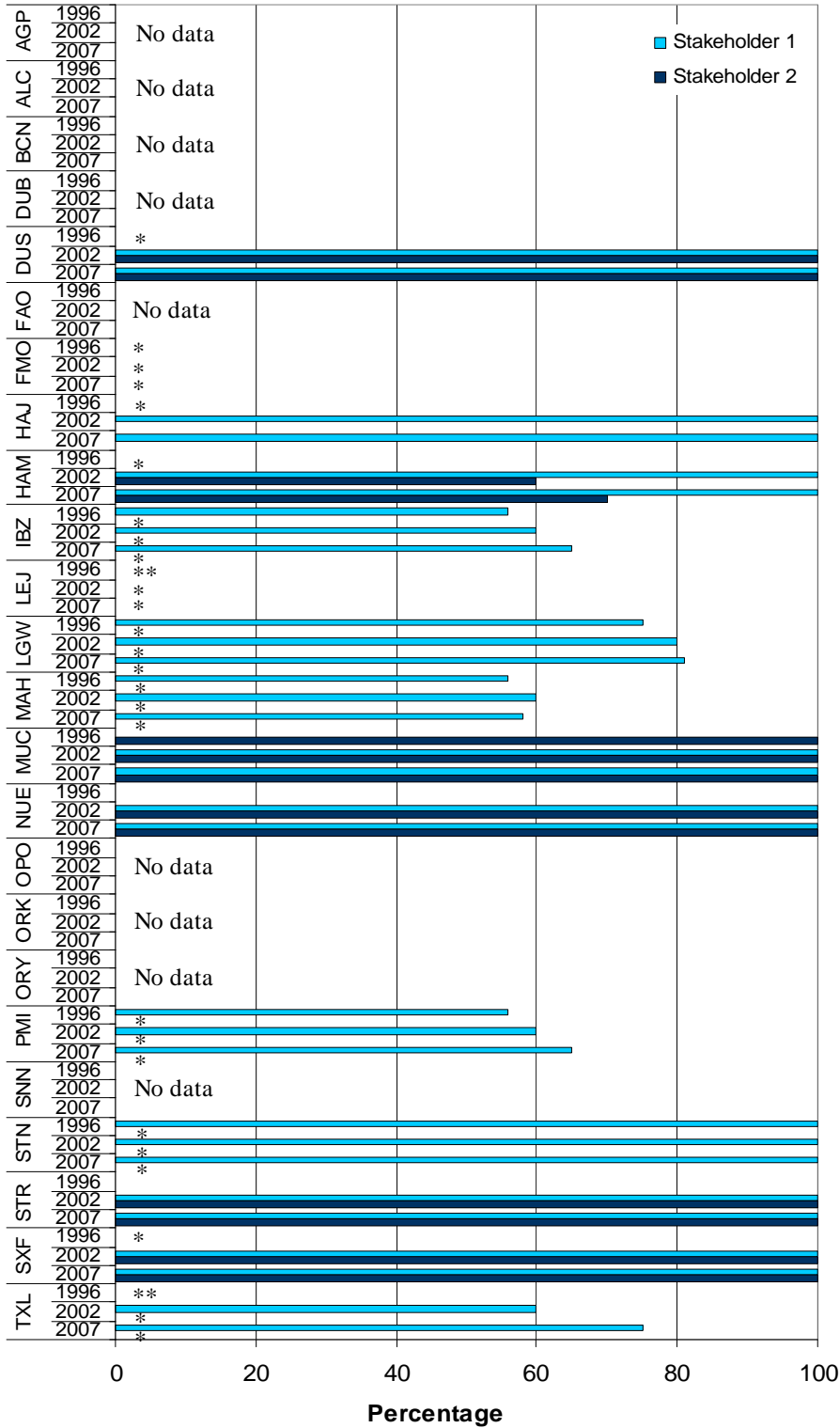


Figure 4-16: Contestable market estimates for ramp handling at EU-15 airports – Internet survey data

If we analyze the results obtained from the internet survey, we can conclude that they do not differ from the developments within the representative sample.

At German airports such as DUS, HAM, MUC, HAJ and NUE, stakeholders estimated the contestable market in 1996 to be zero even though there was no handling airline active. Regarding the underlying definition those answers may be misleading. These statements however may result from the fact that the markets were not contestable at all in 1996 not because of the presence of handling airlines, but because of airport operators having a monopoly in handling activities. This changed with the opening of the market as it became fully contestable. (This development is described more closely in chapter 4.2.5.)

PMI and IBZ airport results reflect the decreasing market share of handling airline and therefore an increasing share of the contestable market.

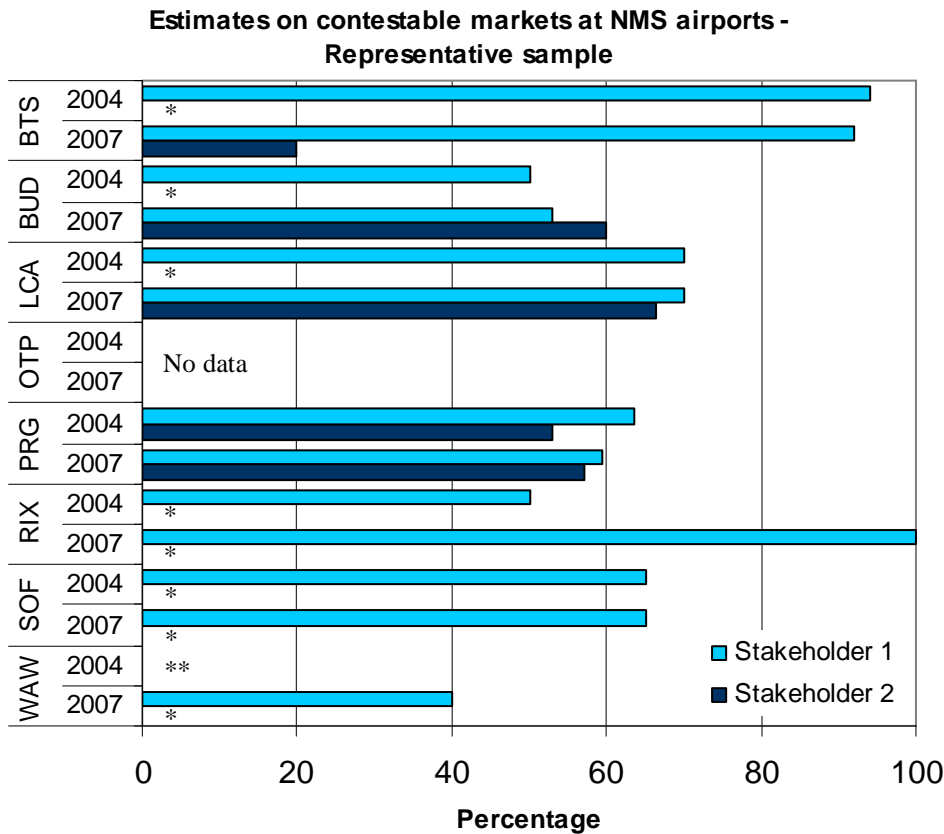


Figure 4-17: Contestable market estimates for ramp handling at airports in the New Member States – Representative Sample

New Member States

At New Member States airports the contestable market in 2007 is estimated to be more than 50% in average, which means that the market share of handling airlines active at those airports comprise less than 50% of the whole market.

Nevertheless, the developments seem to be heterogeneous: at some airports such as BTS the contestable market decreased since the implementation of the Directive 96/67/EC. This may be due to an increasing market volume of handling airlines at those airports. However, this can only be noticed at a minority of airports and is in contrast to the findings of the chapter before: The market share of handling airlines mostly decreased since the opening of the market, as it can be seen at RIX or BUD airport.

Further general positions to the contestable market are summarised below:

- Changes of the contestable markets are largely influenced by the performance of the main carriers. At many airports the contestable market increased, since the network carriers lost market shares in competition with the low cost carriers (e.g. Olympic Airlines ceased self-handling at Athens airport and switched to an independent ground handling provider).
- As the definition of 'contestable market' considers the handling volume available for third party handling activities and in opposition to the self-handling volume, it should be noted, that due to long term contracts, complexity and size, the handling volume of the main carrier, in most cases, is not accessible in practice either (e.g. Handling volume of Austrian Airlines at Vienna airport).
- Some of the airport operators at limited markets mentioned that the size of the contestable market is used to define the optimum number of handling licences before tender.

Conclusion about ground handling contestable markets

The following conclusions can be drawn about the contestable markets at airports:

- In general, the ground handling market at airports is considered by stakeholders as open to third party handling following the introduction of the Directive.
- However, some elements are viewed as limiting the opening of the market:
 - the high volume handled by the main carriers is hampering small companies to enter the market
 - the share of ground handling volume, which the airlines operates itself is not contestable for ground handling companies

- However, as the share of handling airlines is decreasing over time, i.e. the contestable market becomes bigger;
- For New Member States, opening of the market at certain airports is still on-going (or future);
- Market opening is cyclical at airports with limited markets (i.e. with licensed ground handling activities): the market can be seen as closed between two renewals of the contracts.

4.4 Changes in handling prices

In this section the central findings on price developments for ground handling services are summarised. Based on the interviews, we asked the stakeholders to estimate the price developments for ground handling services in general, i.e. the development of the amount of money asked to the airline for the same activity within the reference periods. If no detailed information was available stakeholders, were supposed to estimate qualitatively the direction of the development. The general price changes in ground handling markets are shown in Figure 4-18 until Figure 4-20.

EU-15 Member States

At the majority of airports, in the period between 1996 and 2002, prices decreased intensively an average of approximately 12%. The changes seem to be more or less identical within the representative data and the internet survey data.

In contrast to this development at HEL airport prices increased between 1996 and 2002 mainly due to increasing traffic volume with a healthy number of handlers active. During this time the number of handlers remained stable which allowed the handlers to increase the prices for handling services. The situation changed between 2002 and 2007 when competition increased (two handling providers entered the market) and handlers needed to react with price reductions to gain customers. According to the information provided by an independent ground handling company prices decreased even more than they have increased between 1996 and 2002.

A similar situation was given at CGN airport: in the first period the airport operator invested in infrastructure and therefore also increased the prices for handling services. This however could not be retained when a new handler started operations at CGN and therefore increased competition. But in contrast to the development at HEL airport prices remained stable at CGN airport.

At LEJ airport, Portground is apart from DHL (which just handles its own cargo aircraft) the only handling provider, since LEJ is not over the threshold of 2 Mio. PAX yet. This implies a more or less monopolistic situation whereby Portground could increase the prices in both

periods according to the increasing costs the company faced during that time due to increasing fuel costs and investments in GSE equipment.

Changes in handling prices 1996 - 2002

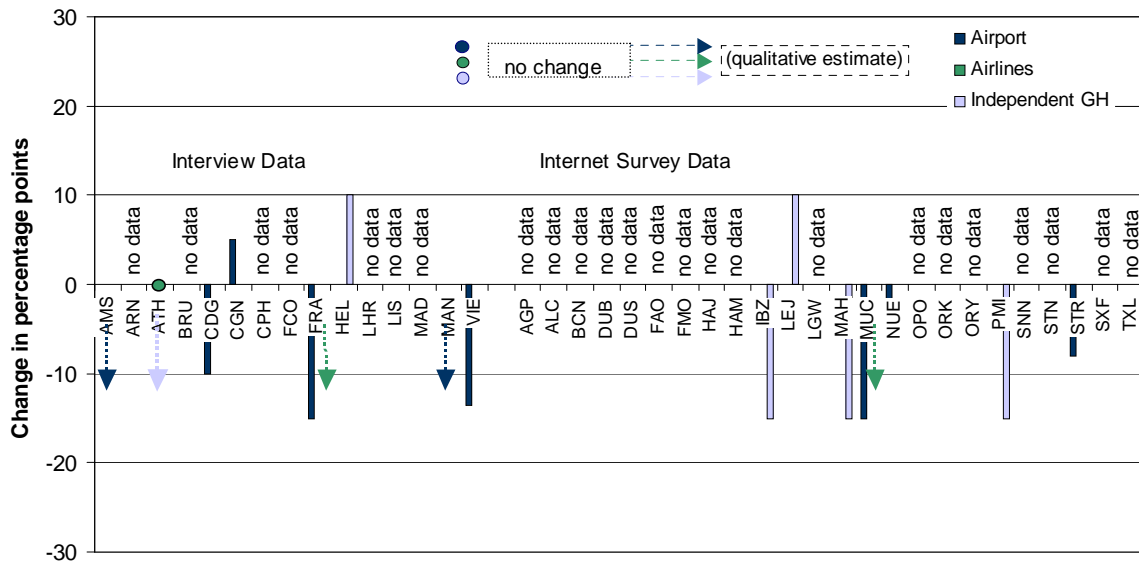


Figure 4-18: Stakeholder specific estimates on changes in handling prices between 1996 until 2002 - airports in the EU-15

Between 2002 and 2007 prices decreased at most airports. 75% of participating stakeholders at EU-15 airports stated a decrease of prices and only 22% saw an increase. Stakeholders even mentioned that prices decreased with a higher intensity than in the previous period: prices changed on average approximately by 15%. At airports with increasing prices they had a change with an intensity of 7%.

It seems as if stakeholders noticed different price changes at the same airport. This can be seen at MAN or VIE airport where the airport operator stated a decrease and the independent ground handling provider stated an increase. This might be due to different price base levels. Airport operators might be on a higher price level since they had had a handling monopoly before the opening of the market and therefore higher price levels. Independent ground handling providers however need to have a lower price level for entering a new market.

At FRA, FCO or ATH airport stakeholders had the same view on the price developments whereas the intensity of changes differs.

At FCO airport competition increased since 2005 when the market was fully opened. Competition was mainly on prices even if the airport tries to compete on quality and on the creation of broad and individually customer adjusted handling packages. The handling airline also sees increasing competition as reason for decreasing prices. The airline however also pointed out that they try to balance the costs due to high oil prices by lowering handling prices. (The handling airline remunerates to its own handling department.)

With focus on the visited EU-15 airports it might be stated, that at airports with a former handling monopoly (e.g. Vienna airport) prices decreased with a higher intensity than at airports, which have already had open markets. Since the ADR (Aeroporti di Roma) sold its ground handling subsidiary at Roma-Fiumicino airport in 2005 and grants unlimited access to the market, handling prices decreased on a larger scale.

Changes in handling prices 2002 - 2007

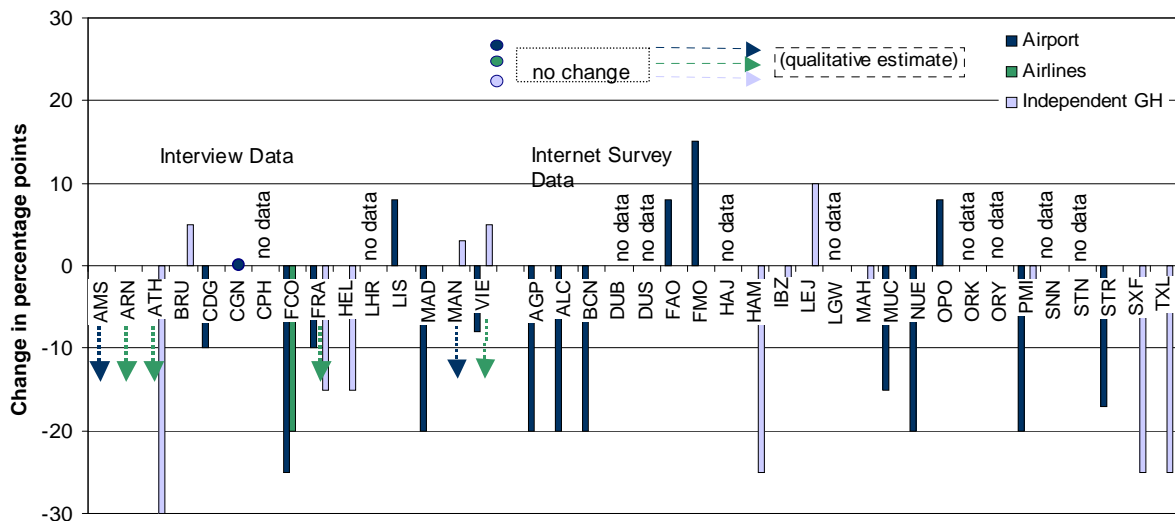


Figure 4-19: Stakeholder specific estimates on changes in handling prices between 2002 until 2007 - airports in the EU-15

Although the perception on price changes differs between the airports, it can be concluded, that since the introduction of the Directive, prices in ground handling markets decreased, and that the Directive and increasing competition are not the single driver of the developments.

Other drivers which have contributed to the decrease, but at a minor scale, are :

- higher pressure from the airlines which resulted in higher productivity and process improvements by the handling company which could then reduce the prices.
- the economies of scale due to increasing traffic volume and a stable number of handlers.

New Member States

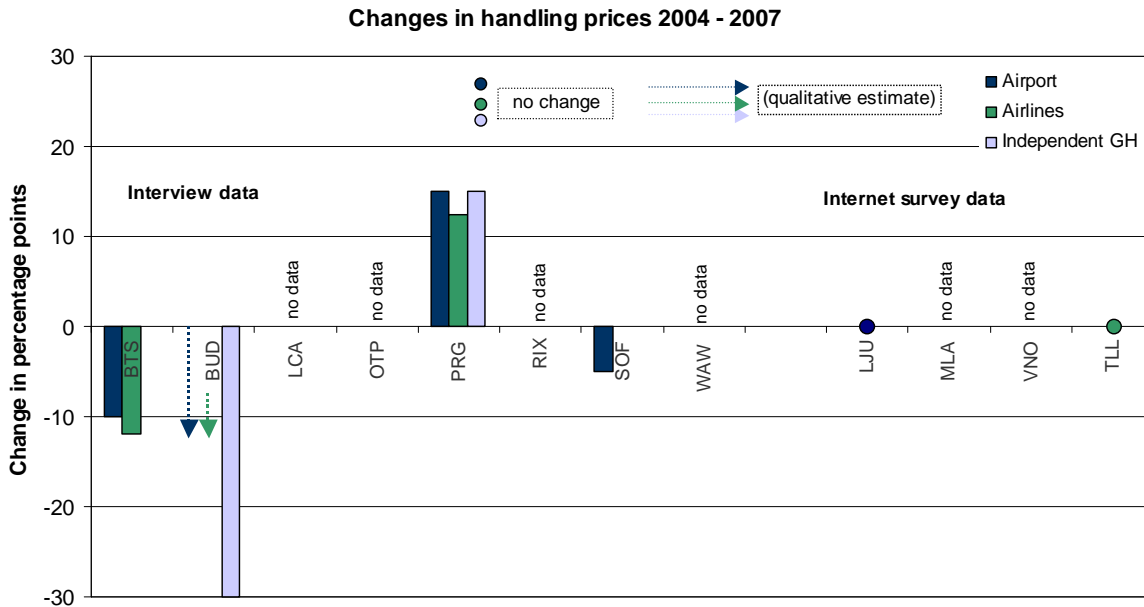


Figure 4-20: Stakeholder specific estimates on changes in handling prices between 2004 until 2007 - airports in the New Member States

Considering the findings for the ground handling markets in the New Member States it could be concluded, that prices for ground handling services decreased since the introduction of the Directive 96/67/EC. Prague airport stakeholders indicated an increase of handling prices due to an increase of the exchange rate of Czech Crowns to the Euro, even though the level of competition increased.

At LJU and TLL airport the prices did not change. Since these airports are not over the threshold of 2 Mio. PAX yet, competition did not start either. This could be the reason for the stable prices and would vice versa explain why prices decreased at airports with an increasing number of handlers and thereby more competition.

At BTS airport, stakeholders have the same view on the developments, but for different reasons: The airport stated decreasing prices mainly due to increasing pressure caused by the airlines. However, the handling airline itself saw decreasing prices due to developments in the financial market and hence resulting in a more powerful Slovak Crown compared to the EUR.

Stakeholder specific positions about price developments

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport operators:

- In accordance with the increase of competition prices for ground handling services decreased.
- Since the start of the Directive, the competition has been more on prices than on quality, in many cases.
- The decreases of handling prices are largely affected by the pricing pressure of airlines.
- Price developments are market specific and vary from airport to airport.
- At some airports ground handling prices increased due to inflation, currency exchange rates and increased wages (e.g. collective labour agreements) as well as to higher costs for the use of infrastructure even though the intensity of competition increased.

Airlines:

- In addition to the liberalisation of European aviation markets, the liberalisation of ground handling markets, increasing competition affects prices and quality.
- Due to market consolidation and increasing costs for ground handling operation airlines could face increasing prices for ground handling services in the future.
- Since some ground handling markets are limited, further decreases of handling prices could be realised by an increase of the required minimum number of suppliers.
- On the contrary, many airports have fully liberalised their access to ground handling markets without negative effects on quality.

Independent ground handling providers:

- Prices for ground handling services decreased due to:
 - Increasing competition since the introduction of the Directive
 - Process improvements and increasing efficiency
 - Investment in more efficient ground support equipment.
- In many cases decreasing prices are compensated by increasing productivity.

- At some stations, ground handling prices increased due to inflation, currency exchange rates and increased wages as well as due to higher costs for the use of infrastructure, even though the intensity of competition increased.
- Since prices for ground handling services decreased while operational costs increased, making operations unprofitable, some independent ground handling companies would favour the definition of minimum handling prices to ensure healthy competition and social standards.

Conclusion about changes in handling prices

- In general, the ground handling prices at airports decreased following the introduction of the Directive and the subsequent increase in competition.
- At EU-15 airports, the prices continued to decrease between 2002 and 2007. This tends to prove that competition still exists in the European ground handling market (due to the renewal of licences for restricted markets and the continuous pressure of market openness for others).
- For New Member States it can be concluded that prices decreased since the opening of the markets. However at some airports competition did not start yet whereby prices did not change either.
- Therefore prices will still decrease in the future at New Member States airports.
- The trend of decrease in prices is maintained thanks to competition pressure at airports covered by the Directive; however the extent to which prices decreased was influenced by other factors such as improvements in ground handling technology (for instance, GH today relies less on manpower than in the past for the same activity thanks to GSE developments) or competition between airports to serve as hubs for airlines (GH are in competition even if they are not at the same airport).

4.5 Changes in Quality Levels

In the following analysis the central findings on changes in quality levels for ground handling services are summarised. Based on the interviews, we asked the stakeholders to indicate the changes in quality level for passenger and for airline convenience in the reference periods (The following possible answers were given: Improvement, deterioration or no change). Since the majority of stakeholders could not rate the passenger convenience the results shown in Table 4-3 until Table 4-5 are based on the general development of 'quality for airline convenience'. It is not differentiated between the four limitable categories in order to have enough results in term of representation.

EU-15 Member States

Taking the first period between 1996 and 2002 into account changes in quality differ from airport to airport in the EU-15. The answers given by different stakeholders at the same air-

port are consistent even though they are not identical in all cases (improvement – no change e.g. at FRA or VIE airport).

For the second period more stakeholders indicated the developments. In this period stakeholders more often even had contrary opinions on the developments as it can be seen at ARN, FCO, VIE or HAM airport.

To give an insight on the reasons for those contrary opinions some airports are analyzed more closely in the following section:

Quality seems to be driven by several different factors which are often airport specific: some stakeholders saw deteriorating quality due to old handling infrastructure or due to capacity constraints at the centralized infrastructure such as the baggage handling system. This was the case at FCO airport where some stakeholders mentioned a lack of investments as a cause for difficulties in operations, additionally intensified by an increasing number of handling companies.

At ARN airport however the airport operator stated that investments in new infrastructure in baggage handling systems, investments in new cargo facilities and new physical areas for cargo handling, expansion of airport hydrant system, De-icing facilities etc. resulted in quality improvements. The handling airline however saw deteriorating quality levels even though the investments were done. This was due to the company needing to concentrate on cost reduction and thus could not keep quality on the existing level anymore.

At HEL airport three stakeholders had totally different opinions: as already mentioned at the previous airports the ground handling provider stated that there was no change in service levels but airport facilities are still limited. The airport operator saw a deterioration not due to infrastructure reasons but due to the changes since 9/11, when the airline industry came under heavy pressure. Since then there is deterioration recognisable, in the lack of staff and supervision of staff and additionally also untrained staff. The airline in contrast stated that through EU-Ops regulations the quality of ground handling improved. But security requirements made life harder for all parties operating at airports around the world.

Airport	Benchmark: Development of quality between 1996 and 2002		
	Airport	Airline	Independent ground handling provider
Interview Data			
AMS	Deterioration	No change	---
ARN	Improvement	Improvement	---
ATH	---	---	No change
BRU	No change	Deterioration	---
CDG	---	---	---
CGN	Deterioration	---	---
CPH	---	---	---
FCO	---	---	---
FRA	No change	---	Improvement
HEL	No change	---	No change
LHR	---	Deterioration	---
LIS	---	---	---
MAD	Improvement	---	---
MAN	No change	---	No change
VIE	---	No change	Improvement
Internet Survey Data			
AGP	Improvement	---	---
ALC	Improvement	---	---
BCN	Improvement	---	---
DUB	---	---	---
DUS	---	---	---
FAO	---	---	---
FMO	No change	---	---
HAJ	---	---	---
HAM	Deterioration	---	Improvement
IBZ	---	---	Improvement
LEJ	---	---	No change
LGW	---	---	---
MAH	---	---	Improvement
MUC	No change	No change	---
NUE	Improvement	---	---
OPO	---	---	---
ORK	---	---	---
ORY	---	---	---
PMI	Improvement	---	Improvement
SNN	---	---	---
STN	---	---	---
STR	No change	---	---
SXF	---	---	Improvement
TXL	---	---	Improvement

Table 4-3: Changes in quality levels for ground handling services 1996 - 2002 – EU-15

Another example for contrary views on quality developments is VIE airport. The airline states a general deterioration of quality, irrespective of the airport but depending on the Service Level Agreements (SLAs) between the airline and the ground handling company. The ground handling provider mentioned that as a result of increasing competition the focus is more on

quality and performance issues which lead to a positive trend in quality development. The airport operator did not rate the quality changes since he did not see any relation between the quality and the Directive 96/67/EC. Other factors like the weather or infrastructure specifics had more influence on quality.

At ATH airport this development is mainly due to the opening of the new airport in 2002. Therefore the situation between 1996 and 2002 can not be compared. Since the opening of the airport, quality improvements continue due to the aim of ground handling companies to attract customers, but also due to Service Level Agreements (SLAs) between the airline and the ground handling provider. Additionally safety and quality meetings are held by the AUC and the ground handlers, where operational issues are discussed, to improve the quality.

The airport operator at MAN airport expresses that quality levels increased because handling agents had to improve both their quality levels and health and safety records in order to compete effectively for airline business. Airline contracts became tighter in regard to both matters and airlines became more willing to exercise penalty clauses for failures in either matter. A ground handling provider at MAN airport expressed that the quality increased due to operational changes and higher investments in safety.

Airport	Benchmark: Development of quality between 2002 and 2007		
	Airport	Airline	Independent ground handling provider
Interview Data			
AMS	Deterioration	---	---
ARN	Improvement	Deterioration	---
ATH	Improvement	Improvement	Improvement
BRU	No change	Deterioration	Improvement / No change
CDG	---	---	---
CGN	Improvement	---	---
CPH	Improvement	---	---
FCO	---	Improvement	Deterioration
FRA	Improvement	No change	Improvement
HEL	Deterioration	Improvement	No change
LHR	---	Deterioration	---
LIS	No change	---	---
MAD	Improvement	---	---
MAN	Improvement	---	Improvement
VIE	---	Deterioration	Improvement
Internet Survey Data			
AGP	Improvement	---	---
ALC	Improvement	---	---
BCN	Improvement	---	---
DUB	---	---	---
DUS	Deterioration	---	---
FAO	---	---	---
FMO	No change	---	---
HAJ	---	---	---
HAM	Deterioration	---	Improvement
IBZ	---	---	No change
LEJ	---	---	No change
LGW	---	---	---
MAH	---	---	No change
MUC	Deterioration	No change	---
NUE	Improvement	---	---
OPO	---	---	---
ORK	---	---	---
ORY	---	---	---
PMI	Improvement	---	No change
SNN	---	---	---
STN	---	---	---
STR	No change	---	---
SXF	---	---	Improvement
TXL	---	---	Improvement

Table 4-4: Changes in quality levels for ground handling services 2002 - 2007 – EU-15

New Member States

Considering the findings for the ground handling markets in the New Member States, the majority of airports indicated changes in quality levels. Thereof most of them mentioned, that quality levels for ground handling services increased in the period between 2004 and 2007. However, at BUD airport the views differ between the stakeholders: The airport operators describes the situation as solid in comparison with the international market average level of quality, which did not change since the implementation of the Directive. The independent ground handling company however rates the standards at BUD as low (below the average). However, since 2006 the quality level is increasing within the company. Generally, the ground handling company sees the reason in decreasing quality within the increasing price competition.

The deterioration at RIX airport is mainly due to capacity constraints in regard to the infrastructure while the passenger count increased for more than 400% over the last years.

Airport	Benchmark: Development of quality between 2004 and 2007		
	Airport	Airline	Independent ground handling provider
Interview Data			
BTS	No change	No change	---
BUD	No change	Deterioration	Improvement
LCA	---	---	Deterioration
OTP	---	---	---
PRG	Improvement	Improvement	Improvement
RIX	Deterioration	---	---
SOF	Improvement	---	---
WAW	Improvement	---	---
Internet Survey Data			
LJU	Improvement	---	---
MLA	Improvement	---	---
TLL	---	Improvement	---
VNO	---	---	---

Table 4-5: Changes in quality levels for ground handling services 2004 - 2007 – New Member States

In the following figures the airport specific changes are summarized. Due to data consistency reasons, stakeholders could only be considered if data was given for both periods of time. Comparing Graph 1 and 3 in Figure 4-21 it can be seen that the quality changed differently in the two periods. Between 1996 and 2002 only 29% of stakeholders out of the EU-15 interview data saw improving quality levels whereas 24% stated deterioration. Most of the stakeholders however did not express changes at all. In the following period most of them (53%) stated an improvement; however, a share of 29% mentioned decreasing quality.

Within the internet data the results differ from the picture just drawn from the interview data: In the first period most stakeholders expressed an improvement in quality and only 6% stated

a deterioration whereas 29% did not see a change. In the following period a lot more stakeholders did not realise a change and the statements about deteriorating quality levels increased as well. Improvements in contrast were not expressed that often any more.

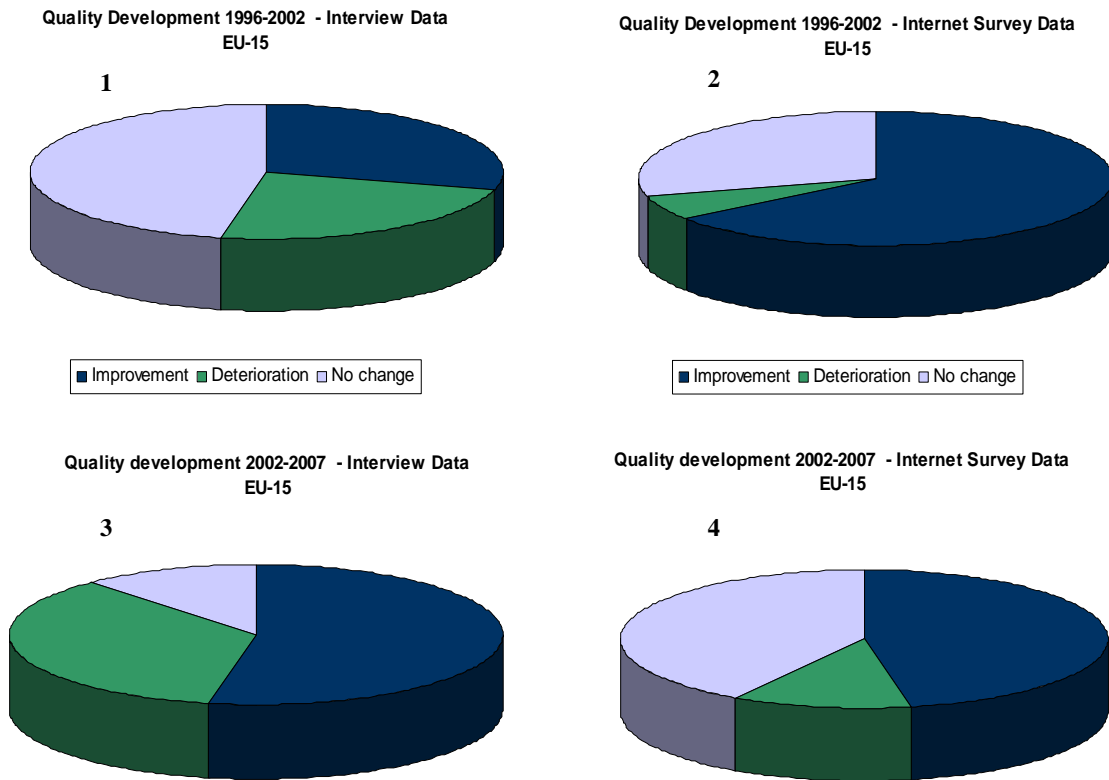


Figure 4-21: Summary of answers on quality development - EU-15 airports

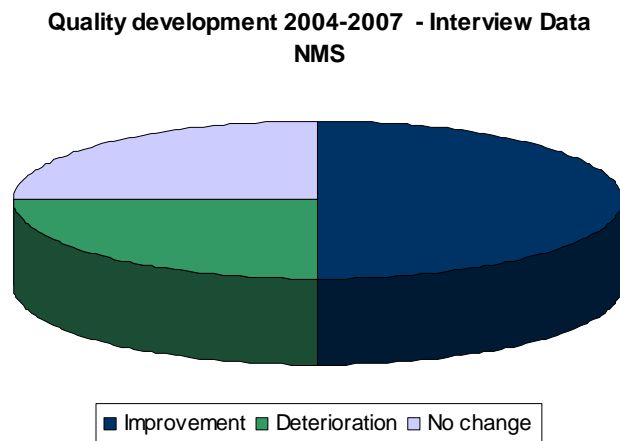


Figure 4-22: Summary of answers on quality development - NMS airports

Stakeholder specific positions about quality developments

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport Operators:

- Reasons for decreasing quality levels:
 - Airport operators mentioned, that increasing competition and pricing pressure from airlines on ground handling providers affected decreasing quality levels.
 - Decreasing quality levels affected decreasing punctuality, increasing delays and therewith the total airport performance.
 - the result from insufficient training of staff employed and cost cuts in ground handling markets, quality levels of ground handling services dropped at airports.
 - Airport operators consider to set up their own ground handling subsidiaries to ensure required quality levels.
 - With the introduction of difficult operational security procedures the quality performance at airports was negatively affected.
 - Capacity and space constraints as well as construction works induced decreasing quality levels at airports.
- Reasons for increasing quality levels:
 - Airport operators stated, that with the introduction of the Directive 96/67/EC and the increase of competition quality levels raised.
 - By defining minimum quality requirements in the handling licence for self-handling airlines and ground handling providers some airport operators indicated positive changes in quality levels (e.g. AENA handling licences).
 - At some airports, investments in new airport facilities and capacities enabled significant increases in quality levels (e.g. Stockholm Arlanda airport inaugurated a new baggage handling system and cargo facilities and could therefore increase the quality in ground handling services).
 - At airports, increasing quality levels were achieved by the introduction of quality management systems, certifications and self-audit processes.
- Regarding the revision of the Directive 96/67/EC against the background of decreasing quality levels at some airports, airport operators like the BAA (British Airports Authority) proposed to introduce minimum quality standards. They would be defined in consultation with the Airport Users' Committee and be applied by

self-handling airlines and third party providers (e.g. baggage delivery time), including quality monitoring and ex-post gradual measures in case of non fulfilment.

Airlines:

- Reasons for decreasing quality levels:
 - Some airlines mentioned, that with the intensification of competition and pressure on prices, quality levels decreased.
 - In the opinion of some airlines the insufficient capacity and quality of airport facilities decreased the level of quality and foreclosed improvements at some stations.
 - Construction works induced decreasing quality levels at many airports.
- Reasons for increasing quality levels:
 - From a customer perspective, many airlines stated, that the introduction of competition in ground handling markets increased quality levels at markets significantly.
 - Beside the impacts of the increasing competition quality levels raised with the increase of requirements implemented in Service Level Agreements.
 - Furthermore the increase in the number of handlers increased the choice for airlines to negotiate Service Level Agreements with higher quality requirements for decreasing prices and therewith strengthened the position of airlines in their very competitive environment.
 - For some airlines the increase of quality levels is related to increasing requirements within the Service Levels Agreements with ground handling suppliers.
 - In addition some airlines mentioned, that competition has a positive effect on safety and security: competition on quality leads the companies to invest in quality and therewith in safety, security and training methods.
- Regarding the revision of the Directive 96/67/EC airlines do not agree to define the obligatory minimum of quality requirements since quality levels are negotiated and implemented in Service Level Agreements with the supplier. Quality requirements do not need to be placed, since airlines are directly affected and interested in securing adequate quality standards themselves.
- Quality requirements must not be abused as market access barriers. Airlines are directly affected by any quality deficiency, so they have self-motivated interest to ensure quality standards – no need for prescribed quality requirements on EU level.

Independent ground handling providers

- Reasons for decreasing quality levels:
 - Independent ground handling companies experienced, that insufficient capacity and quality of airport facilities decreased the level of quality and foreclosed improvements at some stations.
 - Construction works induced decreasing quality levels at many airports.
 - Some handlers mentioned, that in coherence with the intensification of competition and the increasing pressure on prices quality levels decreased.
- Reasons for increasing quality levels:
 - Independent ground handling companies increased quality levels of ground handling services by process improvements and investments in more efficient ground support equipment even though they were operating in a low margin and very competitive environment with decreasing price levels.
 - Even though the prices for ground handling services declined quality levels increased by increasing the operational efficiency.
 - With the intensification of training and improvements of training methods ground handling companies realised increasing quality levels.
 - As the result of the introduction of Quality Management Systems, certification and self-audit processes, independent ground handling companies increased the quality levels of ground handling services.

Regarding the revision of the Directive 96/67/EC independent ground handling companies do not agree to define obligatory minimum quality requirements since quality levels are negotiated and implemented in Service Level Agreements with the customer.

Unions

- At many airports the increasing pressure on working conditions of ground handling effected decreasing quality levels.
- In regard to the revision of the Directive 96/67/EC unions propose to introduce, in consultation with the Airport Users' Committees, minimum quality standards to be applied by self-handling airlines and third party providers (e.g. baggage delivery time), including quality monitoring and ex post gradual measures in case of non fulfilment.
- Ensuring minimum quality standards will have a direct impact on safety and security at the airport.

Conclusion about changes in quality

- At most airports changes in quality have taken place since 1996.
- However, it is difficult to find any trend at the European level or any trend according to the airports in the impacts of the Directive on quality, because other drivers which are varying at airports are influencing significantly quality levels. .
- Generally, the performance of quality levels is influenced by:
 - The individual ground handling provider,
 - The Service Level Agreements between the ground handling provider and the airline,
 - The infrastructure at airports (e.g. construction works could reduce quality levels while the initiation of new facilities could lift the level of provided ground handling services).

4.6 Participation of Airport operators in ground handling markets

EU-15 Member States

Due to historical and strategic reasons, many airports provide ground handling services in competition to handling airlines and third party handling companies. With focus on the EU-15 Member States the number of interviewed airports, actively involved in ground handling markets did not change significantly in the time between 1996 and 2007. Mainly because the operators of Lisbon and Helsinki airport set up new handling subsidiaries, the number of airports providing ground handling services increased to 8 until the year 2002. Finally, the number of airports, participating in ground handling markets decreased to 7 in the time until 2007, because ADR (Aeroporti di Roma) sold its handling company in Roma-Fiumicino. This implies that within the interview data approximately 50% of airports, the airport operator is active in ground handling.

With focus on ramp handling at local ground handling markets, most airports controlling their own ground handling subsidiaries respectively departments comprise strong positions and high market shares, even if the market shares (based on handled aircrafts in ramp handling) decreased since the introduction of the Directive in 1996.

Within the internet survey data almost the same share of airport operators are involved in ground handling. In 1996 10 out of 24 airport operators provided ground handling services. In 2002 two more were active since ANA set up its own ground handling subsidy Portway A.S. at OPO and FAO airport.

The handling volume decreased in most cases between 1996 and 2007 even though the airport operator still comprises a high market share. This can be observed at all German

airports as DUS, MUC, HAM, SXF, TXL. Only Portway at the previously mentioned airports could increase its market share between 2002 and 2007.

The situation in the internet survey as well as at the interviewed airports is presented and summarized in Table 4-6 below.

Airport	Participation of Airport Operator in ground handling markets					
	1996		2002		2007	
	Airport GH subsidiary /department	Market Share in % (Ramp)	Airport GH subsidiary /department	Market Share in % (Ramp)	Airport GH subsidiary /department	Market Share in % (Ramp)
Interview Data						
AMS	--		--		--	
ARN	--		--		--	
ATH	--		--		--	
BRU	--		--		--	
CDG	X	35	X	30	X	12
CGN	X	100	X	96	X	95
CPH	X	no data	--		--	
FCO	X	no data	X	no data	--	
FRA	X	97	X	91	X	85
HEL	--		X	0	X	1
LHR	--		--		--	
LIS	--		X	9	X	13
MAD	--		--		--	
MAN	X	no data	X	no data	X	no data
VIE	X	100	X	93	X	89
Internet Survey Data						
AGP	--		--		--	
ALC	--		--		--	
BCN	--		--		--	
DUB	no data		no data		--	
DUS	X	100	X	97	X	88
FAO	--		X	21	X	46
FMO	X	no data	X	no data	X	no data
HAJ	X	no data	X	no data	X	no data
HAM	X	100	X	87	X	81
IBZ	--		--		--	
LEJ	X	100	X	100	X	100
LGW	--		--		--	
MAH	--		--		--	
MUC	X	100	X	97	X	87
NUE	X	100	X	100	X	100
OPO	--		X	14	X	27
ORK	no data		no data		--	
ORY	no data		no data		no data	
PMI	--		--		--	
SNN	no data		no data		--	
STN	--		--		--	
STR	X	100	X	100	X	85
SXF	X	no data	X	no data	X	91
TXL	X	100	X	86	X	84

Table 4-6: Participation of airport operators in ground handling markets – EU-15

New Member States

Traditionally, most of the airports in the New Member States have provided ground handling services. Focusing on the sample of visited airports, the number of airports participating in ground handling markets decreased, since the operators of Budapest and Larnaca airport decided to sell their ground handling activities. Generally, the market shares decreased as already seen at airports in the EU-15, even at some airports such as Sofia and Bratislava on a high level. The developments are indicated and summarized below in Table 4-7.

Airport	Participation of Airport Operator in ground handling market			
	2004		2007	
	Airport GH subsidiary /department	Market Share in % (Ramp)	Airport GH subsidiary /department	Market Share in % (Ramp)
Interview Data				
BTS	X	94	X	85
BUD	X	20	--	
LCA	--		--	
OTP	no information		no information	
PRG	X	16	X	13
RIX	X	no data	X	100
SOF	X	100	X	70
WAW	X	no data	X	no data
Internet Survey Data				
LJU	x	100	x	100
MLA	--		--	
TLL	x	28	x	36
VNO	x	no data	x	no data

Table 4-7: Participation of airport operators in ground handling markets – New Member States

Summarizing the results, it might be seen, that beside other drivers, the Directive 96/67/EC has an impact on the performance and participation of airport operators in ground handling markets. Generally, market shares decreased and several airport operators decided to sell their ground handling activities due to the increase of competition and to focus on their role as provider of the infrastructure (e.g. BUD and FCO airport), even though others decided to set up new subsidiaries (e.g. LIS and HEL airport).

In Finland, Finavia set up its own subsidiary (Airpro) since no ground handling company could be found to operate at small Finish airports. As airport operator of those airports, Finavia needed to provide those services. In 2002 Airpro also started operations at HEL airport but only comprises a small share of handling volume.

Between airports, airlines and independent ground handling providers the engagement of airport operators in ground handling markets is controversially discussed. In those cases the airport operator acts as a provider of the (centralised) infrastructure and competes at the same time with airlines and independent ground handling companies in ground handling

markets. As the airport charges the competitors for the use of the infrastructure and obtains a strong role within tender processes, airlines and independent ground handlers argue that, handling airports would be able to distort competition in ground handling markets. To ensure fair competition and, objective and non-discriminatory access to the infrastructure, the Directive foresees the separation of accounts between the ground handling and all other airport activities (Article 4). The separation of accounts needs to be safeguarded by an independent institution.

Stakeholder specific positions about the airport operators participation in ground handling

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport operators:

- In compliance with the Directive, the separation of accounts prevents any cross subsidiation from other activities and ensures a fair level of competition. With focus on anti-competitive behaviour independent ground handling companies are able to cross-subsidize their activities throughout Europe and from other business branches. Since airports need to separate their accounts they are not able to cross finance their ground handling services.
- Due to the increasing competition and high operational costs some airport operators have outsourced or sold their ground handling activities.
- Some airport operators not actively involved in ground handling favour the separation between the responsibility for infrastructure and the provision of ground handling services.
- Advantages of active engagement of airport operators in ground handling markets:
 - Safeguarding of hub function and transfer processes (e.g. MCT -minimum connecting time-, punctuality).
 - Safeguarding and control of provided quality levels (customer convenience, optimized process flows).
 - Provision of (selected) ground handling services at some airports, where no other supplier is willing to provide (selected) ground handling services.
 - Strong influence on safety and security.
- Disadvantages of active engagement of airport operators in ground handling markets:
 - High operational costs.

Airlines:

Airlines mentioned advantages and disadvantages of the participation of airport operators in ground handling markets:

- Advantages of active engagement of airport operators in ground handling markets:
 - Safeguarding of hub function and transfer processes (e.g. MCT, Punctuality).
 - Provision of (selected) ground handling services at some airports, where no other supplier is willing to provide (selected) ground handling services.
- Disadvantages of active engagement of airport operators in ground handling markets:
 - The current Directive leaves room for interpretation and enables cross synergies between the airport as an infrastructure provider and airport ground handling subsidiary.
 - Discrimination of competitors (e.g. the airport operator can decide about the location and the size of the ground handling storage area of his competitors).
 - Distortion of competition.
 - Continuously financial cross subsidiation of some airport ground handling subsidiaries.
 - Separation of accounts seems to be insufficient. Airports should be obliged to separate their accounts legally.
 - The active role of airport operators in ground handling markets could influence the choice of independent suppliers, selected in tender procedures.
- Airports should establish a separate legal entity and act under the same conditions as the other stakeholders.

Independent ground handling providers:

Generally, independent ground handling companies rate the active involvement of airport operators in ground handling markets as negative:

- Disadvantages of active engagement of airport operators in ground handling markets:
 - Cross synergies between the airport as an infrastructure provider and airport ground handling subsidiary.
 - Discrimination of competitors (e.g. the airport operator can decide about the location and the size of the ground handling storage area of his competitors).
 - No profit requirements for airport ground handling activities.
 - In some cases the separation of accounts is complex and not transparent.

- The active role of airport operators in ground handling markets could influence the choice of independent suppliers, selected in tender procedures.

Conclusion about the airport operators participation in ground handling

- The Directive 96/67/EC has an impact on the performance and participation of airport operators in ground handling markets.
- With focus on the EU-15 Member States the number of airports actively involved in ground handling markets did not change significantly in the time between 1996 and 2007. Market shares of airport handling companies decreased since the opening of the market but remained on a high level.
- Traditionally, most of the airports in the New Member States provide ground handling services. In 2007, at NMS airports, the airports ground handlers held the majority of market shares in average.
- Generally, market shares decreased and as a result airport operators decided to sell their ground handling activities due to the increase of competition and to focus on their role as infrastructure provider.

4.7 Involvement of airlines in ground handling markets

Preliminary remark

In discussions with stakeholders many airline ground handling subsidiaries stated, that they define themselves as independent providers. However, in this report the handling subsidiaries will be treated as part of the airline company if the majority of shares is held by an airline.

According to the Directive, self-handling is defined as a situation in which an airport user directly provides ground handling services for himself and concludes no contract with any third handling party for the provision of such services.

Airlines participate in ground handling markets as customers as well as self-handlers and third party suppliers. Due to economies of scale most self-handling airlines provide ground handling services to other airlines. Therefore on a reciprocal basis some network carriers provide ground handling services for their alliance partners, while other network airlines select other suppliers. If the third party handling volume of airlines is more or less contestable for other handling parties, the self-handling volume is on contrary captive and not contestable for others. However it was not possible to differentiate between the self-handling and the third party handling volume of an airline. Therefore the market share given in the following table comprises both volumes.

The stakeholders were asked to indicate the market shares comprised by self-handling activities and requested to rate the airlines involvement in ground handling markets. The results are summarised in Table 4-8 to Table 4-10.

EU-15 Member States

Interview Data EU-15						
Airport	Number of handling airlines (Ramp) in 2007	Total market volume: ATM in 1000	Captive Market: Market Shares (in percent) comprised by self-handling activities	Position to handling and airlines' involvement in ground handling		
				Airport Operator	Airlines	Independent ground handling companies
AMS	1	436	70			
ARN	1	216	35	LFV does not see any problems		
ATH	2	205	no data	No advantage or disadvantage		
BRU	1	264	0	Advantage: synergy effect. Disadvantage: staff under airline contract is more expensive. More globally: ground handling is no core business for airlines	Generally: huge investments for the airline - would only become interesting with a huge operation	
CDG	2	544	no data			Self-handling should be limited to the own airline but it should not be allowed to provide services to other airlines or alliance partners
CGN	0	134	0			
CPH	2	288	no data			
FCO	2	335	48	No direct impact on the airport right now	More flexible, timely, complete and customized service. Might be lack of scale economies and in the foreseeable distrust towards airlines not belonging to the same alliance	The service can be tailored better but no leverage in case of poor quality results
FRA	0	493	0	No appropriate experiences are available, because no airline has made use of a self-handling license	Direct control on ground handling operations independent from framework conditions set by the airport. High investment needs	Airport in general will act closer to the airlines interests (compared to independent GH), so equal treatment might be doubtful
HEL	3	178	80	Strong links to the mother company may in some cases be a drawback in selling services to airlines in some other alliance	Airlines must have a critical mass (economy of scale) of traffic which they can self-handle and can that way operate profitable. But a problem occurs and risk is coming higher when traffic decreases	Less open market available
LHR	8	476	no data			
LIS	3	140	no data	ANA has nothing against airline's involvement in ground handling services. Advantages and disadvantages of that involvement might depend on the clients policy as well as the ground handling market.		
MAD	4	483	60*	The AUC is dominated by the dominant carrier: effects on the position, short listening of applicant during tender - Quality and price control - Impacts on the size of the contestable market - Impacts on the efficient use of the infrastructure - Problems due to space constraints		
MAN	0	230	no data			
VIE	0	255	0			

* Data from desk research

Table 4-8: Market presence of handling airlines at visited airports in the EU-15

At the majority of the 15 visited airports in the EU-15 airlines are operating as self- and mostly third party supplier. While at some airports such as FRA, MAN or VIE no airline is operating as a ground handler on the ramp, at other airports like London-Heathrow eight airlines are self-handling and providing ground handling services to other airlines. The size of the captive market therefore differs from airport to airport, depending on the engagement and market presence of self-handlers, and vice versa effects the size of the contestable market (see chapter 4.3).

Survey EU-15						
Airport	Number of handling airlines (Ramp) in 2007	Total market volume: ATM in 1000	Captive Market: Market Shares (in percent) comprised by self-handling activities	Position to handling and airlines' involvement in ground handling		
				Airport Operator	Airlines	Independent ground handling companies
AGP	5	130*	no data	AENA: The AUC is dominated by the dominant carrier: effects on the position, short listening of applicant during tender - Quality and price control for self-handling Airlines within their supply chain - Impacts on the size of the contestable market - Impacts on the efficient use of the infrastructure --> Problems due to space constraints		
ALC	4	80	no data	Same position as AENA (AGP)		
BCN	1	352	no data	Same position as AENA (AGP)		
DUB	2	212	no data			
DUS	0	222	0		AUC DUS: Advantages: - Direct regulation and control of the relevant sub processes for the landside air traffic - Independency from the goodwill of the airports and the general conditions, if there is not a sufficient number of service providers or there is no competition Disadvantages: - High investment needs (equipment / employees)	
FAO	0	40	no data	- No experiences		
FMO	1	39	no data	- Advantages: Concerning Ramp services: always up to date informations, more safety, 4-eyes-principle		
HAI	0	88	0		Same position as AUC DUS	
HAM	0	151	0	Remark: Third party handling from the Airlines is only allowed in the range of the unlimited services. This is not possible in the range of the limited services, because of the definition of "self-handling" (§ 2 Ziffer 6 BADV / Artikel 2 Buchstabe f BAD-RL 96/67/EG), which prohibits that		Acciona: Airport in general will act closer to the airlines interests (compared to independent GH), so equal treatment might be doubtful
IBZ	5	58*	35			Acciona: Only Disadvantages: market distortion for following reasons: - no limit for licence duration - third party activity as an extension of self-handling - cross subsidisation, being usually the dominant player, and former monopolist
LEJ	1	51	no data			
LGW	1	261*	no data			
MAH	5	34*	42			Same position as Acciona IBZ
MUC	0	410	0			
NUE	0	81	0		Same position as AUC DUS	
OPO	0	51	no data	- No experiences		
ORK	2	71	no data			
ORY	0	233	0			
PMI	7	197	35	Same position as AENA (AGP)		Same position as Acciona IBZ
SNN	2	48	no data			
STN	0	182*	0			
STR	0	165	0		Same position as AUC DUS	
SXF	0	66	0		Same position as AUC DUS	Same position as Acciona HAM
TXL	0	151	0			Same position as Acciona HAM

* Data from desk research

Table 4-9: Market presence of handling airlines at internet survey airports in the EU-15

It can be examined that no correlation exists between the size of an airport and its handling volume and the number of self-handling airlines. LIS and HEL airport, which are fairly small compared to the other interviewed airports in the EU-15 have three handling airlines each. But bigger airports do not automatically have more handling airlines as it can be seen at FRA, FCO or CDG airport where not even three airlines are providing handling services.

This result can also be inferred from the internet survey data: at the Spanish airports such as ALC, IBZ or MAH, which are even smaller than e.g. LIS airport, there are at least four

handling airlines active. A similar situation can be seen at the Irish airports SNN and ORK with two airlines active at each airport.

Therefore it can be concluded that the size of an airport is not the decisive factor for the airline activity in ground handling. It can be assumed that the size of the airline's market and therefore its potential handling volume is more important. This can be supported by the fact that Air France is handling at its hub CDG and that Iberia is handling in MAD, the main hub in Spain. However, no result can be given about the market shares of those airlines since data was not available.

Airlines stated that it is important for them to be active in handling at their hubs to assure necessary quality levels, particularly the Minimum Connecting Time.

New Member States

Airport	Number of handling airlines (Ramp) in 2007	Total market volume: ATM in 1000	Captive Market: Market Shares (in percent) comprised by self-handling activities	Position to handling and airlines' involvement in ground handling		
				Airport Operator	Airlines	Independent ground handling companies
Interview Data						
BTS	1	22	15			
BUD	2	124	46		Enables the airline to control the supply chain and ensure the Minimum Connecting Time	Reduction of the contestable market. Through codeshares and bilateral agreements contestable market decreased significantly
LCA	0	no data	0			
OTP	no data	71	no data			
PRG	1	175	16	Strong position within same alliance members and code sharing partners of CSA/ Sky Team. Effect on the contestable market, limited contractability for competitors		
RIX	0	47	0			
SOF	1	43	no data			
WAW	1	133	no data	Negative: Self-handling reduces the contestable market		
Internet Survey Data						
LJU	0	27	0	Disadvantage: handling is not the core business of an airline.		
MLA	3	27	no data	Flexibility, manpower, and full awareness of the business and airline concerns		
TLL	1	39*	no data		Staff in the airlines uniform for the public eye; ensure quality as per your own standards	
VNO	0	33	0			

* Data from desk research

Table 4-10: Market presence of handling airlines at airports in the NMS

Generally, the number of airlines active in ground handling in the New Member states is on average not as high as in the EU-15. MLA airport has the highest number of three airlines being active in handling. At most airports there is however only one airline handling its aircraft.

The market share at BTS and PRG airport is with 15-16% of the market share relatively small compared to airports in the EU-15 such as AMS, HEL or MAD, where the airline comprises on average 70% of the market share.

Stakeholder specific positions about airline participation in ground handling

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport Operators:

- In most cases, airport operators do not see remarkable advantages or disadvantages from the engagement of airlines in ground handling markets.
- With the increase of self-handlers, the availability of space and capacity might be limited.
- Airlines are able to cross subsidise their handling activities within their networks. Airports operating generally at local level are in contrast bound to separate their accounts. This could lead to competitive advantages for handling airlines and to market distortions.
- Airlines are in favour to extend the definition of self-handling in order to circumvent the objective and rules of the selection procedure which apply to third party handling.

Airlines:

- As advantage, self-handling enables full control on ground handling services and provides a customized solution. On the other side airlines face high operational costs, due to high investments and potential lack of economies of scale.
- Airlines have the right to handle their passengers and aircrafts; therefore the definition of self-handling should be extended to franchise flights. Furthermore, no artificial barriers should be introduced; every handler should have the right to sub-contract.
- As other airlines integrators need a self-handling licence to handle their aircrafts and a third party needs a handling licence for the handling of other carriers. As integrators use a mix of commercial airlines capacity, wet leased, chartered or own fleet, they should be free to handle any aircraft carrying shipments under an express operators airway bill.

Independent ground handling providers:

- The definition of self-handling should not be extended. The inclusion of self-handling for alliance partners and reciprocal handling would reduce the contestable market and the level of competition at airports.
- The engagement of airlines in ground handling could lead to market distortions, since their handling licences are not limited and they do not need to depreciate their investments in a short and medium term.

- As many network carriers handle themselves on a reciprocal basis, those agreements are rarely contestable for third party suppliers and limit the competition in ground handling markets.

Conclusion about the airline participation in ground handling

- The number of selfhandling airlines at an airport is independent from the size of the airport.
- Airlines are traditionally active at their hub airports to ensure the necessary quality. Since they state that the investments for ground handling are huge at the beginning, it can be concluded that the majority of airlines would not start a new business at additional airports.
- Contestable market share for ground handling providers is limited due to the involvement of airlines in ground handling especially when the airline also provides handling services to other airlines such as alliance partners. Therefore some stakeholders expressed that handling provided by an airline should be limited to the volume of the own airline's volume.

4.8 Centralised Infrastructure (CI) / Access to installations

According to Article 8 of the Directive, Member States are authorised to reserve the management of defined infrastructure elements used for the supply of ground handling services for the airport operator or other management bodies, if costs or environmental impact does not allow the division or duplication. As centralised infrastructure, the following facilities are explicitly mentioned in the Directive:

- Baggage Handling System,
- De-Icing facilities,
- Passenger Bridges,
- Fixed Power Installations,
- Fuel and Oil Stations,
- Toilet Service (facilities: fresh water supply and waste disposal),
- and Check- In desks.

Consequently the use of the defined centralised infrastructure elements could be compulsory for self-handlers and suppliers of ground handling services and charges levied. Depending on the situation at the airport, additional facilities or services could be defined as centralised infrastructure. The Member State shall ensure, that the management of the centralised

infrastructure is transparent and objective as well as the access is non discriminatory for all airport users and ground handling providers.

Referring to Article 16 in absence of the centralised infrastructure the available space for ground handling activities (e.g. for storage of equipment) must be divided among the handling parties under consideration of fair competition and relevant, objective, transparent and non discriminatory criteria. Where the access to airport installations gives raise for a fee, the same criteria must be considered.

Table 4-11 to Table 4-13 provide an overview on the defined centralised infrastructure and charges for the access to airport installations at airports participating in the study.

EU-15 Member States

Airport	Centralized Facilities EU-15 Interview Data									Charges for the access of airport installations
	Baggage Handling System	De-Icing	Passenger Boarding Bridges	Fixed Power Installation	Fuel&Oil Station	Toilet Servicing	Check-In Desks	Marshalling	Others	
AMS	not explicitly defined									No
ARN	√	√	√	√	√	√	√	√	VIP Services , Bustransport on airside, Airport switchboard, CUSS machines	√
ATH	√	---	√	√	√	√	√	---	BRS	√
BRU	√	---	√	√	√	---	√	√	Sewerage farm, Baggage and passenger screening machines, Decompression chamber, Truncking system, CUTE, Docking guiding systems, FOD, CUSS.	√
CDG	√	√	√	---	√	√	√	√	no information	---
CGN	---	√	√	√	√	√	√	√	Traffic Operations, Water supply (Facility)	√
CPH	√	√	√	√	---	---	√	√	Bus transportation	√
FCO	√	---	√	√	√	√	√	√	Centralised sewage waters and aircraft, Solid waste treatment systems, CUTE System, General voice an uncements, Information to the public, left baggage office	√
FRA	---	√	√	√	√	√	---	---	Gate baggage facilities for outbound baggage, Bulky baggage facilities, Central baggage system for inbound baggage, Central baggage security facilities, Facilities for fresh water supply, CUTE network, Customs baggage warehouse, Conveyor belt for misdirected baggage, Servicing of rush baggage as well as servicing of mistagged baggage and Baggage tracing	√
HEL	√	√	√	√	---	---	√	√	Bus transfer on the apron, CUSS	√
LHR	---	---	---	---	---	---	---	---	---	no information
LIS	√	---	√	√	---	---	√	√	---	√
MAD	√	√	√	√	√	---	√	---	PRM - services, Fixed fuel and oil supply, Engine test pad, Airplane washing area, Portable water supply	√
MAN	√	---	√	√	---	---	√	---	---	√
VIE	√	√	√	√	√	---	√	√	Container Storage (Facility); Waste Disposal (Facility)	√

Table 4-11: Centralised infrastructure at visited airports in the EU-15

Airport	Centralized Facilities EU-15 Internet Survey Data									Charges for the access of airport installations
	Baggage Handling System	De-icing	Passenger Boarding Bridges	Fixed Power Installation	Fuel&Oil Station	Toilet Servicing	Check-In Desks	Marshalling	Others	
AGP	√	√	√	√	√	---	√	---	PRM - services, Fixed fuel and oil supply, Engine test pad, Airplane washing area, Portable water supply	√
ALC	√	√	√	√	√	---	√	---	PRM - services, Fixed fuel and oil supply, Engine test pad, Airplane washing area, Portable water supply	√
BCN	√	√	√	√	√	---	√	---	PRM - services, Fixed fuel and oil supply, Engine test pad, Airplane washing area, Portable water supply	√
DUB	Dublin Airport has no centralized infrastructure									no information
DUS	---	√	√	√	---	---	√	---	Aircraft positions, parking space, bulk and equipment storage, Air traffic management, Central office for traffic/apron supervision, Traffic management, Disposition, Airport information system, Communication networks, CUTE, CUSS kiosks, Feces disposal facility, Fresh water supply station, Central waste disposal/recycling yard	√
FAO	no information									√
FMO	√	√	√	√	√	√	√	√	---	√
IBZ	no information									√
HAJ	---	√	√	√	---	---	√	√	no information	√
HAM	√	---	√	√	---	√	---	√	Handling positions, Facilities for waste disposal, Facilities for fresh water supply	√
LGW	no information									no information
LEJ	√	√	√	√	---	√	---	√	Aircraft positions, waste disposal facilities, fresh water facilities	---
MUC	√	√	√	√	√	√	√	---	Flight Informations system, Noise Protection hangar for test runs of aircraft, aircraft handling positions, including facilities for guiding	√
MAH	no information									√
NUE	√	√	√	√	---	√	---	√	Apron and Central waste disposal	√
OPO	no information									√
ORK	no information									√
ORY	√	---	√	√	√	---	√	---	Fuel system (hydrant) and De-icing liquid	√
PMI	√	√	√	√	√	---	√	---	PRM - services, Fixed fuel and oil supply, Engine test pad, Airplane washing area, Portable water supply	√
SNN	no information									√
STN	√	√	√	√	√	√	√	√	---	no information
STR	√	√	√	√	√	√	---	√	Apron, Container Area, Lavatory Waterfacilities	no information
SXF	√	√	---	√	---	√	√	---	no information	√
TXL	√	√	---	√	---	√	√	---	no information	√

Table 4-12: Centralised infrastructure at internet survey airports in the EU-15

The centralised facilities supposed by the Directive are at most of the interviewed airports in the EU-15 defined as centralised in reality. More in detail the baggage handling system, passenger boarding bridges, fixed power installations, fuel and oil stations and check-in desks can be identified as a core set of centralised infrastructure at a majority of visited airports. Only a minority of airports did not see a benefit to declare several elements as Centralised Infrastructure (e.g. AMS airport). Furthermore, by approval of the authorities in charge many airports declared other infrastructure elements and services on airport specific reasons as centralised infrastructure. The number of those facilities differs amongst the airports. At ATH airport only the Baggage reconciliation system is centralised whereas at other airports such as BRU, FRA, FCO or MAD way more facilities are centralised.

It can be seen that some facilities such as the CUTE system is centralised at many airports, but not defined by the Directive.

The airport operator at some airports also provides bus transportation on the airside. Due to the stakeholders at those airports such as HEL or CPH it is operationally not possible for each handling agent to provide this service since the investment costs are high, the utilisation rate however is low in many cases. This is even more significant when the airport in sum has a small handling volume.

With EU Regulation 1107/2006 the PRM services are defined as centralised by the European Commission. Since then “Managing bodies of airports may provide the assistance to disabled persons and persons with reduced mobility themselves. Alternatively, in view of the positive role played in the past by certain operators and air carriers, managing bodies may contract with third parties for the supply of this assistance, without prejudice to the application of relevant rules of Community law, including those on public procurement.” (Official Journal of the European Union). Therefore the stakeholders mostly mentioned this service to be centralised as well.

Additionally the stakeholders were asked about the problems related to the Centralised Infrastructure. 62,1% of stakeholders who have provided answers did not see problems relating to the use of the Centralised Infrastructure whereas 37,9% stated the contrary.

Problems were mainly seen in the quality of the Centralised Infrastructure due to capacity constraints and missing investments done by the airport operator who is responsible for the operations of the CI. The congestion is generated by fast growing traffic volumes over the last years.

Other problems were mentioned regarding space for equipment. Since all ground handling agents have their own equipment storage areas are not enough. Due to the expansion of the terminal facilities at some airports additional space has been lost.

According to the provided information, generally, the charges for the provision of the centralised infrastructure are imposed on the airlines, even if some exemptions exist (e.g. Flightcare at BRU airport is charged for the use of the check-in desks while other charges for the use of Centralised Infrastructure elements are in common directly imposed on the airlines and not on the ground handling companies).

Additionally, many airports imposed fees on ground handling providers and airport users for the access and use of airports installations as common airport infrastructure such as roads, gates, parking stands, space dedicated for the storage of ground handling equipment, offices, de-icing coordination.

Generally, the fees and charging bases vary from airport to airport and are related to the use of infrastructure elements.

New Member States

At the New Member States the situation is similar to the EU-15 airports. It can only be noted that they define less facilities given by the Directive as centralised and also the additionally defined facilities are not as many.

The transportation on the apron, however, is mentioned more often as centralised than at the EU-15 airports.

Airport	Centralized Facilities NMS									Charges for the access of airport installations
	Baggage Handling System	De-Icing	Passenger Boarding Bridges	Fixed Power Installation	Fuel&Oil Station	Toilet Servicing	Check-In Desks	Marshalling	Others	
Interview Data										
BTS	√	√	---	---	√	---	√	√	Apron transportation	---
BUD	√	---	√	√	---	---	√	√	no information	---
LCA	√	---	---	---	√	---	√	---	CUTE System, Flight Information Display System	√
OTP	no information									
PRG	√	---	√	√	√	---	√	√	Bus transportation, BRS	---
RIX	---	√	√	√	---	---	√	---	Bus transfer on the apron, CUSS	√
SOF	no information									
WAW	√	---	√	√	√	---	√	√	no information	no information
Internet Survey Data										
LJU	√	√	√	√	---	√	√	√	no information	---
MLA	√	---	---	√	---	√	√	---	no information	---
TLL	√	---	√	---	---	---	√	---	Cute System at check-in desks/gates	√
VNO	√	---	√	---	√	---	√	---	---	---

Table 4-13: Centralised infrastructure airports in the New Member States

Stakeholder specific positions about the Centralised Infrastructure

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport Operators:

Only 10 percent of the airports reported, that due to the centralised infrastructure problems or difficulties existed. Under consideration of the position papers of airport associations the following is stated:

- Airport operators focus on the effective and efficient use of the Centralised Infrastructure.
- Space constraints and space availability are, in some cases, reason for the limitation of handling licences.
- Space constraints and highly frequented Centralised Infrastructure are caused by strong traffic growth.
- In many cases self-handlers and suppliers of ground handling services use the Centralised Infrastructure as well as airport installations in an inefficient manner and cause space and capacity constraints.

- In order to provide the Centralised Infrastructure as well as other airport installations and services, the airport needs to charge the airport users and ground handling providers. The charges are cost related, transparent and non-discriminatory.
- The right for the airport to collect a commercial fee according Article 16 should be expressed more clearly.
- A more precise definition of Centralised Infrastructure would not allow the necessary flexibility at local level from airport to airport and would not take into account any future developments.

Airlines:

Approximately 50 percent of the consulted airlines reported, that due to the Centralised Infrastructure problems or difficulties existed. Under consideration of the position papers of airlines associations the following is stated:

- The costs for the use of infrastructures are high, even though the provided quality is insufficient.
- At some stations the insufficient conditions of the Centralised Infrastructure as well as capacity and space constraints affected the quality of ground handling negatively.
- The dual function of some airports as provider of the infrastructure and ground handler could lead to:
 - Conflict of interests,
 - Cross subsidisation,
 - Discrimination of competitors (e.g. space availability).
- In some cases the charges for the provision of the Centralised Infrastructure and the access to airport installation did not comply with the criteria of transparency and non-discrimination. For the revision of the Directive the criteria regarding charges common standards should be introduced and the provisions of Article 8 and 15 clarified.
- The definition of the Centralised Infrastructure should be clarified and more restrictive, since airports are allowed to retain handling monopolies in several services and restrict the access for self-handling airlines and ground handling suppliers.
- Fees for the Centralised Infrastructure and the access to airport installation should be treated similarly to airport charges and included into regulation.

Independent ground handling providers

Approximately 25 percent of the independent ground handling suppliers reported, that due to the Centralised Infrastructure problems or difficulties existed. Under consideration of the position papers of ground handling associations the following is stated:

- Not enough space for equipment. All ground handlers have their own equipment, which results in congested storage areas. Due to insurance issues another ground handler is not allowed to move the equipment of the other ground handler.
- Market discriminations.
- Insufficient quality of the provided centralised infrastructure / capacity constraints.

Conclusion about the Centralised Infrastructure

- Most airports defined the facilities described within the Directive as centralised. At most airports additional facilities were added by the approval of the responsible authority
- The problems, which encountered mostly for independent ground handling companies, are due to capacity and space constraints at the airport and the quality of the facilities. Furthermore users of the Centralised Infrastructure as independent ground handling companies or handling airlines criticised high costs for the CI.
- Some stakeholders stated that the charging mechanism seems not to be transparent and should be clarified within the Directive.
- Views about the CI are very heterogeneous amongst the different stakeholders due to their stakeholder specific interest: airports do not want a further definition within the Directive to keep the flexibility to react to airport specifics. The other stakeholders, however, would prefer a more precise definition to secure a transparent and non-discriminatory use of the CI.

4.9 Airport Users' Committee

Corresponding to the provisions of Article 5 Member States shall ensure, that at airports a committee of representatives of airport users (in the following Airport Users' Committee) is set up. Every airport user (airlines are defined as airport users) shall have the right to participate in the Airport Users' Committee (AUC) or to be represented by an appointed organisation.

In relation to ground handling the AUC should be consulted on application of the Directive and possible exemptions from the provided provisions. Regarding the tender process the

authority needs to consult the AUC concerning the selection criteria, which shall be relevant, objective, transparent and non-discriminatory for its final decision.

Since there is no difference in the role of the AUC between the EU-15 and the New Member States the two geographical regions are analysed together in the following section:

At every airport an Airport Users' Committee was established up since the implementation of the Directive. Since then it is a consultative body, which is contacted in regard to the tender process. The influence on the decisions in the tender process differs from airport to airport.

It can also be noticed that the stakeholders have a different view on the role of the AUC: The airports and the independent ground handling providers do not see a problem and even state that the AUC has some influence on decisions. It is also stated that the AUC is consulted about other topics apart from the tender process:

- Charges / Costs for the Centralised Infrastructure
- Ground handling issues such as de-icing procedures
- Definition of the Centralised Infrastructure
- Terminal expansion plans

The final decision about airport related topics is however made by the airport operator or the responsible authority.

The airlines in contrast state the influence as very limited and would like to see the Airport Users' Committee to have more influence, mainly within the tender procedures. They justify this position through the fact that airlines are the costumers of handling agents and that they would like to choose the new entrant in the selection procedure. If an airline is however active in handling it would choose its own competitor. Airport operators expressed that this would cause a conflict of interest, which is the reason why airlines should not have a vote in the tender procedure.

Table 4-14 provides an overview on the AUC at visited airports.

Airport	AUC	Established	Does the AUC have some influence on decisions? Interview Data - EU-15		
			Airport Operator	Airlines	Independent ground handling provider
AMS	√	1998	No, AUC consulted on any changes in the ground handling market	---	---
ARN	√	1996	No, AUC has just a consultation role, but until now it has so far agreed with LFVs decisions and plans. Since the airport does not carry out any ground handling service it is not regarded as a competitor. Therefore there is no problem with the limited influence of the AUC	No	---
ATH	√	2001	No. The AUC is consulted and its position is taken into consideration	---	Yes. Since users shall implement the decisions, timing and operational details are mutually agreed
BRU	√	2000	Advisory role only	---	---
CDG	√	1998	Yes. Position is taken into account. The final decision in tender procedures is taken by the Civil Aviation Authority	---	---
CGN	√	1997	Yes. In the tender the vote of the AUC has influence on the final licensing of new 3rd handling party	---	---
CPH	√	2004	Consultative body	---	---
FCO	√	1999	Yes. Although not binding, the opinion of the AUC is taken into consideration by the airport managing company	No. The AUC is not representative its role is only consultative. ENAC takes its decisions without even providing the reasons why it disregards the AUC advice	Yes. It may influence the operational decisions but too weak when costs are involved
FRA	√	1997	Yes. The AUC is always involved and consulted on all major questions regarding ground handling	No, as the AUC has only the status as consultative body. The airport operator does not consider votings of the AUC	Yes, one of three votes in tender process
HEL	√	1998	Yes. E.g. discussions on the de-icing coordination charge resulted in a charging basis that was suggested by the users	No. The airport wants to receive the opinion of the airlines but has not so far really taken them into account	---
LHR	√	before 2000	Yes, through discussions and votes	---	---
LIS	√	1999	Consultative body	---	---
MAD	√	no data	Consultative body, consultation for the tender process	---	---
MAN	√	1996	Yes, by expressing views on new schemes, charges etc.	---	---
VIE	√	1998	Consultative body	No, only consultation with the CAA and the airport operator	---

Table 4-14: Overview of Airport Users' Committees at visited airports in the EU-15

Airport	AUC	Established	Does the AUC have some influence on decisions? Internet Survey Data - EU-15		
			Airport Operator	Airlines	Independent ground handling provider
AGP	√	no data	AENA: No, the position of the AUC is not decisive for the selection of suppliers	---	---
ALC	√	no data	Same answer as AENA AGP	---	---
BCN	√	no data	Same answer as AENA AGP	---	---
DUB	√	1999	DAA: The airport authority holds consultation meetings in a fair, transparent and non-discriminatory basis and believes that its meetings with the Shannon Airport AUC are productive and lead to user views being taken into account	---	---
DUS	√	1998	The AUC has a right of co determination	AUC DUS: No, as the AUC has only the status as consultative body. The airport operator does not consider votings of the AUC	---
FAO	√	1999	No, the AUC must be consulted, although its written opinion is not binding upon the airports	---	---
FMO	√	1997	No	---	---
HAJ	√	1998	---	Same answer as AUC DUS	---
HAM	√	1997	Yes, definition of CI, consulting in tender process	---	Yes, one of three votes in tender process
IBZ	√	2005	---	---	Acciona IBZ: Limited influence, a lot of airlines have seasonal traffic, not having senior management at these airports. The airport usually does not receive adequate feed back to " complex " questions affecting airport infrastructure, services etc.
LEJ	√	1997	Recommendations for choice of handling service provider (license), adaption of infrastructure charges, implementation of new services/charges (e.g. PRM)	---	---
LGW	√		no information		
MAH	√	2005	---	---	Same answer as Acciona IBZ
MUC	√	1997	Partly yes, for instance pricing policy	Same answer as AUC DUS	---
NUE	√	1998	---	Same answer as AUC DUS	---
OPO	√	2001	No; The AUC must be consulted, although its written opinion is not binding upon the airports	---	---
ORK	√	1999	Same answer as DAA DUB	---	---
ORY	√	1998	Yes. Position is taken into account. The final decision in tender procedures is taken by the Civil Aviation Authority	---	---
PMI	√	2005	Same answer as AENA AGP	---	Same answer as Acciona IBZ
SNN	√	1999	Same answer as DAA DUB	---	---
STN	√		no information		
STR	√	1999	Yes, for example change in centralised infrastructure charging system based on AUC-initiative	Same answer as AUC DUS	---
SXF	√	2000	---	Same answer as AUC DUS	Yes, one of three votes in tender process
TXL	√	1999	---	---	Yes, one of three votes in tender process

Table 4-15: Overview of Airport Users' Committees at internet survey airports in the EU-15

Airport	AUC	Established	NMS - Does the AUC have some influence on decisions?		
			Airport Operator	Airlines	Independent ground handling provider
Interview Data					
BTS	√	2005	No	No	---
BUD	√	no data	Yes	---	Yes. Influence on some issues
LCA	√	2007	No	---	No
OTP	no data	no data	no data		
PRG	Delegated to AOC	---	Strong role of the AOC: all topics concerning infrastructure, charges and the relationship between the users and airport discussed within the AOC.	---	---
RIX	---	2008	Consultative body	---	---
SOF	√	2007	No decisive votes possible	---	---
WAW	√	no data	no data		
Internet Survey Data					
LJU	√	2004	Yes. Blocks some decisions	---	---
MLA	√	2004	A general consensus approach is always reached.	---	---
TLL	√	1994	---	Yes, some influence on airport charges.	---
VNO	√	2006	Yes. Development plans are coordinated with AUC.	---	---

Table 4-16: Overview of Airport Users' Committees airports in the New Member States

Stakeholder specific positions about the Centralised Infrastructure

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport Operators:

- According to the Directive 96/67/EC the AUC is defined as consultative body. The AUC has no decisive vote.
- Airports do not see the necessity to change the role and competence of the AUC.
- Airports consider the AUC as a forum for consultations, discussions and exchange of information.
- At some airports there is a low participation rate at AUC meetings.
- In some cases the AUC is dominated by the home base carrier and does not reflect representatively the vote and position of the airline community.
- Conflict of interests: Self-handling and third party handling airlines will not vote for strong competitors.
- A set of guidelines at the EU-level should be defined, which sets minimum requirements for the internal functioning of the AUC. This would guarantee, that the AUC

would not be dominated by certain carriers. Additionally, airlines, which are operating in ground handling, should not be entitled to select their competitors.

Airlines:

- As customers of the ground handling services, the airlines see the necessity to strengthen the role of the AUC.
- Representing the customers of ground handling services, the AUC should have decisive votes in the tender process and on the decision, from which ground handling companies will be approved and licensed.
- In some cases the AUC was informed by the authority respectively the managing body of the airport. In final decisions, especially tender procedures, the positions of the AUC were not considered.
- Since the voting rules for the AUC are not clearly defined, a set of guidelines should be given.

Independent ground handling providers:

- Even though independent ground handling providers are not part of the AUC, they plead for a stronger role of the AUC to ensure the application of the criteria of relevance, objectivity, non-discrimination and transparency in the tender process.
- Regarding operational questions, the AUC and involved AOC have some influence on decisions.

Conclusion about the Airport Users' Committee

- According to the provided data, almost all airports set up the AUC. One airport delegated the functions of the AUC to the Airport Operators Committee (AOC).
- Based on the analysed questionnaires at almost all airports the AUC is consulted on topics related to ground handling, charges and tender procedures.
- The influence of the AUC on decisions vary. Even though the AUC votings are not decisive at all airports, at some airports, especially with focus on operational questions, the positions of the AUC might be stronger than at other airports.
- The presence and role of groundhandling airlines within AUC is controversial as they can be both customers and providers of groundhandling.

4.10 Tender process

Preliminary remark

In compliance with the provisions laid down in Article 6 and 7 of the Directive, Member States shall ensure free market access for third party providers and self-handling airlines established in the European Union. For the service categories such as baggage handling, freight and mail handling, ramp handling and fuel and oil handling, Member States may limit the number to no fewer than two self-handling airlines at airports with more than one million passengers respectively 25.000 tonnes of cargo. For airports with more than two million passengers respectively 50.000 tonnes of cargo the number of third party suppliers may be limited to no fewer than two handling licences, while one third party supplier must be independent from the airport and airport users' who carried out more than 25 percent of passengers or freight recorded in the year preceding that in which those suppliers were selected. Under consideration are the specific constraints of space or capacity, with approval from the Commission temporarily exemptions could be admitted (Article 9, compare Table 3-1).

If the number of self-handling and/or third party handling licences for selected or all limitable categories is restricted, the suppliers will be selected in a tender process. The procedures, criteria and conditions are laid down in the Directive, Article 11 and Article 14.

Independently from the tender, Member States are able to introduce an obligatory approval for airport users and ground handling providers to ensure minimum standards in regard to a sound financial situation, sufficient insurance cover, security, safety of installations, aircraft and equipment, environmental protection and social legislation. The criteria for the approval must comply with the principles of relevance, objectivity, transparency and non-discrimination.

In addition, for the tender process Member States can introduce standard conditions and technical specifications to be met by the suppliers, which should be subject to consultations between the airport operator, authority and the AUC. The selection criteria must comply with the principles of relevance, objectivity, transparency and non-discrimination. Based on the submitted tender documents and under consideration of the selection criteria, the airport management body selects the suppliers for a maximum period of seven years and consults the AUC on its decision. Where the airport operator is engaged in ground handling an independent authority selects the suppliers. Referring to this the airport ground handling subsidiary must not be subject to the tender procedure.

Summarising the provisions of the Directive, it can be concluded that the legal licensing is done by the airport operator respectively the authority while the commercial contract is negotiated between airlines and ground handling suppliers.

Figure 4-23 provides a synopsis on self and third party handling, limitable categories and the tender procedure.

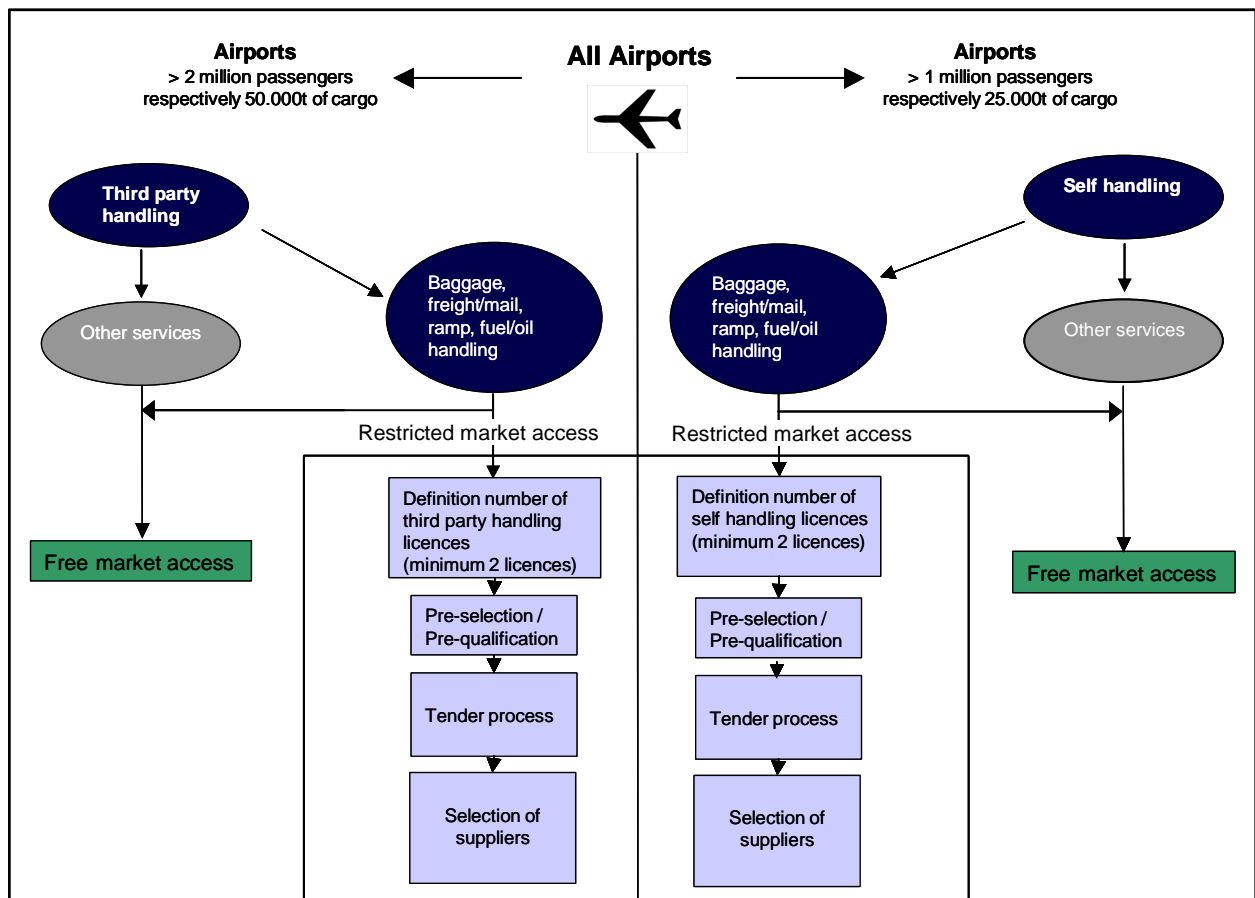


Figure 4-23: Functional overview on market forms and tender process

EU-15 Member States

In regard to visited airports in the EU-15, Table 4-17 presents an overview on chosen market forms and tender procedures. It shows how many tender procedures have taken place since the opening of the market and for which category of ground handling. Generally each tender comprises all stated categories. If data was available the year of the tender process is also mentioned.

Within the sample of the visited airports in the EU-15, 6 airports or 40% of all airports are fully liberalised, i.e. every handling agent can obtain a licence to operate at the airport. In those cases, no tender needs to be arranged.

The other 60% of airports are limited to a certain number of handling licences for the categories mentioned in Table 4-17. Mostly category 3, 4 and 5 are limited whereas category 7 (fuel and oil handling) is liberalised at almost all airports. At CDG, MAD and VIE only third party handling is limited; freedom of self-handling is safeguarded for all categories.

Mostly the licences are limited to two or to three handlers for self-handling and for third party handling each. For those limited airports tenders needed to be organised in compliance with the provisions laid down in Article 11 and 14 of the Directive.

Interview Data EU-15						
Airport	Number of tender processes since introduction of the Directive (Ramp Handling)	Valid number of tendered licences (incl. Airport GH)	AUC consulted?	Who can vote on the tender process?	Decisive criteria	length of licence
AMS	Liberalised market - no tender					
ARN	Liberalised market - no tender					
ATH	Self handling: 3 (cat. 3, 5) Third party: 2 (cat. 3, 5)	Self handling: 2 Third party: 3	√	Authority/ Ministry	Operational concept and business plan	7 years
BRU	Self handling: 2 (cat. 3, 4, 5) Third party: 2 (cat. 3, 4, 5)	Self handling: 2 Third party: 2	√	Airport/ AUC	Cost basis, use of airport infrastructure, operational plan and business plan	7 years
CDG	Third party: 5 ¹ (cat. 3, 5 ;1999/ 2000/ 2001/ 2006/ 2007) 2 (cat. 4)	Third party: 3 ¹	√	Airport / Authority	Safety, security and environment regulations, financial capacity, resources (Human and materials), social policy in terms of social legislation, Internal procedures regarding quality controls	3 years
CGN	Self handling: 1 (cat. 4, 5; 2007) Third party: 2 (cat. 4, 5; 1999/2004)	Self handling: 2 Third party: 2	√	AUC, Workers council, Airport, Authority	the votes of the AUC, workers council, airport; the willingness to take over airport staff; a quality management system, a sample calculation according to a sample flight plan; experience and references	5 years
CPH	Liberalised market - no tender					
FCO	Liberalised market - no tender					
FRA	Self handling: 1 (cat. 3, 4, 5; 1998) Third party: 2 (cat. 3, 4, 5; 1998/2005)	Self handling: 2 Third party: 2	√	AUC, workers council, Airport, Authority	experience, reliability	5 years
HEL	Limited market - no tender realised					
LHR	Liberalised market - no tender					
LIS	Limited market - no tender realised					
MAD	Third party: 2 (cat. 3, 5; 1996/2005), 1 (cat. 4; 2005)	Third party: 3	√	Airport Operator / Authority	Quality levels, human and technical resources, environmental care, economic operational and quality improvements	7 years
MAN	Liberalised market - no tender					
VIE	Third party: 2 (cat. 3, 4, 5)	Third party: 2	√	AUC / Airport / Authority	vote AUC, operational concept, business plan, experience, price, reliability	7 years

¹: At CDG handling licences are dedicated to Terminals

Table 4-17: Overview of market forms and tender process at interviewed airports in the EU-15

At four airports the length of the licence complies with the suggestion of the Directive of 7 years. This implies that the airports needed to arrange for two tender procedures since the opening of the market. At the other airports, the time is shorter than the seven years: in CDG the licences is valid for three years, in CGN and in FRA for five years.

HEL airport is generally also liberalised but limited with particular services. For those a tender process will be organised in the near future.

As already mentioned in chapter 4.9, the Airport Users' Committee was consulted at each of the airports in regard to the tender process. In some cases such as BRU, CGN, FRA or VIE it also had a vote, which was however not considered in the final selection. Also at FRA and CGN the workers council can vote for candidates. According to the provided data those two airports are however the only airports where workers are consulted as well.

According to the Directive, the selection decision is made by the responsible authority if the airport operator is involved in ground handling activities. In this case the airport operator often conducts the tender procedure, whereas the authority finally decides about the new market entrant. Otherwise the airport operator is responsible for the decision himself.

The decisive criteria within the tender process have identical parts at several airports such as the business plan and the operational concept. Apart from those, quality levels as well as security and safety regulation play a role. Only at CGN airport the willingness to take over staff is mentioned as criteria within the tender process.

At airports participating in the internet survey only minor differences can be assessed: Compared to the representative sample of EU-15 airports, the majority of airports, more precisely 79%, is limited to a certain number of licences. Only the Irish and the British airports are fully liberalised, which allows every handler to be active at those airports.

The number of tender processes does not differ from the airports in the representative sample: the majority of airports have already organised two tenders since the opening of the market in 1996. The number of licences tendered is at most airports limited to two self-handling and third party handling each. Only at the Spanish airports like AGP, ALC and BCN and at ORY three licences were granted. 47% of airports can ensure the freedom of self-handling whereby in the past only a tender for third party handling licences needed to take place. The tendered licences are valid for seven years with the exception of SXF airport. However this limitation of the licence duration was only implemented due to the closing of SXF in 2011 and the opening of the New Berlin Brandenburg International airport.

Within this tender procedure the AUC was consulted at each of the airports with the exception of FMO airport, whereas FMO is not over the threshold of 2 Mio. PAX yet and therefore does not need to open the market yet.

Since not many stakeholders provided data about the decisive criteria within the tender process (only AENA and MUC airport), it can only be assumed that they do not differ widely from the criteria mentioned within the representative sample. AENA also stated the quality levels as well as economic operations.

Internet Survey Data EU-15						
Airport	Number of tender processes since introduction of the Directive	Valid number of tendered licences (incl. Airport GH)	AUC consulted?	Who can vote on the tender process?	Decisive criteria	length of licence
AGP	Third party: 2 (cat. 3, 5; 1996/2005), 1 (cat. 4; 2005)	Third party: 3	√	Airport Operator / Authority	Quality levels, human and technical resources, environmental care, economic operational and quality improvements	7 years
ALC	Third party: 2 (cat. 3, 5; 1996/2005), 1 (cat. 4; 2005)	Third party: 3	√	Airport Operator / Authority	Quality levels, human and technical resources, environmental care, economic operational and quality improvements	7 years
BCN	Third party: 2 (cat. 3, 5; 1996/2005), 1 (cat. 4; 2005)	Third party: 3	√	Airport Operator / Authority	Quality levels, human and technical resources, environmental care, economic operational and quality improvements	7 years
DUB	Liberalised market - no tender					
DUS	no data	Self handling: 2 Third party: 2	no data	Authority	no data	no data
FAO	no data	Third party: 2	no data	no data	no data	7 years
FMO	Self handling: 1 (cat. 5) Third party: 1 (cat. 5, 7)	Self handling 2: Third party: 2	---	Authority	no data	no data
HAI	Third party: 2 (cat. 3, 4, 5)	Self handling: 2 Third party: 2	no data	Authority	no data	7 years
HAM	Self handling: 2 (cat. 3, 4, 5) Third party: 2 (cat. 3, 4, 5; 2000/2006)	Self handling: 2 Third party: 2	√	Authority	no data	7 years
IBZ	Third party: 2 (cat. 3, 5; 1997/2005)	Third party: 2	√	Airport Operator / Authority	Quality levels, human and technical resources, environmental care, economic operational and quality improvements	7 years
LEJ	Third party: 1 (cat. 5, 7)	Self handling 2: Third party: 2	√	Authority	no data	7 years
LGW	Liberalised market - no tender					
MAH	Third party: 2 (cat. 3, 5; 1996/2006)	Third party: 2	√	Airport Operator / Authority	Quality levels, human and technical resources, environmental care, economic operational and quality improvements	7 years
MUC	Third party: 2 (cat. 3, 4, 5; 1998/2002)	Self handling: 2 Third party: 2	√	Authority	Criteria for bid acceptance: charge levels based on a sample calculation that the service provider demands of the user. Plausibility and traceability of sample calculation. Verification of quality in rendering ground handling services (experience/references in the field of rendering handling services at international airports, quality of available staff, organisation/structure of handling operations)	7 years
NUE	Self handling: 1 (cat. 5) Third party: 1 (cat. 5)	Self handling: 2 Third party: 2	√	Authority	price and quality system	7 years
OPO	no data	Third party: 2	no data	no data	no data	7 years
ORK	Liberalised market - no tender					
ORY	no data	Third party: 3 ¹	no data	Authority	no data	7 years
PMI	Third party: 2 (cat. 3, 5; 1996/2006)	Third party: 2	√	Airport Operator / Authority	Quality levels, human and technical resources, environmental care, economic operational and quality improvements	7 years
SNN	Liberalised market - no tender					
STN	Liberalised market - no tender					
STR	Third party: 2 (cat.3, 4, 5; 1998/ 2001)	Self handling: 2 Third party: 2	√	Authority	no data	7 years
SXF	Third party: 2 (cat. 3, 4, 5; 2000/2008), 1 (cat. 7; 2001)	Self handling: 2 Third party: 2	√	Authority	no data	4 years
TXL	Third party: 2 (cat. 3, 5; 2000/2007)	Self handling: 2 Third party: 2	√	Authority	no data	no data

¹: At ORY handling licences are dedicated to Terminals

Table 4-18: Overview of market forms and tender process at internet survey airports in the EU-15

New Member States

As Table 4-19 shows, airports within the New Member States do not comply with the Directive yet, except PRG airport which is fully liberalised. Some airports are just shortly above the threshold of 2 Mio. PAX or 50.000 tonnes of freight whereby they could not arrange a tender yet. This will change in the near future at BTS, BUD, RIX and SOF. It can be assumed that all of the airports of the New Member States participating in the study will be limited to a certain number of handlers. This implies that New Member States airports are still in the implementing phase of the Directive 96/67/EC and the developments is not finalised yet.

At LCA and MLA, it was already indicated that there are two licences for self and third party handling. However at MLA airport the freedom of self-handling is safeguarded.

New Member States						
Airport	Number of tender processes since introduction of the Directive (Ramp Handling)	Valid number of tendered licences (incl. Airport GH)	AUC consulted?	Who can vote on the tender process?	Decisive criteria	length of licence
Sample Interview						
BTS	Due to strong traffic growth BTS under the Directive since 2007. Limited market - no tender realised.					
BUD	Since 2006 the market access limited to independent third party suppliers - no tender realised - full compliance with the Directive soon					
LCA	no data	Self handling: 2 Third party: 2	√	no data		7 years
OTP	no data					
PRG	Liberalised market - no tender					
RIX	Due to strong traffic growth RIX under the Directive since 2006. Limited market - no tender realised (Preparation for a tender in 2008)					
SOF	Liberalised market - no tender (Strong role of the CAA: beside the airport since 2007 one independent ground handling supplier operating)					
WAW	Limited market - no tender realised					
Sample Internet Survey						
LJU	no tender	Pax volume did not reach 2 Mio. yet				
MLA	no data	Third party: 2	no data	Authority	no data	no data
TLL	no data					
VNO	Liberalised market - no tender					

Table 4-19: Overview of market forms and tender process at airports in the NMS

Stakeholder specific positions about the Tender Process

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport Operators:

- Generally, airport operators oppose uniform selection criteria at EU level, as local conditions need to be considered in the tender process. Moreover, all ground handling suppliers should be licensed under this condition.

- The criteria for the tender process should be clear and objective. For the two stage tender process, including pre-qualification and actual selection, the authority or the airport operator should make clear distinction between the criteria for the pre-selection and the selection phase.
- A commercial allocation mechanism system for licences may constitute an interesting solution for ensuring, from a legal perspective, a fair and equitable selection of ground handlers, however this measure needs to be properly assessed.
- Airports support the introduction of minimum requirements in the pre-selection to ensure quality, safety, social conditions and security aspects.
- With the revision of the Directive, guidelines or minimum requirements on insurance cover for full suppliers and sub-contractors should be introduced.
- Maximum licence period could be extended to 10 years for concession contracts of service suppliers, which enhances stability of the market and avoid the airport operator respectively the authority to multiply the heavy procedure of the selection process. On the other side too long periods would lead to oligopolies, avoid competition and therefore would be contrary to the objectives of the Directive.
- Within the tender process the transfer of staff between companies is not regulated. To avoid uncertainties for handlers and staff, some guidelines should be introduced.
- The AUC should have an advisory role and should be consulted in the tender process. Giving the AUC decision making power could give the main carrier complete control on the ground handling market and would contradict the objectives of the Directive. Furthermore, airlines acting as ground handling suppliers would be in a conflict of interest, since they would select their prospective competitors.
- As many airports have capacity constraints and focus on the efficient use of infrastructure, the authority respectively the airport operator should made the decisions on the number of handling licences.

Airlines:

- Generally, airlines suggest the full opening of ground handling markets. At least the thresholds should foresee a minimum of four suppliers at large airports and a minimum of three at smaller airports.
- Many airports fully liberalised their access to ground handling markets with positive effects on quality.
- Airlines stated that they have no or only limited influence on the selection of suppliers, even though they are customers of ground handling services. It is proposed, that the AUC should be able to vote in the final selection of the supplier, (in some tender

processes the final choice differs significantly from the preferences of the AUC). Stakeholders suggested that airports and authorities should be involved in the phase of pre-selection to ensure the general framework, while airlines should make the final decision.

- Airlines reported, that in some selections the final decision did not reflect the view and expectations of the AUC and seemed to be politically inspired. Moreover, the final decision was not properly motivated.
- Since some Member States hold shares of airports actively involved in ground handling, the decision of the authority might not be independent. In some cases there may be a conflict of interest during the selection process, if airports providing ground handling services, select their competitors.
- At the island airports with handling monopolies of a dominant airline, the monopolistic supplier misuses his position by imposing higher handling prices on airlines, which were not customers at other airports with more than two million passengers.
- Prevention of artificial market access barriers and ensuring fair and equal market conditions: quality requirements must not be set in the tender, since airlines are directly affected and have self-motivated interest to secure adequate quality standards.
- Some airlines stated that due to investments and depreciation the validity of tendered handling licences for seven years in maximum is justified, while others prefer short-term licences to consider the fast evolving market preferences.

Independent ground handling providers:

- At some airports the access to ground handling markets is still limited and no tender, which complies with the provisions of the Directive, has taken place.
- In some Member States the ability to take over staff from the airport and social conditions offered was highly weighted as selection criteria in tender procedures. This practice reduces the competitiveness of independent ground handling suppliers (cost structure, obligation to take staff selected by the competitor) and rather contradicts the objectives of the Directive.
- Even though independent ground handling providers are not part of the AUC, they plead for a stronger role to ensure the application of the criteria of relevance, objectivity, non-discrimination and transparency in the tender process.
- As the provisions on tender process leave room for interpretations, the procedure should be clarified in the Directive. For the two stage tender process, including pre-qualification and actual selection, for both stages relevant, objective, transparent and

non-discriminatory criteria should be defined and introduced. Furthermore both stages of the tender should be separated properly.

- Since in some tender procedures the final selection seems not to be comprehensible and in some cases politically inspired,
 - The actual weight of every selection criteria should be clarified and published,
 - The vote of the AUC considered and endorsed,
 - The final choice should be properly motivated.
- Many ground handlers stated, that due to investments in equipment and staff, the validity of the handling licences should exceed the current maximum of seven years. Licences with duration of less than seven years affect the cost structures due to higher depreciation (compared to competitors) and does not enable medium and long-term strategies and contracts.

Unions:

- Within the tender process the transfer of staff between companies is not regulated. Based on legal framework conditions and the implementation of the Directive, staff of the previous handling company needs to be dismissed while the new selected ground handling company employs rather young and less paid staff. Strong effect on job security and social conditions, affected by the implementation of the Directive and the lack of regulation transfer of staff. In regard to the transfer of staff the Directive should provide some guidelines (e.g. Spanish model) or regulation on European level.
- Regarding the provisions on the tender process social aspects as well as the mandatory involvement of work councils should be introduced.
- Maximum licence period could be extended to ten years to enhance stability of the jobs.

Conclusion about the Tender Process

- The implementation of the Directive regarding the chosen market forms and the tender process vary between the visited airports.
- At six airports in the EU-15, self-handling airlines and ground handling suppliers could enter the ground handling markets and provide services as baggage handling, freight and mail handling, ramp handling and, fuel and oil handling only with the approval of the airport and/or the authority without tender procedures. (free access to the market)
- Beside the general approval, nine airport operators respective authorities decided to limit the market access and set up tender procedures. Therefore at most airports two

licences are tendered and at some even three. The duration of licence validity and the tender procedure differ significantly.

- With an emphasis on the New Member States, at another six airports the access to ground handling is limited. However no tender process, which complies with the provisions of the Directive, has taken place yet since the airports are still in the implementation phase.
- Many stakeholders mentioned that the transfer of staff is not enough specified and regulated within the Directive and should be part of the tender process.

4.11 Sub-contracting

Preliminary remark

The Directive 96/67/EC does not provide any definitions, provisions or guidelines on sub-contracting in ground handling markets. Sub-contracting is implicitly considered in Article 2, which defined self-handling as the situation where an airport user provides itself exclusively with ground handling services without any operational participation of third party (respective sub-contracting suppliers). Chapter 4.7 is dedicated to self-handling and discusses questions positions on sub-contracting related to self-handling.

EU-15 Member States

Table 4-20 to Table 4-22 outline the existence of airside related sub-contracting, respective cascade sub-contracting, and presents an overview on possible sub-contracting related problems.

Regarding the representative sample of EU-15 airports, it can be concluded that sub-contracting is at almost all airports practised except at ATH airport where sub-contracting is not permitted and LHR where no data is available.

Cascade sub-contracting (i.e. where the sub-contracted company does not perform the service but sub-contracts it to another company), is however not practised. Only ARN, CDG and FRA airport stated that cascade sub-contracting is realised at those airports.

Within the tender process, sub-contracting did not play a role at the interviewed airports with the exception of BRU airport. This could explain why a ground handling provider can provide ground handling services cheaper than its competitor by sub-contracting parts of the handling services e.g. to a specialised company.

Interview Data EU-15						
Airport	Does sub-contracting exist?	Does Cascade sub-contracting exist?	Sub-contracting indicated during tender?	Did problems encounter due to sub-contracting or cascade sub-contracting?		
				Airport Operator	Airlines	Independent ground handling provider
AMS	√	no	Liberalised market - no tender	no	no	---
ARN	√	√	Liberalised market - no tender	Northport (now acquired by Menzies) sub-contracted to fulfill contractual obligations. This led to difficulties in reaching core decision-makers within Northport	no	---
ATH	not permitted					
BRU	√	no	√	Some airlines tried to sub-contract to third party handling companies, that did not have a license from the airport	no	no
CDG	√	√	no	no data		
CGN	√	no	no	no	---	---
CPH	√	no data	Liberalised market - no tender	no	---	---
FCO	√	---	Liberalised market - no tender	no	√	no
FRA	√	√	no	Insufficient insurance coverage, lack of quality, use of temporary workers agencies	no	no
HEL	√	no	Liberalised market - no tender	Since the sub-contractors are working for more than one company at the airport the staff does not necessarily know for whom they are working. It is questionable how a handling company communicates all safety/security requirements if they also do not know about their staff.	Staff problems. Risk of accidents/incidents due to insufficient training staff rotation	---
LHR	√	no data				
LIS	√	no data	Limited market - no tender realised	no	---	---
MAD	√	no	no data	Cascade sub-contracting is not practiced: Concern: negative effects on safety, security, quality, environment, training, equipment	---	---
MAN	√	no	no data	no	---	---
VIE	√	no	no	no	no	no

Table 4-20: Sub-contracting at interviewed airports in the EU-15

Problems resulting from sub-contracting are mainly seen by airport operators. In HEL the airport operator stated that it is not easy to communicate with the handling companies if the services are sub-contracted to other companies whereas the main service provider is not available at the airport anymore. Airport operators fear that sub-contracting has negative effects on security and safety requirements even if no problems regarding safety and security could be detected yet.

The airport operator at FRA mentioned that workers of sub-contracted companies or temporary workers agencies have a lack of quality since they are only temporarily employed at the airport and therefore do not get adequate trainings in advance. This can have a negative impact on the safety as well.

Regarding the internet survey, airports within the EU-15 sub-contracting exists at the majority of airports. Only 21% noted that sub-contracting is not practised at the airport. For these latter airports, the absence of subcontracting practice implies that cascade sub-contracting is not realised.

At the other 79% of airports, sub-contracting could be observed whereas even cascade sub-contracting existed at 33% of all airports. This is more than in the representative sample of EU-15 airports. This is due to the high number of German airports where sub-contractors contract another company for selected ground handling services. Only at NUE airport cascade sub-contracting is not practised.

At DUS and HAM as well as IBZ, MAH, PMI and ORY, sub-contracting was even already indicated during tender procedures. At all other airports it was either not indicated or no tender had taken place since the airport is fully liberalised.

In contrast to the representative sample, stakeholders did not see any problems in regard to sub-contracting.

Internet Survey Data EU-15						
Airport	Does sub-contracting exist?	Does Cascade sub-contracting exist?	Sub-contracting indicated during tender?	Did problems encounter due to sub-contracting or cascade sub-contracting?		
				Airport Operator	Airlines	Independent ground handling provider
AGP	√	no	no data	no	---	---
ALC	√	no	no data	no	---	---
BCN	√	no	no data	no	---	---
DUB	no	no	Liberalised market - no tender	no	---	---
DUS	√	no	√	no	no	---
FAO	√	no data	no	no	---	---
FMO	no	no	no	no	---	---
HAJ	√	√	no	---	no	---
HAM	√	√	√	no	---	no
IBZ	√	no	√	---	---	no
LEJ	√	√	no	no	---	---
LGW	no	no	no data			
MAH	√	no	√	---	---	no
MUC	√	√	no	no	no	---
NUE	√	no	no	no	no	---
OPO	√	no data	no	no	---	---
ORK	no	no	Liberalised market - no tender	no	---	---
ORY	√	√	√	no	---	---
PMI	√	no	√	no	---	no
SNN	√	no data	Liberalised market - no tender	no data		
STN	no	no	no data			
STR	√	√	no	no	no	---
SXF	√	√	no	---	no	no
TXL	√	√	no	---	---	no

Table 4-21: Sub-contracting at internet survey airports in the EU-15

New Member States

At New Member States airports sub-contracting seems to be part of the ground handling industry since only at three airports (LCA, RIX and VNO) sub-contracting is not practised. In contrast to the internet survey airports within the EU-15, where cascade sub-contracting can be observed, within companies in the New Member States cascade sub-contracting is not common. Only at MAL airport, stakeholders mentioned it to be used.

Since at many New Member States airports no tender procedure has taken place yet (see also chapter 4.10) or the market is fully liberalised (no need for a tender), sub-contracting could not be indicated within this process.

The only opinion that stakeholders in the New Member States stated was against cascade sub-contracting. PRA airport operator mentioned that cascade sub-contracting could have a negative effect on quality, price and safety and is therefore not permitted.

New Member States						
Airport	Does sub-contracting exist?	Does Cascade sub-contracting exist?	Sub-contracting indicated during tender?	Did problems encounter due to sub-contracting or cascade sub-contracting?		
				Airport Operator	Airlines	Independent ground handling provider
Interview Data						
BTS	√	no	Limited market - no tender realised	no	---	---
BUD	√	no	Limited market - no tender realised	no	---	no
LCA	no	no	√	no	---	no
OTP	no data					
PRG	√	no	Liberalised market - no tender	no cascade sub-contracting in PRG: possible effects on quality, price and safety	no	no
RIX	no	no	Limited market - no tender realised	no	---	---
SOF	√	no	Liberalised market - no tender	no	---	---
WAW	√	no	Limited market - no tender realised	no	---	---
Internet Survey Data						
LJU	√	no	no	no	---	---
MLA	√	√	√	no	---	---
TLL	√	no data	Liberalised market - no tender	no data		
VNO	no	no	Liberalised market - no tender	no data		

Table 4-22: Sub-contracting at airports in the NMS

Stakeholder specific positions about Sub-contracting

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport Operators:

- With the increase of sub-contracting, the demand for space increases and might lead to congestions and capacity constraints.
- With the increase of sub-contracting, the number of ground handling staff at the air-side increases and transparency, safety, security and working conditions might be affected negatively.
- At some airports sub-contracting practices undermine objectives, selection criteria and requirements defined in the tender process. Therefore in tender procedures obligatory sub-contracting should be indicated.
- Generally, sub-contracting should be permitted even though an approval obligation for any sub-contracting party with the same licensing conditions, provided for the main contractors, should be introduced. Cascade sub-contracting should be limited respectively or prohibited.

Airlines:

- All market participants should have the right to sub-contract, but the main contractor needs to guarantee safety and quality standards.
- Airlines and ground handling companies are responsible for the sub-contractors, staff and service, and ensure in their own interest quality, safety and efficiency. Hence, no further regulation is necessary.

Independent ground handling providers:

- All market participants should have the right to sub-contract, but the main contractor needs to guarantee safety and quality standards.
- With increasing specialisation, sub-contracting respectively, cascade sub-contracting enables competitive advantages regarding quality and price aspects. Therefore sub-contracting should not be limited.
- Ground handling companies are responsible for the sub-contractors, staff and service and ensure in their own interest the quality, safety and efficiency. Hence, no further regulation is necessary.

- Since sub-contractors need to be approved by the authority and/or the airport management body their compliance with minimum standards is safeguarded and from a regulatory point of view their existence is legitimate.

Unions:

- Self-handling airlines and ground handling suppliers are licensed as full service providers. There is no need to sub-contract several sub services.
- With the increase of sub-contracting and cascade sub-contracting, transparency, safety, security and working conditions are negatively affected.
- Sub-contracting and cascade sub-contracting is practiced to minimize wages and to increase working time especially over time. Collective labour agreements and company agreements are undermined.
- Regarding the revision of the Directive, sub-contracting and cascade sub-contracting should be limited.

Conclusion about Sub-contracting

- Except from one airport, at most airports sub-contracting is part of the ground handling industry.
- For three airports, stakeholders indicated the existence of cascade sub-contracting. In conclusion, at most airports cascade sub-contracting was not implemented. Some stakeholders stated safety and security concerns as reason for the non-existence.
- With focus on airports with limited market access in the EU-15 sub-contracting was not indicated at three airports while at one airport applicants for ground handling licences pointed out sub-contracting components within the tender process.
- At some visited airports with restricted market access in the NMS, no tender has taken place and therefore sub-contracting could not be indicated.
- Generally, most of the airlines and independent ground handling providers did not report any difficulties due to sub-contracting practices while some airports reported problems.
- Considering the comments stated in the questionnaires, at most airports the (cascade) sub-contracting parties need to be approved by the authority or the airport management body to operate at the airport.

4.12 Employment

Preliminary remarks

According to Article 18, for the application of the Directive, Member States may take the necessary measures to ensure protection of the rights of workers and respect for the environment. Since the implementation of the Directive the legal framework conditions differ. Therefore, also the employment related developments in ground handling markets vary between the Member States and airports significantly, as well. Hence, a broad variety of influencing variables (social protection, collective labour agreements, specifications) affected social- and employment conditions in ground handling at national level, the impact of the Directive on working conditions is difficult to identify.

Even if all job categories within the ground handling industry differ we decided to take the following two into account: ramp agents and loaders. They are supposed to show tendencies in the development within the employment conditions, even though all categories of ground handling employees are different.

Independently from the Directive and its impacts, ground handling is a very labour intensive business. As stakeholders reported, 70 to 80% of the total costs of ground handling companies correspond to labour costs.

However, in order to identify some trends and tendencies, the stakeholders were requested to indicate changes in the number of staff, employed in ground handling, changes of income levels, general working and social conditions, and developments on the type of contract. Since many stakeholders did not submit information on this topic, arguing they had already participated in the ECORYS study (see also chapter 3.5), the findings are very limited. Furthermore, they stated that the Directive did not influence working conditions or other employment related topics whereas they did not see it a necessity to provide data.

According to the very limited data, submitted by four airport ground handling divisions, one airline and five independent ground handling companies (station based), the total number of staff increased, while the number of staff employed at airport ground handling subsidiaries slightly decreased. Employment at handling airlines decreased while the number of staff, employed at independent ground handling companies increased from 1996 at EU-15 airports.

Based on the data from two airports, two airlines and two independent ground handling companies, airport ground handling and independent ground handling companies recorded an increase of the number of staff, while the jobs provided by handling airlines decreased between 2004 and 2007 at airports in the New Member States.

Corresponding to the stakeholders, generally, the income levels increased. More in detail, in the EU-15 Member States the average income of a typical ramp agent increased between 1.0 and 3.0% per year between 1996 and 2002. From the year 2002 the income

development is even more heterogeneous and varies between -2.0 and 7.0% increase per year. Figure 4-25 provides an overview.

4.12.1 Changes of average income levels

EU-15 Member States

Stakeholders were asked to provide data about the average yearly salary of loaders as well as ramp agents within their company. Generally, it can be concluded from the provided data that there are differences in the level of income between the different job categories. This may be due to economical differences between the Member States of the EU and additionally due to company specifics such as an affiliation to collective labour agreements. However, this is not remarkable since ramp agents have more responsibility than loaders.

Concerning the changes in the salary of loaders between 1996 and 2002 eight stakeholders in the EU-15 provided data. Changes, however, differ widely between airports and stakeholders whereby it can only be concluded that salaries increased at most of the airports.

In the following period, growth levels were higher at some airports, but results still differ widely. A tendency can be seen in increasing income levels. Only within one airline, income for loaders decreased. It is however difficult to identify the reason for the decrease.

Since data is limited to a few stakeholders a stakeholder comparison is not possible.

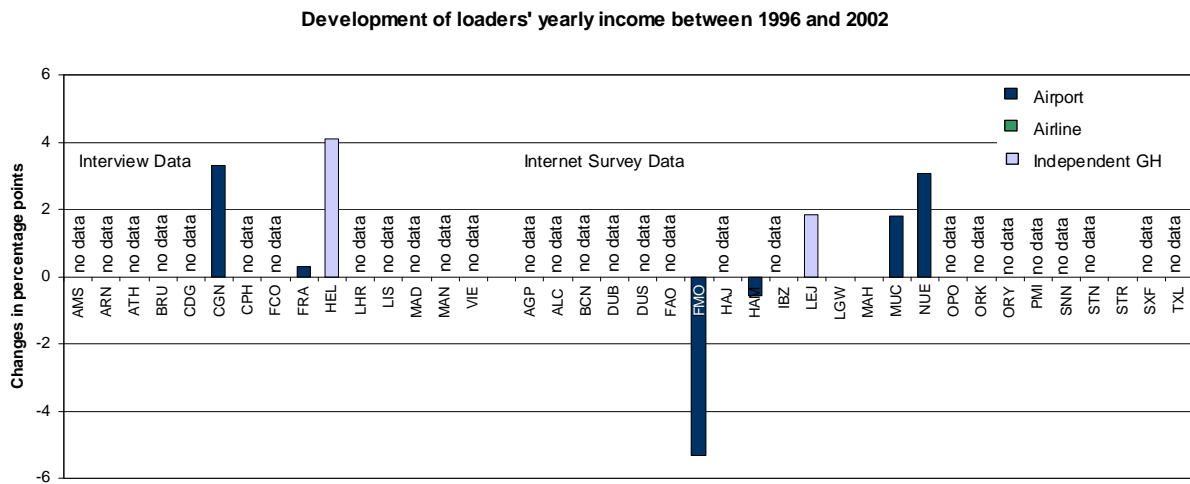


Figure 4-24: Development of loaders' income levels at airports in the EU-15 between 1996 and 2002 according to the type of stakeholders

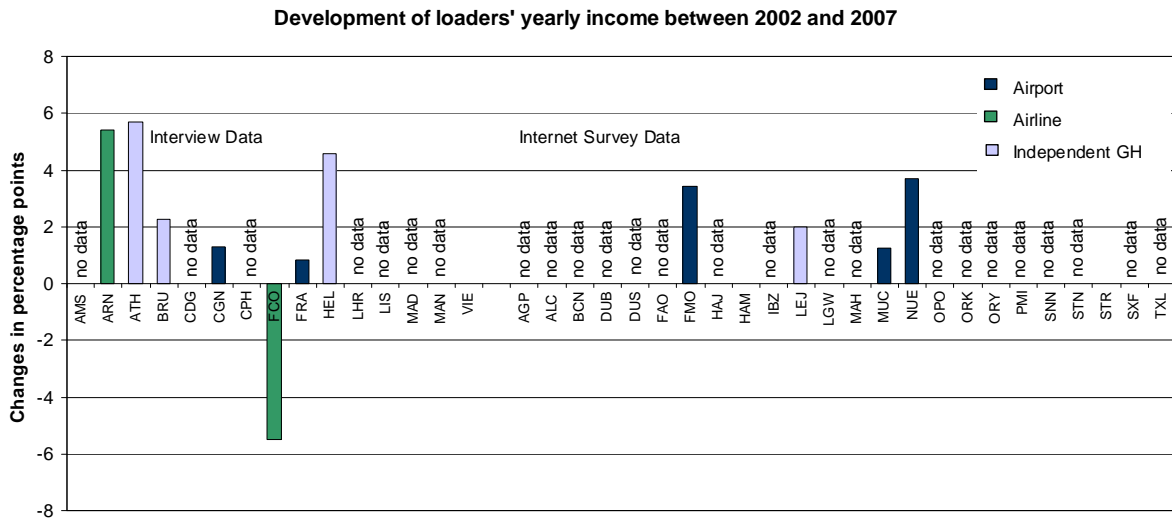


Figure 4-25: Development of loaders' income levels at airports in the EU-15 between 2002 and 2007 according to the type of stakeholders

Regarding the growth of the salary for ramp agents, differences can be seen: for the time between 1996 and 2002 however, only five stakeholders provided data on the changes for ramp agents. At four of those the salary slightly increased and at one airport (FMO) the salary decreased. For the following period up until 2007, eight companies provided data and it can be concluded that the salaries for ramp agents increased on a higher level than previously with the exception of an airline at FCO airport where salary for ramp agents decreased. Growth levels however differ widely at the eight airports: at HEL, ATH and ARN the growth was between 5 and 7% whereas at the other airports it was between 1 and 2%.

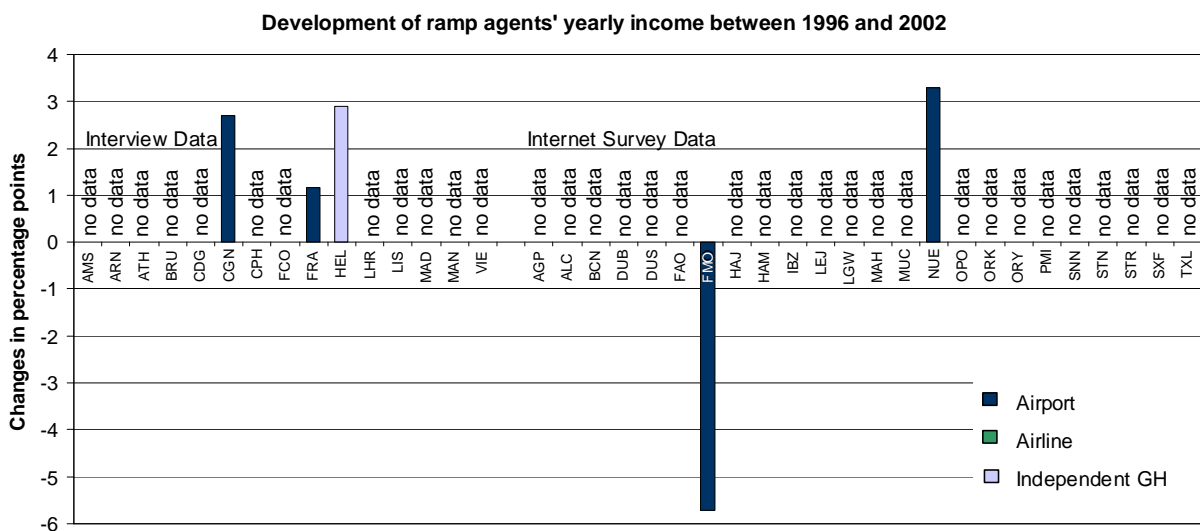


Figure 4-26: Development of ramp agents' income levels at airports in the EU-15 between 1996 and 2002 according to the type of stakeholders

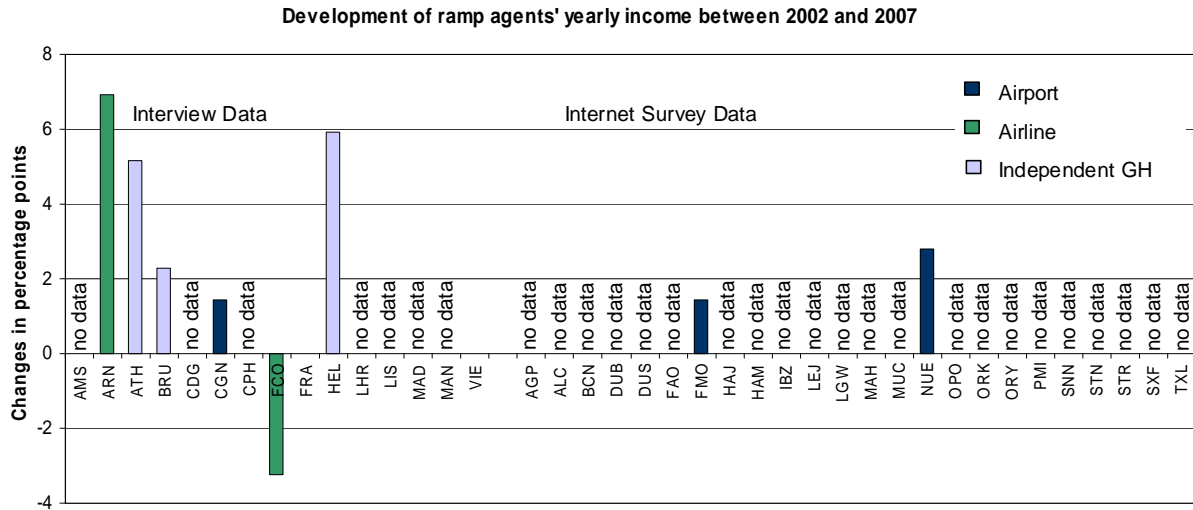


Figure 4-27: Development of ramp agents' income levels at airports in the EU-15 between 2002 and 2007

New Member States

The income developments in the New Member States seem to be more similar to the EU-15 companies: salaries for ramp agents as well as for loaders increased between 2004 and 2007. However, the level of growth differs between the stakeholders as well as the airports. Furthermore, there is a difference between the two occupational groups.

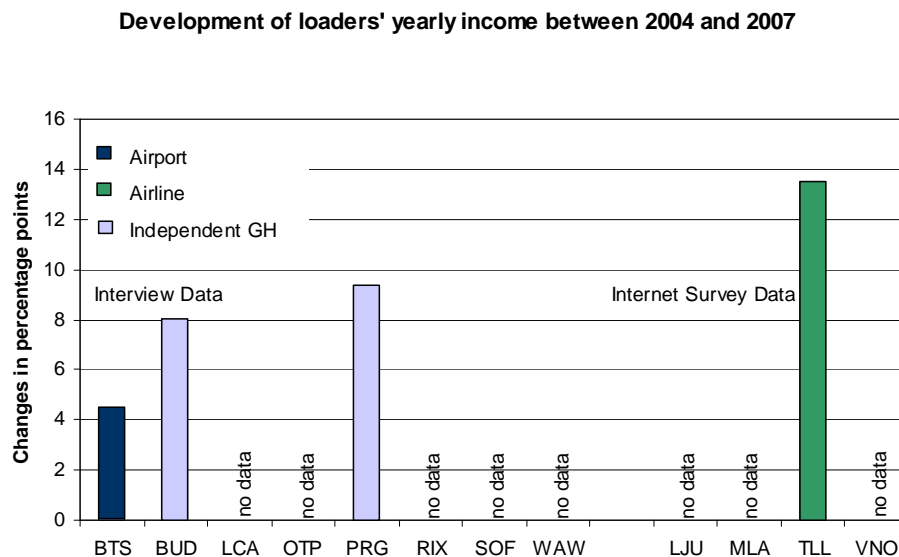


Figure 4-28: Development of loaders' income levels at airports in the NMS between 2004 and 2007

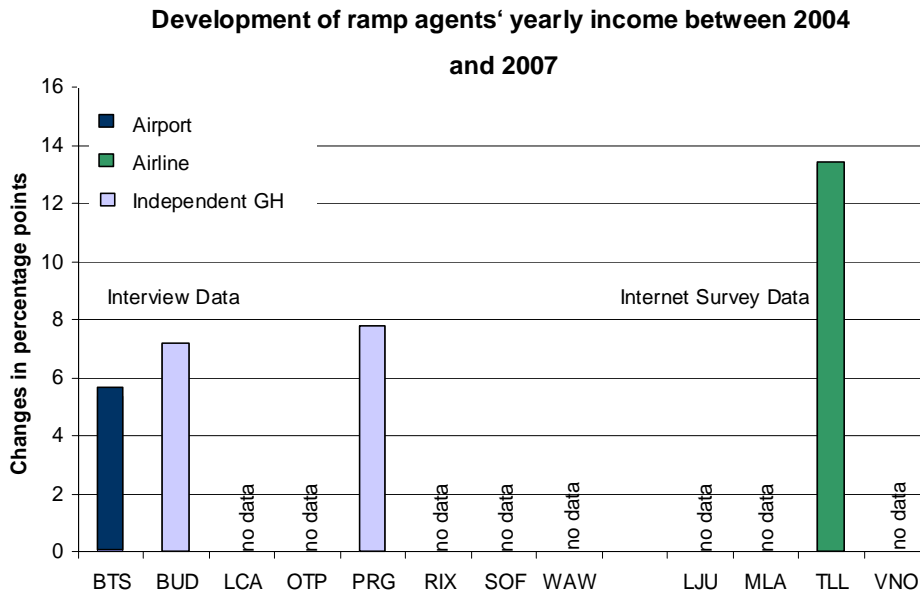


Figure 4-29: Development of ramp agents' income levels at airports in the NMS between 2004 and 2007

4.12.2 General Working conditions

EU-15 Member States

Stakeholders were asked to submit information about the general working conditions and if changes could be noticed between 1996 and 2002 and between 2002 and 2007. However information was only available for the second period of time.

General working conditions are defined as an overview or summary of all types of working conditions such as the operational pressure, health and security, number of working hours, number of holidays and rest time between shifts etc.

At interviewed airports, only eleven stakeholders submitted information on the developments of general working conditions within the internet survey of EU-15 airports in addition to nine companies (only German companies). Due to the limited number of stakeholders providing answers only tendencies on changes can be highlighted.

Some stakeholders, who submitted information, indicated that the general working conditions between 2002 and 2007 improved. Only at BRU and VIE airport, the independent ground handling companies stated that there were no changes. The airport operators of VIE and FRA airport, however, stated that the working conditions deteriorated. The example of FRA is in the contrast to the ground handling companies' opinion.

This is the result of different developments within the above mentioned parts of the working conditions. Therefore the stakeholders' opinions differ. For example, in one company the number of working hours increased and the rest time between shifts decreased which

influenced the working conditions negatively. In the other company, however, there was no change seen in those two categories. This implies that the working conditions are company specific and cannot be compared. Apart from this it can also be concluded that the Directive cannot be the only factor which influences the working conditions since the opinions differ between airports and stakeholders. Otherwise there should have been a correlation between the same stakeholder group and the direction of changes of working conditions.

By analysing the working conditions more closely, it can be concluded that the improvements mainly results from increasing influence of employees on their shifts and improving health and security for the employees. Apart from the fact that operational pressure is increasing in almost every company most of the other factors such as the number of holidays or the rest time during shifts did not change between 2002 and 2007.

Interview Data EU-15			
Airport	Benchmark: Development of working conditions between 2002 and 2007		
	Airport	Airline	Independent ground handling provider
AMS	---	---	---
ARN	---	Improvement	---
ATH	---	---	Improvement
BRU	---	---	No change
CDG	---	---	---
CGN	Improvement	---	---
CPH	---	---	---
FCO	---	---	---
FRA	Deterioation	---	Improvement
HEL	---	---	Improvement
LHR	---	---	---
LIS	---	---	---
MAD	---	---	---
MAN	Improvement	---	Improvement
VIE	Deterioation	---	No change

Table 4-23: Stakeholder specific benchmark on the general development of working conditions between 2002 and 2007 at interviewed airports in the EU-15

The same pattern can be seen within the airports from the internet survey airports as within the interviewed airports: The majority of stakeholders rated the developments as improving, however, also two airport operators (MUC and STR) estimated the changes as deteriorating.

Operational pressure also increased at most airports. The development of working hours and the number of holidays, however, varies between the different stakeholders.

The comparison between different stakeholders at the same airport can only be made at HAM airport where the airport operator and the independent ground handling agent provided

information. In contrast to the comparison within the interview sample, stakeholders in HAM had the same view - an improvement - on the topic.

Internet Survey Data EU-15			
Airport	Benchmark: Development of working conditions between 2002 and 2007		
	Airport	Airline	Independent ground handling provider
AGP	---	---	---
ALC	---	---	---
BCN	---	---	---
DUB	---	---	---
DUS	No change	---	---
FAO	---	---	---
FMO	---	---	---
HAJ	---	---	---
HAM	Improvement	---	Improvement
IBZ	---	---	---
LEJ	---	---	Improvement
LGW	---	---	---
MAH	---	---	---
MUC	Deterioation	---	---
NUE	Improvement	---	---
OPO	---	---	---
ORK	---	---	---
ORY	---	---	---
PMI	---	---	---
SNN	---	---	---
STN	---	---	---
STR	Deterioation	---	---
SXF	---	---	Improvement
TXL	---	---	Improvement

Table 4-24: Stakeholder specific benchmark on the general development of working conditions between 2002 and 2007 at internet survey airports in the EU-15

New Member States

With a few exceptions like the airport operator in RIX and SOF and the participating airline at PRG airport, stakeholders rated the developments of working conditions as improving.

As already mentioned, within the New Member States, most stakeholders have also seen increasing operational pressure. Within the other parts such as the number of working hours, number of holidays, and rest time between shifts, most companies saw no change between 2004 and 2007. For the variables such as professional health and security, rest time during

shifts and influence of employees on their shifts, the opinions of the stakeholders differ widely.

New Member States			
Airport	Benchmark: Development of working conditions between 2004 and 2007		
	Airport	Airline	Independent ground handling provider
Interview Data			
BTS	Improvement	Improvement	---
BUD	---	---	No change
LCA	---	---	Improvement
OTP	---	---	---
PRG	Improvement	No change	Improvement
RIX	Deterioration	---	---
SOF	No Change	---	---
WAW	---	---	---
Internet Survey Data			
LJU	Improvement	---	---
MLA	Improvement	---	---
TLL	---	Improvement	---
VNO	Improvement	---	---

Table 4-25: Stakeholder specific benchmark on the general development of working conditions between 2004 and 2007 at airports in the New Member States

4.12.3 Development in the type of contract

Stakeholders were asked to provide data about the type of contracts employees within their company hold and if the type of contract changed between 2002 and 2007.

EU-15 Member States

Interviewed Airports:

Within the airport operators at interviewed airports only three companies provided answers about the development in the type of contract. Within those companies no tendency can be seen due to the limited data. It can only be seen that VIE airport as well as the independent ground handling company at ATH and LHR airport do not employ workers via temp agencies.

Among the airlines only a tendency can be seen in the increase of employees via temp agencies. Other than that, no consistent picture can be drawn apart from the fact that only two airlines provided data.

By analysing the answers of independent ground handling companies it can only be highlighted that the changes seem to vary from company to company and therefore influenced by more factors beside the Directive 96/67/EC.

Apart from the type of contract, regarding its duration, companies were also asked to comment on the development of contracts in regard of the working time. More precisely, stakeholders were asked to provide information about full time, part time and seasonal contracts.

Three of the four answering airport operators stated a decrease in full time contracts whereas all three had a different view on the changes in fixed-term contracts as well as the seasonal contracts.

Airlines seem to be as heterogeneous as airport operators within their opinions about the change of contracts. No trend can be seen.

The six independent ground handling companies which provided answers seem to have different opinions about the contracts, even though a trend towards an increasing or stable number of fixed-term contracts, as well as employees, via temp agencies can be noticed.

EU-15 Interview									
Airport	Stakeholder specific benchmarks on changes in the type of contracts hold by employees between 2002 - 2007								
	Unlimited contracts			Fixed-term contract			Via temp agencies		
	Airport	Airline	Independent GH	Airport	Airline	Independent GH	Airport	Airline	Independent GH
AMS	---	---	---	---	---	---	---	---	---
ARN	---	---	---	---	---	---	---	---	---
ATH	---	---	No change	---	---	No change	---	---	---
BRU	---	---	Decrease	---	---	Increase	---	---	Increase
CDG	---	---	---	---	---	---	---	---	---
CGN	Decrease	---	---	Increase	---	---	Increase	---	---
CPH	---	---	---	---	---	---	---	---	---
FCO	--	Increase	---	---	Decrease	---	---	Increase	---
FRA	Decrease	---	Increase	No change	---	Decrease	Increase	---	Increase
HEL	---	---	No change	---	---	No change	---	---	No change
LHR	---	No change	Decrease	---	No change	Increase	---	Increase	---
LIS	---	---	---	---	---	---	---	---	---
MAD	---	---	---	---	---	---	---	---	---
MAN	---	---	No change	---	---	---	---	---	---
VIE	No change	---	No change	No change	---	No change	---	---	No change
Airport	Full Time Contracts			Part Time Contracts			Seasonal Contract		
	Airport	Airline	Independent GH	Airport	Airline	Independent GH	Airport	Airline	Independent GH
AMS	---	---	---	---	---	---	---	---	---
ARN	---	Decrease	---	---	Increase	---	---	No Change	---
ATH	---	---	Increase	---	---	Increase	---	---	Increase
BRU	---	---	Decrease	---	---	Increase	---	---	Increase
CDG	---	---	---	---	---	---	---	---	---
CGN	Decrease	---	---	Increase	---	---	Increase	---	---
CPH	---	---	---	---	---	---	---	---	---
FCO	---	Increase	---	---	Increase	---	---	Decrease	---
FRA	Decrease	---	No change	Decrease	---	Increase	---	---	No change
HEL	---	---	No change	---	---	No change	---	---	No change
LHR	---	No change	---	---	No change	---	---	No Change	---
LIS	---	---	---	---	---	---	---	---	---
MAD	---	---	---	---	---	---	---	---	---
MAN	Decrease	---	Increase	---	---	No change	Increase	---	Decrease
VIE	No change	---	No change	No change	---	No change	No change	---	No change

Table 4-26: Stakeholder specific benchmarks on changes in the type of contracts hold by employees – at visited EU-15 airports

Internet Survey Airports

Since only German airports answered in the internet survey within the EU-15 Member States no table is shown with the developments. It, however, can be summarised that most airports stated that the number of employees holding unlimited contracts decreased. Meanwhile the

number of fixed term contracts as well as the number of employees having a contract with a temp agency increased. Only the airport operator at NUE airport stated that all types of contracts increased. Within the DUS airport operator, unlimited contracts did not change in the time frame while fixed term contracts as well as employees via temp agencies increased.

Airlines did not provide answers since there is no handling airline active at German airports.

Within the ground handling companies no consistent picture can be drawn regarding the development in the change of contracts. The only consistent development can be seen in the increase of fixed term contracts.

In regard to contracts with different durations within the sample of airport operators no consistent view about the change of the number of full time contracts can be observed. It seems to be company specific, how the contracts are developed. Regarding part time contracts the number increased with the exception of MUC airport. Since most airports do not have seasonal employees at all, only two airports operator provided information about the changes.

Concerning the independent ground handling companies the results vary between the companies. A consistent picture can only be drawn on part time contracts, which increased in all companies, which answered the questionnaire.

Summarising the results within the internet survey data of EU-15 Member States it can be concluded that companies need to be operationally more flexible. This development explains why fixed term contracts as well as part time contracts tend to increase.

New Member States

Due to very limited information from stakeholders within the New Member States at interviewed airports as well as stakeholders participating in the internet survey the only trend, which can be analyzed, is the increase in fixed-term contracts. Besides there might be an increase in seasonal contracts. Some companies, however, also stated that no change was seen within the mentioned contract types.

The stakeholder specific answers are provided in the following table.

Airport	Stakeholder specific benchmarks on changes in the type of contracts hold by employees between 2004 - 2007								
	Unlimited contracts			Fixed-term contract			Via temp agencies		
	Airport	Airline	Independent GH	Airport	Airline	Independent GH	Airport	Airline	Independent GH
BTS	No change	No change	---	Increase	No change	---	No change	---	---
BUD	---	---	Increase	---	---	Increase	---	---	Increase
LCA	---	---	No change	---	---	No change	---	---	No change
OTP	no data								
PRG	Increase	---	Increase	Increase	---	Increase	No change	---	---
RIX	no data								
SOF	No change	---	---	no data					
WAW	no data								
Airport	Full Time Contracts			Part Time Contracts			Seasonal Contract		
	Airport	Airline	Independent GH	Airport	Airline	Independent GH	Airport	Airline	Independent GH
BTS	No change	No change	---	Decrease	No change	---	Increase	---	---
BUD	---	---	Increase	---	---	Increase	---	---	Increase
LCA	---	---	No change	---	---	No change	---	---	No change
OTP	no data								
PRG	Increase	---	Increase	Increase	---	---	No change	---	Increase
RIX	no data								
SOF	No change	---	---	no data					
WAW	no data								

Table 4-27: Stakeholder specific benchmarks on changes in the type of contracts hold by employees at visited airports in the New Member States

4.12.4 Number and quality of training

Finally, the stakeholders were asked about changes in the number and the quality of training. Only a limited minority of parties provided information on training issues and the answers are very heterogenous.

The absolute duration of training provided to the employees before the start of work differs between the stakeholders, within the EU-15 and the NMS. The duration however increased or remained stable within the majority of companies between 1996 and 2007.

According to the report of Ecorys on the social development in the EU air transport sector, the opening of markets has changed the framework conditions for stakeholders and their employees due to more flexibility. However, the opinions about the development of employment conditions and qualification levels diverge between the stakeholders. The specific views are summarized below:

Stakeholder specific positions about Employment

(These statements engage only the authors' positions and should not be seen in any way as EC opinions.)

Airport operators:

- Since the liberalisation, the number of jobs in ground handling markets increased.
- At some airports the implementation of the Directive led to negative impacts, such as lower salaries, deteriorating work and security conditions, lower quality levels and difficulties in implementing the transfer process.

- Within the tender process the transfer of staff between companies is not regulated. Depending on the national legal framework and implementation of the Directive staff of the existing ground handling company needs to be dismissed while the new selected ground handling company employs new staff. This might affect job security, social conditions, safety and social conditions.
- There is a need at EU level for clarifying the real meaning of Article 18 of the Directive by imposing clear guidelines.

Airlines:

- From many airlines' point of view, the Directive does not affect working conditions, training and qualification. Therefore, only a very limited number submitted information on this topic.
- An erosion of working conditions is not ascertainable. Generally, the prices decreased without effects on working conditions.
- The liberalisation of the aviation sector has led to an increasing number of jobs.

Independent ground handling suppliers:

- Many ground handling companies stated that the Directive does not affect working conditions, training and qualification. Therefore only a very limited number submitted information on this topic.
- The liberalisation of the aviation sector has led to an increasing number of jobs. In this regard at some stations there is a lack of manpower. Therefore working conditions improved to attract staff.
- Since the licences of independent ground handling companies are limited and the transfer of staff is not clear, they are not able to guarantee unlimited contracts.
- In ground handling markets, independent ground handling suppliers compete on prices and quality. In their own interest well qualified, trained and motivated staff is absolutely necessary.

Unions:

- The Directive is implemented into the national legal framework. The impacts on employment vary between the EU Member States, depending on the link to social protection and the degree of the liberalisation.

- The growth of air traffic exceeded the growth of jobs within the ground handling sector in the EU. Therefore, the pressure on staff increased.
- Generally, in more liberalised ground handling markets the competition is just on prices and in turn on wages. That is the reason why wages decreased below the average within the country.
- Unions would propose a limitation in the number of handlers at each airport to stop the downward trend of wages.
- Generally, with the increase of competition, staff was reduced and due to efficiency the pressure on working conditions increased. More flexible working contracts increased working pressure.
- To realize efficient cost structures, ground handling companies replaced experienced and senior staff with young and less paid staff.
- In regard to the modification of the Directive, it should comply with the common European social standards and requirements (Directive), which protect wages, and employees and ensure acceptable working conditions (min. social requirements).
- Within the tender process the transfer of staff between companies is not regulated. Depending on the national legal framework and implementation of the Directive staff of the existing ground handling company needs to be dismissed while the new selected ground handling company employs new, rather young and less paid staff. There is a strong effect on job security and social conditions, affected by the implementation of the Directive and the lack of regulation of staff transfer. The transfer of staff between companies should be considered in the tender procedure and regulated on national level (e.g. sectoral agreement in Spain) or regulated on a European level.
- Since the licences of independent ground handling companies are limited, the number of more limited, flexible contracts increased and job security decreased. Therefore, quality of ground handling decreased and security and safety issues have risen.
- While it takes some time to build up strong bonds in unions within companies, a tender, and with this the change of ground handling companies, destroys the possible bond and influence of the unions.
- New labour agreements with new companies tend to cover just the minimum, in contrast to previous agreements which were a powerful way to get a wage increase.
- Due to increasing competition ground handling companies limit the training and qualification measures to the minimum.
- Some workers councils plead for the introduction of common standards of qualification for ground handling staff due to improvements in quality, efficiency,

safety and security, training and the efficient use of infrastructure as well as to comply with future challenges, namely the enormous growth of traffic in the EU.

Conclusion about Employment

- In general, employment conditions are heavily driven by company specifications, collective labour agreements and national social protection systems. The Directive effects are therefore difficult to isolate.

However, the following trends have emerged in the study:

- Development of Average Income
 - Within the EU-Member States, tendencies can be seen in that the income level increased since 1996. However, it needs to be noted that the growth varies between the airports.
 - Within the New Member States income for employees within all companies, which answered the questionnaire increased.
- General working conditions
 - The majority of stakeholders, who submitted information, indicated that the general working conditions improved.
 - The improvements stated by some stakeholders mainly result from increasing influence of employees on their shifts and improving health and security for the employees. Apart from the fact that operational pressure is increasing in almost every company, most of the other factors such as the number of holidays or the rest time during shifts did not change between 2002 and 2007.
 - Stakeholders in the New Member States saw mainly improvements of working conditions. The increasing operational pressure was highlighted by almost all stakeholders in the New Member States.
- Type of contract
 - Through the analysis of the changes in the type of contract, it can be concluded that not all of the stakeholders employ workers via temp agencies.
 - However, the number of employees via temp agencies increases within the companies using this type of contract.
 - The contracts in regard of working time tend to change to more fixed-term contracts and less unlimited contracts. Companies need to be more flexible to react on unforeseen market changes in time.

- Training
 - The duration of training provided to the employees before the start of work differs between the stakeholders, within the EU-15 and the NMS.
 - The duration however increased or remained stable within the majority of companies between 1996 and 2007.

4.13 Staff Safety

Preliminary remark

As specified in Article 17 of the Directive 96/67/EC ("the provisions of this Directive affect in no way the rights and obligations of the Member States in respect to law and order, safety and security at airports"), the Directive was conceived with the ambition not to create any impacts on safety and security at airports. However, ten years after its publication, it is worthwhile assessing if the Directive could have had indirectly an impact on airport safety.

The following segment provides an overview on changes in safety related events, focussing on staff safety (notably accidents and incidents occurring to staff).

According to the provided information and in compliance with ICAO annexes and documents (notably ICAO annex 14 "Aerodromes" and ICAO Doc. 9859 "Safety Management Manual"), the vast majority of airport operators and stakeholders have implemented and upgraded safety management systems during the last years. "Safety Management Systems" track the safety events (i.e. incidents, nearly incidents and accidents).

However, those SMS have only been implemented recently (for instance ICAO annex 14 only made it compulsory for Member States in 2005 to require airport operators to have a SMS). As a consequence, there is currently no reliable data covering our study period which could allow quantifying the safety evolution at airports and therefore, the only way to assess the impact of the Directive on safety is to rely on stakeholders' views.

At visited airports, the stakeholders indicated their appreciation of changes in safety issues for the reference periods during the interviews. The results are shown in the following tables.

One could expect results showing a consistent view on safety issues, as at most of the visited airports, safety issues are regularly discussed between stakeholders. Indeed, at many airports there are safety committees where all companies operating at the airport meet to promote actions for the reduction of incidents. Even at airports where safety committees do not exist officially, most stakeholders stated that the different operators at the airport worked together to enhance the safety level.

Airport	Benchmark: Development of safety issues between 1996 and 2002		
	Airport	Airline	Independent ground handling provider
Interview Data			
AMS	Decrease	Increase	---
ARN	Increase	Increase	---
ATH	---	---	---
BRU	---	---	---
CDG	---	---	---
CGN	---	---	---
CPH	---	---	---
FCO	---	---	---
FRA	Decrease	---	Increase
HEL	---	Increase	No change
LHR	---	---	---
LIS	---	---	---
MAD	Increase	---	---
MAN	---	---	Increase
VIE	Decrease	---	Increase
Internet Survey Data			
AGP	Increase	---	---
ALC	Increase	---	---
BCN	Increase	---	---
DUB	Increase	---	---
DUS	---	---	---
FAO	---	---	---
FMO	No change	---	---
HAJ	---	---	---
HAM	Decrease	---	---
IBZ	---	---	---
LEJ	No change	---	---
LGW	---	---	---
MAH	---	---	---
MUC	Increase	---	---
NUE	---	---	---
OPO	---	---	---
ORK	Increase	---	---
ORY	---	---	---
PMI	Increase	---	Decrease
SNN	Increase	---	---
STN	---	---	---
STR	---	---	---
SXF	---	---	---
TXL	---	---	---

Table 4-28: Benchmark: Development of safety issues between 1996 and 2002 at airports in the EU-15

Airport	Benchmark: Development of safety issues between 2002 and 2007		
	Airport	Airline	Independent ground handling provider
Interview Data			
AMS	Decrease	Increase	---
ARN	Increase	Increase	---
ATH	Decrease	---	---
BRU	Increase	---	Decrease
CDG	---	---	---
CGN	Increase	---	---
CPH	Increase	---	---
FCO	---	---	---
FRA	Decrease	---	Increase
HEL	---	Increase	No change
LHR	---	---	Decrease
LIS	---	---	---
MAD	Increase	---	---
MAN	---	---	Decrease
VIE	Increase	---	Increase
Internet Survey Data			
AGP	Increase	---	---
ALC	Increase	---	---
BCN	Increase	---	---
DUB	Increase	---	---
DUS	Increase	---	---
FAO	---	---	---
FMO	No change	---	---
HAJ	---	---	---
HAM	No change	---	---
IBZ	---	---	---
LEJ	Increase	---	---
LGW	---	---	---
MAH	---	---	---
MUC	Increase	---	---
NUE	Increase	---	---
OPO	---	---	---
ORK	Increase	---	---
ORY	---	---	---
PMI	Increase	---	No change
SNN	Increase	---	---
STN	---	---	---
STR	---	---	---
SXF	---	---	No change
TXL	---	---	---

Table 4-29: Benchmark: Development of safety issues between 2002 and 2007 at airports in the EU-15

Airport	Benchmark: Development of safety issues in the NMS between 2004 and 2007		
	Airport	Airline	Independent ground handling provider
Interview Data			
BTS	Increase	Increase	---
BUD	---	---	No change
LCA	No change	---	No change
OTP	---	---	---
PRG	Increase	Increase	---
RIX	Increase	---	---
SOF	---	---	---
WAW	Increase	---	---
Internet Survey Data			
MLA	Decrease	---	---
VNO	No change	---	---
TLL	---	---	---
LJU	Decrease	---	---

Table 4-30: Benchmark: Development of safety issues between 2004 and 2007 at airports in the New Member States

However, as shown in the tables above the perception of changes in safety issues varies widely between airports and stakeholders. Furthermore, it needs to be noted that a prominent number of stakeholders did not rate the developments of safety related events. Further investigations with those stakeholders revealed that they wanted to express that the changes in the number of safety events did not relate to the Directive 96/67/EC. Since they were afraid of misinterpretations of the data once it was admitted, they did not provide data at all.

The inconsistencies in these results can be analysed taking into account the following points:

- Many stakeholders denoted a decreasing number of safety issues, highlighting the importance of the introduction of safety management systems, safety monitoring, safety committees and improved general cooperation on safety topics.
- On the contrary, some stakeholders highlighted that safety related events increased through the implementation of the Safety Management System and the necessity to report all events, which was not mandatory before the implementation.

Additionally, many stakeholders admitted that it was not easy for them to identify clearly the actual input of the Directive in safety issues, in the absence of reliable data:

- Other drivers, which are completely independent from the Directive, can affect significantly safety levels at airports: the growth in air traffic or the introduction of a more systematic approach to safety through SMS. These as well as the implementation of new regulations (local, national or European) at airports since 1996 make it particularly difficult to isolate the effects of the Directive at airports.

- Even for effects directly coming from the implementation of the Directive which can be qualitatively assessed (for instance multiplication of groundhandlers airside, sub-contracting practices...), the impact of these effects on safety is difficult to assess in the absence of data.

Considering the heterogeneous results as well as the high number of stakeholders which did not rate any safety related developments, the present study cannot draw any clear conclusion on possible impacts of the Directive on safety events, except that the link between safety events and the Directive is not obvious.

Generally, all stakeholders have a similar perception of factors influencing the level of safety:

- The traffic volume and therefore the operational pressure,
- Capacity and space constraints,
- Single events such as construction works or weather conditions,
- The training and qualification of staff,
- The number of staff and quantity of equipment at ground handling areas and
- Safety management systems, safety monitoring, and safety committees and the mandatory need to report and as well as more attention on safety issues.

Stakeholder specific positions about Safety Developments

(The stakeholders' hereafter positions engage only their authors and should not be seen in any way as EC opinions)

Airport Operators:

- With the introduction of safety management systems, safety monitoring and safety committees, and improved cooperation on safety at many airports the number of safety related incidents and accidents could be reduced.
- In coherence with the absolute increase of traffic the number of safety events increased, even though the number of events remained relatively stable or decreased.
- Airports mentioned that the increasing operational pressure (e.g. minimized turn around times, fees) and growing traffic effected raising numbers of incidents and accidents in ground handling operations, even though this cannot statistically be proven.

- Safety issues increased due to the fact that it has become mandatory to report. Therefore the findings cannot be compared with the results from the previous periods.
- The increase of staff on the apron, lack of professional trainings and low qualification standards lead to an increasing number of safety and security concerns.

Airlines:

- Many airlines did not rate safety developments since they do not see any relations to the Directive.
- With the introduction of safety management systems, safety monitoring and safety committees and improved cooperation on safety at many airports the number of safety related incidents and accidents could be reduced.
- Generally safety issues increased due to the increasing number of staff, equipment and aircrafts on the apron.
- From an airline perspective, safety and working conditions are sufficiently regulated on national level. Since airlines are responsible and strongly affected by safety issues (e.g. aircraft damages) they are very aware of safety performance in ground handling.

Independent ground handling providers:

- Many independent ground handlers did not rate safety developments since they do not see any relation to the Directive.
- Since safety is paramount and essential for ground handling business independent handlers are very aware of safety performance in ground handling.

Unions:

- The increasing operational pressure (e.g. minimized turn around times, fees) and growing traffic affected increasing numbers of incidents and accidents in ground handling operations, even though this cannot statistically be proven.
- An increased turnover in staff has led to lower wages, which could have important safety implications.
- In regard to the Safety Management- and Reporting Systems the actual number of incidents could be twice as that on the published data, because many employees do not report incidents.

- The handling operators shall be subject to compulsory approval procedures by Member States.

Conclusion about Safety Developments

- Many of the stakeholders did not see any direct relationship between the Directive and safety issues.
- However some concerns were raised about the ground handling staff safety in general, independently from the Directive. Some factors such as air traffic increase, capacity constraints, training of staff, number of staff and equipments etc. could lead to a deterioration of safety levels at airports. Further inquiries on these issues could be useful.
- The introduction of reporting practices through the implementation of SMSs should give access in the near future to reliable safety events statistics in that respect.

4.14 Security

The impacts on security of the Directive were also addressed in the framework of this study. The authorities in charge were asked to provide us with data on staff security related events in ground handling. According to the submitted and fulfilled questionnaires and due to international recommendation all responding authorities monitored security related events but did not provide us with any data. Actually, most of airport security data is confidential information, making it difficult to provide it for public presentations.

Moreover, after September 2001, security at airports has been hugely reinforced, notably with the introduction of security regulations at EU level. As a consequence, it is difficult for EU-15 countries to assess the impact of the Directive (which was implemented from 1996) on security, considering that the whole context changed from 2001. Regarding New Member States (NMS), the security regulations and the Directive entered into force simultaneously, making it also difficult to isolate the Directive effects.

Conclusion on security

The current study based on stakeholders' views did not result in any conclusions about security impacts of the Directive, due to a lack of data.

5 Summary of the results

5.1 Introduction

With the adoption of the Directive 96/67/EC in October 1996, the liberalisation of ground handling markets at Community airports was initialised. Between 1997 and 2000 the EU-15 Member States transposed the opening of ground handling markets by implementing the Directive into the national legal framework. The 12 New Member States applied for and respectively prepared the application of the Directive since their entrance into the European Union between 2004 and 2007.

In accordance with the liberalisation of the air transport market in the European Union, the Directive 96/67/EC focuses on the strengthening of competition, implicating

- an increase in efficiency within the ground handling sector,
- a decrease of the average handling prices,
- an increase in the quality levels of service,
- an enhancement in the choice for airlines.

In 2001 the European Commission appointed SH&E International Air Transport Consultancy to undertake an impact study on the quality and efficiency of ground handling services at EU airports as a result of the implementation of Council Directive 96/67/EC. The report was published in 2002. The main findings are:

- a decrease in terms of price for ground handling services,
- no conclusions on developments regarding quality are drawn since the perception of the stakeholders varies significantly,
- an increase of competition by an increasing number of independent third party handling companies and stagnation in the number of self-handling airlines.

Since 2002, ground handling markets experienced a very dynamic phase of development and growth. Additionally, with the entrance of the New Member States to the European Union, the European air transport market changed significantly. In preparation for a possible revision of the Directive the European Commission assigned the Airport Research Center, in cooperation with MVV Consult, to carry out this review on the impacts of the Directive 96/67/EC on the ground handling markets at Community airports.

According to the methodical approach the study is based on on-site interviews at selected airports and in addition on an internet survey for the remaining airports and their stakeholders under the Directive. With focus on the airports in the EU-15, the analyses consider the years 1996, 2002 and 2007 to ensure compatibility with the SH&E report as well as

to cover the years since the introduction of the Directive. With regard to the airports in the New Member States, analyses were carried out for the periods 2004 and 2007.

5.2 Results of the study

5.2.1 General conditions and specifics of national legislation in the EU Member States

In compliance with the provisions of the Directive 96/67/EC, the Member States introduced various types of liberalisation. While in some Member States the access to ground handling markets is fully liberalised (i.e. every handling provider is allowed to be active at the airport without attending a tender procedure), in other countries the access is limited. In accordance with the Directive in those countries, handling licences for all or some limitable categories of ground handling such as baggage handling, freight and mail handling, ramp handling and fuel and oil handling, are tendered and granted for seven years in maximum. Other countries liberalised the access at selected airports.

In general it was difficult to obtain information from the stakeholders: Some companies stated that data is confidential and therefore could not be provided for the study. This concerned mostly the security and safety chapters of the report. Additionally some stakeholders could not highlight developments since the implementation of the Directive due to their recent market entrance. Other stakeholders, however, who have been active since 1996, could not access older data any more.

Therefore in some cases only tendencies about the impact of the Directive 96/67/EC and the development of the ground handling sector could be highlighted

5.2.2 Analyses of competition of ground handling markets

Generally, the number of self-handling airlines and third party handling companies has increased since the introduction of the Directive. However, the findings vary between the airports significantly. At airports with former handling monopolies the number of third party handlers increased more than at airports, which were already liberalised before the introduction of the Directive. While the number of self-handling airlines remained stable or increased slightly, the number of third party handlers increased more significantly.

Conclusions about baggage handling competition

The number of baggage handling providers has generally increased at European airports following the introduction of the Directive, in the EU-15 airports as well as in NMS airports. An average growth of 95% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines could post a growth of 33% in the same time. (Due to the representation, results are only derived from the data of interviewed airports.)

The growth of third party handling agents in the New Member States accounted for 17% between 2004 and 2002, the growth of handling airlines 25%.

It needs to be noted that the absolute change in the number of third party handling parties in the New Member States as well as in the EU-15 was higher compared to the change in the number of handling airlines. The absolute change in the number of third party handling suppliers per airport was higher in the EU-15 Member States than in the New Member States with the exception of German and Spanish airports.

Conclusions about freight and mail handling competition

The number of freight and mail handling providers has generally increased at European airports following the introduction of the Directive, in the EU-15 airports as well as in NMS airports.

An average growth of 62% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines could post a growth of 60% in the same time.

The growth of third party handling agents in the New Member States accounted for 39% between 2004 and 2002, the growth of handling airlines 20%.

It needs to be noted that the absolute change in the number of third party handling parties in the New Member States as well as in the EU-15 was higher compared to the change in the number of handling airlines.

Conclusions about ramp handling competition

The number of ramp handling providers has generally increased at European airports following the introduction of the Directive, in the EU-15 airports as well as in NMS airports.

An average growth of 81% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines could post a growth of 27% in the same time.

The growth of third party handling agents in the New Member States accounted for 27% between 2004 and 2002, the growth of handling airlines 40%.

It needs to be noted that the absolute change in the number of third party handling parties in the New Member States as well as in the EU-15 was higher compared to the change in the number of handling airlines.

With the exception of two airports, the change (at MLA and BUD airport two handling airlines entered the market) in the number of handlers per airport did not exceed one handler.

Conclusions about fuel and oil handling competition

In contrast to category 3, 4 and 5 the number of fuel and oil handling companies did not homogeneously increase at the interviewed airports. Only the number of third party handling providers in the EU-15 could post an increase. An average growth of 8% between 1996 and 2007 can be seen in the number of third party handling companies. Handling airlines did not show a change in the same time.

In the New Member States no change could be seen in the number of third party providers and handling airlines.

5.2.3 Stakeholder specific Market Shares

The main changes in terms of market shares can be observed for airports where the airport operator was in monopoly previously, and where the market was opened following the introduction of the Directive.

As a general rule, the market shares of independent ground handling providers increased, while market shares of airport ground handling subsidiaries and handling airlines decreased. The shares of handling airlines stagnated or decreased as well. The most important changes in the development of the market shares have taken place in the period from 1996 to 2002 when the markets were opened, new handling agents entered the market and competition started to increase.

5.2.4 Contestable market

In general, the ground handling market at airports is considered by stakeholders to be open to third party handling following the introduction of the Directive. Market opening is however, cyclical at airports with limited markets (i.e. with licensed ground handling activities): The market can be seen as closed between 2 renewals of the contracts.

The stakeholders were requested to estimate the size of the contestable ramp handling volume. The estimated size and structure of the contestable markets vary largely between the analysed airports.

Some elements are viewed as limiting the opening of the market:

- the high volume handled by the main carriers is hampering small companies to enter the market
- the share of ground handling volume, which the airlines handles itself is not contestable for ground handling companies

The share of handling airlines however is decreasing over time, i.e. the contestable market becomes bigger.

For New Member States, opening of the market at certain airports is still on-going (or future): it seems that the implementation of the Directive in the New Member States is still to be enhanced.

5.2.5 Changes in handling prices

Although the perception of price changes differs between the stakeholders, since the introduction of the Directive, prices and the subsequent increase in competition in the ground handling markets price have decreased, even though the Directive is not the single driver of the developments.

With focus on the EU-15, prices decreased with a higher intensity at airports with a former handling monopoly than at airports, which already have had open markets.

At EU-15 airports, the prices continued to decrease between 2002 and 2007. This proves that competition still exists in the European ground handling market (due to the renewal of licences for restricted markets and the continuous pressure for market openness for others).

Considering the findings for the ground handling markets in the New Member States, in general prices for ground handling services decreased since the introduction of the Directive. However, at some airports where competition had not started yet, prices did not change. Therefore prices could decrease in the future at New Member States airports

The trend in the decrease of prices is maintained, thanks to competition pressure at airports covered by the Directive; however the extent to which prices decreased was influenced by other factors such as improvements in ground handling technology

5.2.6 Changes in Quality Levels

Stakeholders were requested to indicate changes in quality levels. The analysis showed that the perceptions vary significantly between airports and stakeholders.

According to the analysis of the views of EU-15 based on stakeholders which rated the changes in quality levels, at most airports changes in quality have taken place since 1996. Developments were heterogeneous amongst the airports but also amongst the stakeholders at the same airport.

The opinions about influencing factors differ amongst the stakeholders (e.g. some stakeholders view the improvement in quality is due to the increasing level of competition (i.e. competition with regards to quality) other stakeholders, however see it as a factor which contributes to the decreasing quality since decreasing prices can only be achieved by decreasing quality).

Generally, the performance of quality levels is influenced by:

- The individual ground handling provider,
- The Service Level Agreements between the ground handling provider and the airline,

- The infrastructure at airports (e.g. construction works could reduce quality levels while the initiation of new facilities could lift the level of provided ground handling services).

5.2.7 Participation of Airport operators in ground handling markets

Due to historical and strategic reasons many airports provide ground handling services in competition with handling airlines and independent third party handling companies. With a focus on the EU-15 Member States the number of airports, actively involved in ground handling markets did not change significantly between 1996 and 2007.

Summarizing the results, market shares decreased and several airport operators decided to sell their ground handling activities due to the increase of competition and to focus on their role as a provider of the infrastructure. At airports where the airport operator stayed active the market shares of airport handling companies decreased as well but retained a high quality.

Most of the airports in the New Member States provide ground handling services. Generally, market shares decreased and a few airport operators decided to sell their ground handling activities due to the increase of competition and to focus on their role as a infrastructure provider.

Between airports, airlines and independent ground handling providers the engagement of airport operators in ground handling markets is controversially discussed. In these cases the airport operator acts as a provider of the (centralised) infrastructure and competes at the same time with airlines and independent ground handling companies in ground handling markets. The airport charges the competitors for the use of the infrastructure and obtains a strong role within tender processes, airlines and independent ground handlers argue that, handling airports would be able to distort competition in ground handling markets. To ensure fair competition, objective and non-discriminatory access to the infrastructure, the Directive foresees the separation of accounts between the ground handling and all other airport activities.

5.2.8 Involvement of airlines in ground handling markets

Airlines participate in ground handling markets as customers as well as self-handlers and third party suppliers. Due to economies of scale, most self-handling airlines provide ground handling services to other airlines. On a reciprocal basis some network carriers provide ground handling services for their alliance partners, while other network airlines select other suppliers. Since the third party handling volume of airlines is more or less contestable for other handling parties, the self-handling volume is captive and not contestable for others.

Furthermore, airlines are traditionally active at their hub airports to ensure the necessary quality. Since they state that the investments for ground handling are huge at the beginning,

it can be concluded that the majority of airlines would not start a new business at additional airports.

The size of the captive market differs from airport to airport, depending on the engagement and market presence of self-handlers, and vice versa effects the size of the contestable market. This indicates that the contestable market share for ground handling providers is limited due to the involvement of airlines in ground handling especially when the airline also provides handling services to other airlines such as alliance partners. Therefore some stakeholders expressed that handling provided by an airline should be limited to the volume of the own airline.

5.2.9 Centralized Infrastructure / Access to installations

According to Article 8 of the Directive, Member States are authorised to reserve the management of defined infrastructure elements used for the supply of ground handling services for the airport operator or other management bodies, in case that costs or environmental impacts do not allow division or duplication.

Referring to Article 16 in absence of the centralised infrastructure the available space for ground handling activities (e.g. for storage of equipment) must be divided among the handling parties with the consideration of fair competition and relevant, objective, transparent and non-discriminatory criteria. Where the access to airport installations gives raise for a fee, the same criteria must be considered.

At most of the airports centralised facilities are defined, while a minority did not see a benefit to declare several elements as centralised infrastructure even though those are provided by the airport operator. More in detail the baggage handling system, passenger boarding bridges, fixed power installations, fuel and oil stations and check-in desks can be identified as a core set of centralised infrastructure at a majority of visited airports. Furthermore, by approval of the authorities in charge, many airports declared other infrastructure elements and services on airport specific reasons as centralised infrastructure. The marshalling service at the facilities is hardly ever centralised.

The problems, which were encountered, are mostly due to capacity and space constraints at the airport and the quality of the facilities. Furthermore users of the centralised Infrastructure as independent ground handling companies or handling airlines criticised high costs for the CI.

Some stakeholders even stated that charging mechanism seem to be non transparent and should be clarified within the Directive. However, views about the CI are very heterogeneous amongst the different stakeholders due to their stakeholder specific interest: Airports do not want a further definition within the Directive to keep the flexibility to react to airport specifics. The other stakeholders, however, would prefer a more precise definition to secure a transparent and non-discriminatory use of the CI.

5.2.10 Airport Users' Committee (AUC)

In compliance with the Directive almost all airports set up an AUC. One airport delegated the functions of the AUC to the Airport Operators Committee (AOC). Based on the analysed questionnaires, at almost all airports the AUC is consulted on topics related to ground handling, charges and tender procedures. The influence of the AUC on decisions vary. The AUC votings at all airport are not decisive, but at some airports, where the focus is especially on operational questions, the positions of the AUC might be stronger than at other airports.

5.2.11 Tender process

The implementation of the Directive regarding the chosen market forms and the tender process varies significantly between the airports.

At six airports in the EU-15, self-handling airlines and ground handling suppliers could enter the ground handling markets and provide services such as baggage, freight and mail, ramp, fuel and oil handling only with the approval of the airport and/or the authority without tender procedures.

Besides the general approval, nine airport operators' respective authorities decided to limit the market access and set up tender procedures. Therefore at most airports two licences are tendered and at others even three. The duration of licence validity and the tender procedure differ significantly.

With an emphasis on the New Member States, at another six airports the access to ground handling is limited. However, the tender process, which complies with the provisions of the Directive, has not taken place yet since the airports are still in the implementation phase.

Many stakeholders mentioned that the transfer of staff is not specified enough and regulated within the Directive. Unions e.g. ask for a clearer regulation, as they see a replacement of older for younger staff linked to the change in handling companies when entering a new market after a tender was won.

5.2.12 Sub-contracting

At most airports, sub-contracting is part of the ground handling industry. With the exemption of three major airports, cascade sub-contracting was not practiced at visited airports. In conclusion, at most airports, cascade sub-contracting was not implemented.

With a focus on airports with limited market access, sub-contracting was not indicated at four airports, while at one airport, applicants for ground handling licences pointed out sub-contracting components within the tender process.

At some visited airports in the New Member States with restricted market access, no tender has taken place and sub-contracting could not be indicated.

Generally, most of the airlines and independent ground handling providers did not report any difficulties due to sub-contracting practices while some airports reported some problems.

Considering the comments stated in the questionnaires, at most airports the (cascade) sub-contracting parties need to be approved by the authority or the airport management body to operate at the airport. Therefore those companies are obliged to prove the fulfilment of minimum requirements such as safety and security.

5.2.13 Employment

According to Article 18 Member States may take the necessary measures to ensure protection of the rights of workers and respect for the environment. Since the implementation of the Directive as well as the legal framework conditions differ, the employment related developments in ground handling markets vary between the Member States and airports significantly. Therefore a broad variety of influencing variables (social protection, collective labour agreements, specifications) affected social- and employment conditions in ground handling at national level, for which reason the impact of the Directive are difficult to isolate

Stakeholders were asked about several aspects of employment and the development of those. More precisely they were asked to provide information about the development of average income, working conditions, and the type of contract and trainings.

The results of this chapter were limited since most stakeholders did not see the correlation between the Directive and changes in employment and therefore did not provide any information. For this reason the following results can only be seen as tendencies within the ground handling industry.

In general, employment conditions are heavily driven by company specifications, collective labour agreements and national social protection systems. The Directive effects are therefore difficult to isolate.

However, the following trends have emerged in the study:

- Development of Average Income
 - Within the EU-Member States tendencies can be seen that the income level increased since 1996. However it needs to be noted that the growth varies between the airports
 - Within the New Member States, income for employees within all answering companies increased.
- General working conditions
 - The majority of stakeholders, who submitted information, indicated, that the general working conditions improved.

- The improvements stated by some stakeholders mainly resulted from increasing influence of employees on their shifts and improving health and security for the employees. Apart from the fact that operational pressure is increasing in almost every company, most of the other factors such as the number of holidays or the rest time during shifts did not change between 2002 and 2007.
- Stakeholders in the New Member States saw mainly improvements of working conditions, the increasing operational pressure was highlighted by almost all stakeholders in the New Member States
- Type of contract
 - Through the analysis of the changes in the type of contract, it can be concluded that not all of the stakeholders employ workers via temp agencies.
 - However the number of employees via temp agencies increases within the companies using this type of contract.
 - The contracts in regard of working time tend to change to more fixed-term contracts and less unlimited contracts. Companies need to be more flexible to react on unforeseen market changes in time.
- Training
 - The duration of training provided to the employees before the start of work differs between the stakeholders, within the EU-15 and the NMS.
 - The duration however increased or remained stable within the majority of companies between 1996 and 2007.
- Security
 - Due to the absence of data provided by stakeholders, no analysis of the security impacts of the Directive could have been carried out in the framework of this study.

5.2.14 Staff Safety

According to the analysis of the submitted benchmarks, a majority indicated increasing or stable levels of safety issues since the introduction of the Directive, although it needs to be considered that many stakeholders did not rate the developments of safety related events.

In both periods, 67% of stakeholders out of the EU-15 interviewed airports, saw an increase of safety issues. They rated that this development could be due to the implementation of the safety management system, which could have led to an increase in more events being reported. But it could also have been due to the increasing traffic volume at airports. Another 25% of stakeholders saw the contrary, namely a decrease of safety issues and only 8% stated that there was no change.

The opinion of stakeholders in the New Member States out of the representative sample is similar to the perceptions of stakeholders in the EU-15, even though there was no decrease seen in the New Member States. 67% rated the safety events as increasing, 33% have not seen a change.

Considering the remarks of those stakeholders who did not rate safety developments in ground handling, it needs to be mentioned that many denoted a decreasing number of safety issues, due to by the introduction of safety management systems, safety monitoring, safety committees and improved general cooperation on safety topics.

Generally, all stakeholders have a similar perception of factors influencing the level of safety:

- The traffic volume and therefore the operational pressure,
- Capacity and space constraints,
- Single events such as construction works or weather conditions,
- The training and qualification of staff,
- The number of staff and quantity of equipment at ground handling areas,
- Safety management systems, safety monitoring and safety committees and the mandatory need to report and more attention for safety issues.

5.3 Final remarks

Besides the regulatory framework the European ground handling markets are subject to a wide range of influencing variables, which affect growth, competition and structural changes. As the ground handling market is a very dynamic sector, it changes frequently and gathered information could change its validity very fast. Furthermore, deviating legal frameworks and provisions at national levels affect the impacts of the Directive. Considering these limiting factors; changes, developments, trends and tendencies were highlighted.