

Social developments in the EU air transport sector

A study of developments in employment, wages
and working conditions in the period 1997-2007

Final report

Client: European Commission, DG Energy and Transport

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Preface

This study was conducted by ECORYS on behalf of DG TREN. The assignment was carried out under the Framework Contract for Impact Assessments and Ex-ante evaluations (lead contractor ECORYS). The study was carried out in the period of January to December 2007. The study addresses and analyses the development of (direct) employment, wages and working conditions in EU air transport in the period 1997-2007.

During the study we have received feedback of people from different organisations. We would like to express our gratitude to all people who have shared their valuable insight with us on the matter.

The evaluation has been carried out by an independent evaluation team consisting of labour market and air transport experts within ECORYS. It should be noted that this report represents the views of the consultant, which do not necessarily coincide with those of the Commission.

Rotterdam, November 2007

Marjolein Peters
Project director ECORYS

1 Introduction

1.1 Liberalisation of the EU air transport sector

1.1.1 Introduction

Rules for international air commerce were originally established by the 1944 Chicago Convention on International Civil Aviation. The participating nations linked commercial aviation in the post World War II era strongly to security issues. This resulted in the establishment of different national aviation regimes which were based on national ownership and a system of designated flag carriers. International operations of these carriers were governed by bilateral ‘air service agreements’ (ASAs) between countries. ASAs determine which airlines are allowed to fly to which destinations and at what tariffs. Herewith the air transport market became one of the most regulated sectors in the economy. The EU market was no exception in this respect.

The liberalisation of the European air transport market was launched at the end of the 1980s. Several factors contributed to a call for liberalisation¹:

- The deregulation of the American air transport market in the 1980s clearly resulted in lower fares.
- Air carriers were amongst the state-owned commercial enterprises which were privatised during that time, especially in the UK.
- The finalisation of the Single European Market that was launched with the Single European Act in 1986 ultimately produced a greater freedom on pricing and operations. Proponents of a liberalised European air transport market expected that the opening of national air transport markets would also result in more competition between (existing and newly established) airlines and ultimately in lower prices.

Liberalisation of the air transport market took place in three successive stages in 1987, 1990 and 1992. Three legislative packages established new rules and conditions on market access and competition in the European air transport market. The first package (1988-1990) and the second package (1990-1992) included measures to deregulate market access for airlines and established new rules for sharing of capacity, fares for scheduled services, competition between airlines and airline licensing specifications.

¹ CEC (2002). Industrial Change and employment: The Civil Aviation Sector.

1.1.2 The third package²

With the third package (1993-1997) the most important step towards full liberalisation of the EU air transport market was realised. This package introduced the freedom to provide services within the EU and, from April 1997, the freedom to provide ‘cabotage’: the right for an airline of one Member State to operate a route within another Member State. This single market was extended to Norway, Iceland and Switzerland in the following years.

The third package consisted of three EU regulations:

- Council regulation 2407/92³ harmonised the requirements for the operating licenses of EU airlines.
- Council regulation 2408/92⁴ established the open access for all airlines with an EU operating license to all routes within the EU. At the same time the regulations gave national governments the opportunity to impose public service obligations on routes that are essential for regional development.
- Council regulation 2409/92⁵ introduced the full freedom for EU airlines with regard to fares and rates. This regulation meant that airlines were no longer required to submit their fares to the national authorities for approval.

The third package created fair(er) conditions for competition in the Community air transport market in order to encourage airlines to provide passengers cost-efficient and high-quality services. It increased competition in the EU air transport market, gave new airlines (including low cost carriers) an opportunity to enter the market and obliged EU airlines to operate in a more competitive way. The core of this new legislation consisted of:

- Introduction of competition law and the end of state aids.
- End of the ‘flag carrier’ or ‘national carrier’ concept.
- Opening the door for point-to-point operations.
- Granting the 7th freedom rights and cabotage within the European internal market. All barriers to the development of carriers performing point-to-point services within the EU have been herewith removed.
- The end of the ‘national designation’ clause in bilateral air agreements.

1.1.3 Liberalisation of the ground handling market⁶

In October 1996 the EU Council adopted a directive to liberalise the EU-market for ground handling services. Until that moment services like baggage handling and ramp services at most EU airports had been a monopoly operated by the airport authority or the dominant carrier at that airport. Airlines were complaining about the relatively high prices of ground handling services at EU airports and sub-optimal efficiency and quality of service.

2 Source: http://ec.europa.eu/transport/air_portal/internal_market/competition_en.html, September 2007.

3 *Council Regulation (EEC) No 2407/92* of 23 July 1992 on licensing of air carriers.

4 *Council Regulation (EEC) No 2408/92* of 23 July 1992 on access for Community air carriers to intra-Community air routes.

5 *Council Regulation (EEC) No 2409/92* of 23 July on fares and rates for air services.

6 Source http://ec.europa.eu/transport/air_portal/airports/ground_handling_en.html, September 2007.

The Directive 96/67/EC⁷ sought to establish complete freedom for both self handling and third party handling. The scope of the directive is limited to some extent. EU Member States may limit the number of handlers for several categories of services⁸. They are however not allowed to limit the number to fewer than two for each category in order to guarantee a minimum choice to airlines. Furthermore, at least one of the handlers should be entirely independent from the airport and the dominant carrier at that airport. These restrictions are applicable to all airports with at least two million passengers or 50.000 tonnes of freight per annum. Similar limitations were introduced for self handlers (which mean that airlines provide the ground handling services for themselves). For these services at least two air carriers should be admitted on the airport.

1.1.4 EU directives and regulations with special relevance to air transport staff

In addition to the wider directives concerning health and safety and the organisation of working time that apply to all workers in the EU, there are two directives especially aimed at air transport personnel that are of importance for this study:

- In Directive 2000/79⁹ rules of working time for mobile workers in civil aviation are established. The directive states that mobile workers may not work more than 2000 hours annually, in which the block flying time may not exceed 900 hours. Furthermore, the directive specifies the monthly and annual rest period for this category of workers.
- Directive 91/670¹⁰ sets out the mutual acceptance of personnel licences for functions in civil aviation.

With the Regulation 1899/2006¹¹ the European Union launched new harmonised safety standards for European civil aviation. With the regulation JAR OPS 1 the standards agreed by the Joint Aviation Authorities (JAA) were translated into uniform EU legislation applicable in all Member States. The so-called EU OPS laid down in the regulation, fulfil first and for all a safety goal, but also include minimum standards on the duration of flights and shifts as well as rest periods for flight and cabin crew. One of the outstanding issues of the EU OPS centres on common safety and training requirements for the cabin crew. A full set of common standards concerning security and safety training for cabin crew is not included in the regulation.

The European Aviation Safety Agency (EASA) is currently preparing a scientific and medical evaluation of the provisions of Subparts O and Q of annex II of the EU OPS.

7 Council Directive 96/67/EC on access to the ground handling market at Community airports.

8 Baggage handling, ramp handling, fuel and oil handling and freight and mail handling as regards the physical handling of freight and mail, whether incoming, outgoing or being transferred, between the air terminal and the aircraft.

9 Council Directive 2000/79/EC of 27 November 2000 concerning the European Agreement on the Organization of Working time of Mobile Workers in Civil Aviation concluded by the Association of European Airlines (AEA), the European Transport Workers' Federation (ETF), the European Cockpit Association (ECA), the European Regions Airline Association (ERA) and the International Air Carrier Association (IACA).

10 Council Directive 91/670/EEC of 16 December 1991 on mutual acceptance of personnel licences for the exercise of functions in civil aviation.

11 Regulation 1899/2006 of the European Parliament and the Council amending Council Regulation (EEC) No 3922/91 on the harmonisation of technical requirements and administrative procedures in the field of civil aviation.

These subparts deal with flight time limitation and rest requirements and with safety instructions for cabin crew.

1.1.5 Single European Sky

The Single European Sky (SES) is an initiative to reform European air traffic control to meet future capacity and safety needs. In order to do so the SES initiative intends to organise air traffic management in the EU on a European rather than on a national level. The SES is regulated by four EC regulations¹². The objective of these regulations is:

- to improve and reinforce safety;
- to restructure European airspace as a function of air traffic flow, rather than according to national borders;
- to create additional capacity;
- to increase the overall efficiency of the air traffic management system (ATM).

In addition, the EC in 2004 adopted a proposal for introducing a Community licence for air traffic controllers. The Community licence aims at harmonising the licensing systems for air traffic controllers and promoting the mutual recognition of national licences. The Community licence introduces common standards for the European training system of air traffic controllers. Also the Community licence organises more opportunities for international job mobility for air traffic controllers.

The Single European Sky legislation will lead to the establishment of cross-border functional airspace blocks (FABs). Restructuring the European airspace as a function of air traffic flows requires more international cooperation between air navigation service providers and a more flexible use of manpower. Currently, some FABs are being studied, but none have yet been established.

1.2 Objective and research questions

The European Commission has asked ECORYS to carry out a study concerning the development of direct employment and the working and wage conditions in the EU air transport labour market in the period since 1997.

The Terms of Reference define the following three objectives for the study:

Objectives of the study:

- a. 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). On the other hand, the study will not deal with the impact on local employment (taxi companies, hotels, etc.).
- b. to determine the developments in terms of working conditions and of wage conditions over the same period in the EU.

¹² EC Regulations 549-552/2004.

- c. 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).

The study does not aim to give a full account of the three objectives. Rather, the study aims to present the European Commission:

- A more complete, detailed and independent insight of the development of direct employment in the EU air transport market.
- A first overview of the main trends and issues on working and wage conditions in the most significant professions in air transport.
- A qualitative evaluation on the relation between these developments and the liberalisation of the EU air transport market.

At the start of the study and in the inception phase the precise scope of the study was determined. This was necessary since the Terms of Reference had a very wide scope given the limited resources and time frame for the study. The definition of the priorities of the study resulted in a number of alterations compared to the terms of reference. These alterations were agreed on by the EC and the steering committee¹³ of the study.

First of all it was decided to focus the qualitative analysis of working and wage conditions on the following six topics:

1. Development of wage conditions.
2. Development of working conditions.
3. New practices in labour conditions.
4. The effects of improvements in competitiveness on social relations.
5. Initial and professional training.
6. Mobility of professionals in air transport (in qualitative terms).

Secondly it was decided to focus the study on passenger traffic. Employment in cargo traffic is included as far as it can be determined from the available data sources. Our activities in the inception phase (interviews, desk research) have shown that cargo traffic was (in the light of this study) considered of less importance, since most cargo traffic by air is not intra-EU.

Thirdly, it was agreed to leave out the comparison of the development of employment and wage and working conditions in the air transport sector to other sectors (such as the maritime sector, the road transport sector or the rail sector). This decision was mainly made to better focus the study's resources on key issues.

Finally, during the course of the study it was decided to focus the study on the old Member States of the EU (the EU-15). It was agreed that since the new Member States joined the EU towards the end of the period under investigation, it was more logical to concentrate on the EU-15. This choice, of course, gives some limits to our study since in the new EU Member States the air transport market is also developing at a fast pace. In the future it will certainly be needed to widen the scope to the whole of the EU.

¹³ See Annex 1 for a presentation of the steering committee that supported our study.

1.3 Methodology

1.3.1 Introduction

This study constitutes a first effort to uncover the social effects of the liberalisation of the air transport market since the adoption of all Single Market legislation. Other than on the economic effects of the liberalisation, little or no research had been done regarding this topic before.

The methodology of the study consisted of:

- desk research;
- interviews with stakeholders on a European level;
- an internet survey among trade unions and employers in the EU air transport sector in 27 Member States;
- interviews with employers and trade unions from the sector in the four largest EU Member States (The United Kingdom, France, Germany, and Spain).

A list of consulted sources, a list of the interviewed stakeholders, an elaboration of the response of the internet survey and the questionnaires of the internet survey can be found in annexes II to VI.

In 2004 the UK Civil Aviation Authority (CAA) published a study on the effects of liberalisation on aviation employment in the UK. It already pointed out the limited comprehensiveness of data and observed that the data in some cases was contradictory. Their study was therefore based to a large extent on interviews with stakeholders and the text regularly refers to opinions of stakeholders¹⁴.

As little information was readily available from other sources, the methodology of our study relies for a large part on information that was obtained from the social partners in the air transport sector, both on an international and on a national level. Opinions of the social partners are an important part of the study, especially regarding the developments in wages and working conditions. Where factual evidence was available it was analysed. The framework of the study did not allow us to check with governmental resources at Member State level.

In fact, studies on working conditions typically rely to a large extent on interviews and surveys amongst stakeholders. The reason for this is that direct measurement of working conditions is only possible to a limited extent and fraught with difficulties. A number of general indicators do exist (e.g. absence due to sickness, occurrence of certain types of accidents at work, the existence or application of certain safety measures) but obtaining such data for all EU Member States is a time consuming and expensive process. In addition, the relevant indicators are often not the same for different sectors and occupations. Also, such indicators focus on visible problems and are therefore not able to capture all the issues involved.

14 CAA (2004). CAP 749 *The Effect of Liberalisation on Aviation Employment*.

In the more qualitative approaches researchers conduct expert interviews, focus groups with stakeholders, or individual interviews with a small group of stakeholders that represent the ‘typical’ employees or companies that are the object of the study. The more quantitative approach uses surveys, usually postal or web-based. Often they are conducted with a representative sample of employees. In this study however, both sides of industries have been included in the study through surveying of both trade unions and employers’ organisations in the Member States. All known organisations were approached through their representative organisation at EU level¹⁵.

Obviously in studies that draw information from interviews and opinions from surveys, the usual scientific standards and criteria need to be observed with regard to the sampling procedure to ensure representativeness, with regard to the questionnaire to ensure validity of the responses and with regard to the analysis, to ensure accuracy and reliability of the conclusions. Of course one should bear in mind that although this will yield a very reliable picture of the opinions of stakeholders, careful interpretation is required to go from opinions to conclusions about the actual situation. Techniques to enable a better interpretation include looking for developments over time and comparisons between countries, sectors or occupations.

While the methodology chosen in this study has its limits, it proved to be very useful for uncovering the main social trends and issues in the air transport sector in the past ten years.

We limit our research to the 15 ‘old’ EU Member States because these are mostly affected by air transport market liberalisation legislation since 1997. It is therefore likely that the social effects of liberalisation can be most clearly studied in these countries. A future study should clarify what consequences EU liberalisation legislation had on employment, working and wage conditions in the new EU Member States.

In the report we make a clear distinction between the opinion of stakeholders and facts based on evidence. Where there is a divergence of opinions and no other sources are available, the report refrains from drawing hard conclusions.

In the sections below we elaborate our methodology in more detail.

1.3.2 Task 1: Analysis of the principal trends in air transport since 1997

The study has started with an analysis of the principal trends in the air transport sector since 1997. We have based this part of the study mainly on desk research using international sources. An important source for our analysis was the existing reports on economic developments in the sector since liberalisation. These reports include studies conducted by the Commission as well as studies conducted by other stakeholders. In addition we used statistics that are available from data sources such as Eurocontrol, ICAO, Eurostat and the annual reports of the employer organisations.

¹⁵ Several non-ERA regional airlines were invited by ECORYS to participate in the online survey. This was done upon request from ERA.

The main objective of the analysis of principal trends was to draw a picture of the economic context that forms the basis for the developments in direct employment and the wage and working conditions in the sector in the past ten years.

1.3.3 Task 2: Construction of the time series of direct employment

One of the main tasks in the study was the construction of a time series of direct employment in the EU air transport industry for the period 1997-2006. As there is no specific source of information that can supply the necessary statistics for such a time series, we had to use a number of different sources:

- For **airlines** we based our analysis on Eurostat's Structural Business Statistics (SBS, NACE 62). Data was available for the period 1997-2005. For three Member States (The Netherlands, Ireland and Greece) Eurostat data was not available. For those Member States we used data from the Association of European Airlines (AEA) and the annual reports of airlines to estimate the development of airline employment.
- For **airports** no EU wide employment statistics exist. The development of employment in EU airport organisations presented in this report is based on the results of our internet survey. The airport operators that have responded to our survey correspond to the airports with approximately one third of the total passenger traffic in the EU-15. However, respondents were predominantly from North-Western EU Member States. We reweighed the results of the survey with statistics of the Airports Council International (ACI) Europe on the development of the total number of passengers handled by EU-15 airports for 1998, 2001 and 2006¹⁶. Finally, we projected the estimated development of employment for 1997-2006 on the level of employment in EU-15 airports presented in the DM Barry and Associates report of 1997¹⁷.
- We based our analysis of employment in **Air Traffic Management** on statistics available at Eurocontrol¹⁸. These statistics were only available for the period 2001-2006. For the period 1997-2000 it was not possible to recreate a time series (within the scope of this study).
- The analysis of the development of employment in private **ground handling service providers** is based on a questionnaire that we, in consultation with the International Aviations' Handlers Organisation (IAHA), sent to the top five ground handling companies in the EU-15. In the end three providers were willing to reply. In chapter 3 we present (anonymously) the development of employment in these three companies. In addition, we present an estimation of the IAHA of the employment in their member organisations.

16 Only airports that were present in all three years were used. Because additional growth in 2006 may have come from airports which had little or no traffic in one or both of the earlier years, the employment figures reflect an underestimation.

17 DM Barry & Associates et al., *Study on the social effects of changes in the civil aviation sector, final report*, report prepared for Commission of the European Communities, DG Employment and DG Transport, October 1997

18 ATM cost effectiveness benchmark reports 2002-2006 of Eurocontrol

1.3.4 Task 3: Qualitative analysis of the developments in working and wage conditions

The analysis of the developments in working and wage conditions is mainly an exercise of a qualitative nature. As we expected that the developments would differ highly for different groups of personnel, we focused our analysis on four main professions in the sector:

- flight crew;
- cabin crew;
- ground handling staff;
- air traffic controllers.

In table 1.1 an overview is given of the topics that were studied in our analysis of wage and working conditions and the research methods that were used for that.

Table 1.1 Overview of the working and wage conditions topics and research activities

	Desk research	Internet survey	Interviews
Wage conditions		X	X
Working conditions		X	X
New practices in labour conditions	X		X
Competitiveness and social relations	X		X
Training		X	X
Mobility		X	X
Less priority topics	X	X	X

Desk research

For our study of the developments in working and wage conditions we analysed available international sources (the European Industrial Relations Observatory (EIRO), the International Labour Organisation (ILO), the International Air Transport Association (IATA), the European Transport Workers' Federation (ETF) and the European Cockpit Association (ECA)) and the national or organisation sources that were made available to us in the interviews.

Web based survey to national stakeholders

We developed two online questionnaires which were distributed among members of the organisations present in the steering committee. The questionnaire was distributed to:

- Employers: airlines (members of the AEA, the European Regions Airlines Association (ERA), the International Air Carrier Association (IACA) and European Low Fares Airline Association (ELFAA)), airports (members of ACI Europe), ATM organisations (members of the Civil Air transport Navigation Organisation (CANSO)) and private ground handling service providers (members of IAHA);
- Trade unions: members of the European Transport Workers' Federation (ETF) and the European Cockpit Association (ECA).

Employers received a different questionnaire to trade unions. All questions were organised around the four professional groups that were selected.

Overall, the development of the questionnaires was a complex and time-consuming process:

- Contrary to our earlier convictions, it proved necessary to develop separate questionnaires for trade unions (with a focus on represented members) and employers (focussing on organisations). The nature of the information we wanted to retrieve from the online survey made this unavoidable.
- On the one hand the study covers a wide variety of topics. On the other hand we also had to keep the length of the questionnaire acceptable for the respondent.
- The questionnaire needed to incorporate the effect of changes in the sector (growth of LCCs, shifts in ground handling from airports and self-handlers to independent ground handling companies, et cetera).

In the end a total of 78 employers (out of 297 respondents who opened the invitation¹⁹) responded to our questionnaire. 40 employers fully completed the questionnaire, of which 34 are based in the EU-15. The answers of these 34 employers were used in our analysis. On the side of the trade unions, 76 (out of 234 respondents who opened the invitation²⁰) responded. A total of 50 trade unions completed the survey, of which 36 are located in the EU-15. As the scope of our study was limited to the EU-15, our analysis was done on these 36 respondents.

The number of responses is large enough for analyses on the total group of employers and trade unions. Analyses on subgroups (different types of employers or trade unions) can only present indicative results, especially on the side of the employers. In these cases some biases have to be taken into account. The most important bias that has occurred in the response is that there has been a relatively large response for airport operators (for instance compared to the response from private ground handling companies). Within the group of airport operators German airport operators are overrepresented.

The following causes for the relatively low response can be distinguished:

- Complexity factor: Individual respondents were often not able to answer all the questions by themselves. Completing the questionnaire required in many cases the cooperation of several divisions within an organisation. There is a high probability that organisations were not able to manage this in addition to their regular activities.
- The invitations to the questionnaires were distributed by the members of the steering committee. It is not sure whether the questionnaire was always received by the appropriate persons.
- Finally, the launch of the questionnaire during holiday period might have caused non-response. Given the high amount of fuse and the long period that the questionnaire was kept on-line however, this cannot have been a major obstacle for respondents to finalise the questionnaire.

Interviews in France, Spain, the United Kingdom and Germany

The interviews in four major EU air transport markets delivered more in-depth and detailed information on the developments in wage and working conditions in the sector. They proved to be a valuable supplement to the knowledge gained from the surveys. Even

¹⁹ It is possible that the organisation accessed the questionnaire multiple times.

²⁰ Idem.

though the interviews were not intended to yield data that could be generalised in a statistical sense, our selection of cases needed to adequately represent the sector under investigation. It was therefore necessary to cover the different sub sectors (i.e. airlines, airports, ATM-organisations and private ground handlers), the size of the organisations and the variety of types of organisations (e.g. regional carriers, charter carriers, low cost carriers and full service carriers).

The selection of the case studies also depended on the cooperation of the members of the steering group as well as on the cooperation of their members. Interviews were performed with stakeholders of the following organisations:

Table 1.2 Overview of interviews performed with stakeholders on national level

	Germany	UK	Spain	France
Carriers	CIRRUS Airlines	British Airways	Iberia	Air France-KLM
		Easy jet		
Airports	ADV	BAA	AENA	Bordeaux Airport
	FRAPORT			
ANSP	DFS	NATS	AENA	
Ground handlers	Menzies and Aviapartner			
Trade Unions	VerDi	BALPA	CCOO	CGT
	V Cockpit (2x)	TGWU (Unite)	UGT	
		Prospect	SEPLA	

The selection of the interviews was based on the following criteria:

- **Member States:** we selected the organisations to be interviewed in such a way that they cover the largest part of the European air transport market. These are basically the four largest EU Member States (Germany, the United Kingdom, Spain, and France). These countries resemble additionally a different labour conditions culture (e.g. France – Germany), and state of privatisation (e.g. UK-Spain).
- We included a well-balanced mix of **carriers:** Flag carriers (BA, Iberia, and Air France), Low Cost Carriers (Easy jet) and regional carriers (CIRRUS Airlines). Our efforts to include more regional carriers and also a charter or leisure carrier in the interviews were not successful.
- **Airport operators:** as was described in the criteria, we looked for a combination of major hubs (BAA, FRAPORT, and AENA which operates all airports in Spain) and a smaller regional airport (Bordeaux). We also had the opportunity to talk to the German organisation ADV which represents the German airports.
- **ANSPs:** There is (normally) one ANSP per country. We aimed to include three ANSPs. As a result we did not interview the French ANSP.
- **Private ground handling service providers:** After consultation with the IAHA we decided to include two large multinational service providers: Aviapartner and Menzies.
- **Trade unions:** we interviewed a total of 10 different trade unions spread over the four Member States that were selected. We made a selection of the different kinds of trade unions according to the professional groups they represent.

The interviews were an additional enquiry to the statistics and the questionnaire. Even though they mirrored only a cross-section of the sector in Europe, we are confident that the criteria mentioned above provided a safeguard for the illustrative character of the whole sector. A preparatory phase consisting of desk research was necessary in order to perform the interviews. Desk research provided us with preliminary information about the latest developments (since 1997) in air transport in the selected organisations, such as passenger developments or mergers between companies. This information allowed us to ask precise questions to the various interviewees.

In the interviews we asked the interviewees to provide us with proof for the claims they made regarding the development of employment, wages and working conditions. Although some interviewees provided us with documents, most of them provided proof by word of mouth through giving examples or by giving us more details. This allowed us to effectively assess the results of the interviews.

The organisation of the interviews required substantial efforts:

- Despite the fact that the majority of the members of the steering committee provided us with the right contact persons, in some cases it occurred that the details provided did not match all our requirements (e.g. sometimes the contact person was not that involved in HR-related matters and a different contact person had to be found);
- The contact persons provided did not always respond to our requests. This was partly due to the period in which the interviews were planned (June – September 2007).
- Interviewees from this sector generally live a busy and very mobile life. It was therefore difficult to arrange several meetings for one period of time in one country. Wherever possible this problem was solved by resorting to telephonic interviews.

Nevertheless, we consider that the level and the quality of the interviews was sufficiently high to be relevant and useful for the purpose of this study.

1.4 Structure of the report

This report discusses the development of employment, wages and working conditions in the EU air transport industry in the period 1997-2007. The report starts with a short summary of the most important economic trends in air transport in the past ten years (chapter 2). Chapter 3 describes the development of direct employment in airlines, airports, ground handling companies and air traffic management organisations in the EU 15. The developments in employment conditions (remuneration and types of contracts) for flight crew, cabin crew, air traffic controllers and ground handling staff are discussed in chapter 4. Chapter 5 contains the results concerning the development of working conditions in the air transport sector. The report ends with conclusions (chapter 6).

2 Principal trends in the EU air transport market

2.1 Introduction

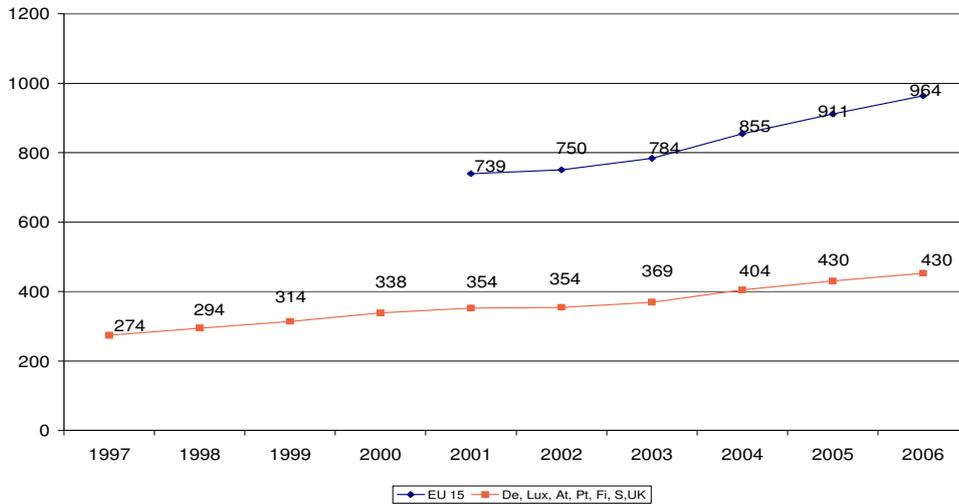
The air transport sector in the EU has been subject to many changes in the period 1997-2007. Some new developments, like the emergence of scheduled low cost carriers and the growth of independent ground handling companies, have fundamentally altered the sector. In this chapter we give a brief introduction to the principal economic trends in the EU air transport sector in the past ten years. These economic trends constitute the basis for social developments in the sector. In the next chapters on employment, wage and working conditions we will refer back to these economic trends in order to provide (partial) explanations. The chapter is by no means intended to provide a complete picture of the recent developments in the sector, since such an exercise would exceed the scope of this study.

2.2 Development of air related traffic

Figure 2.1 shows the development of passengers for the period from 2001 to 2006 for the EU 15 and for the period 1997 to 2006 for seven European countries. We used the statistics that are available from the Eurostat data source. Unfortunately, the source does not provide data for all the EU 15 over the investigated timeframe, so instead we illustrate that available for Germany, Luxembourg, Austria, Portugal, Finland, Sweden and the United Kingdom.

As shown in figure 2.1 the number of passengers has increased constantly in the seven chosen countries as well as in the EU 15. Within the chosen countries the average annual growth of passengers was 7 percent (1997-2006). The average annual growth in the EU 15 Member States in the period 2001-2006 equals 5 percent. In spite of the terrorist attacks of 9/11 a decrease of passengers is not identifiable. However, the development of the growth rate shows a clear hiccup after 9/11.

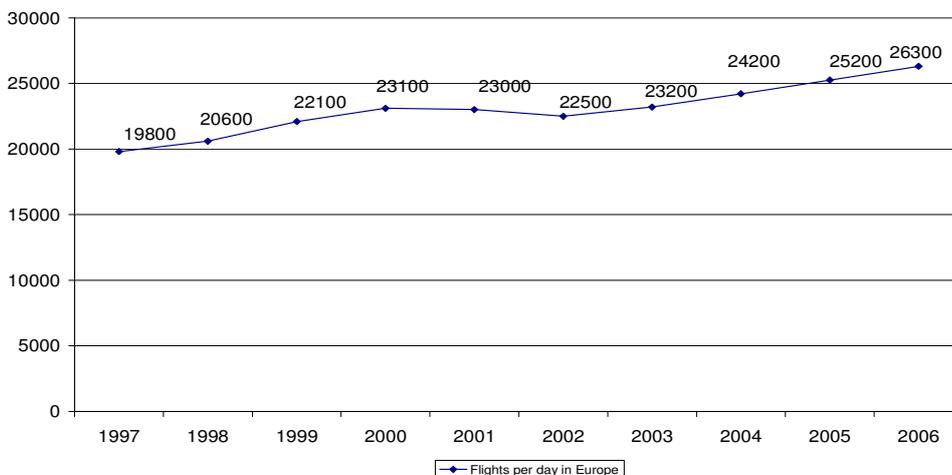
Figure 2.1 Number of passengers in EU 15 and seven European Countries, 1997-2006 (in Million) *



* The figures presented have not been corrected for double counting of passenger that take off and land in the EU-15 on the same flight
 Source: Eurostat

Further evidence for the increase in air traffic is given in figure 2.2. Figure 2.2 illustrates the development of the average number of flights per day in Europe in the period 1997-2006. As can be seen from the figure, the average number of flights per day has increased from less than 20,000 flights per day in 1997 to nearly 26,300 flights per day in 2006. Peak traffic demand in excess of 31,000 flights per day was recorded several times during the summer 2006, with 15 September 2006 being the busiest day ever, with a record 31,914 flights²¹. As a possible result of 9/11 the number of flights decreased in 2002 for a short period of one year. Shortly after this slump the number of flights increased with an average growth of 4.2 percent per year rapidly.

Figure 2.2 Average number of Flights in Europe per day (1997-2006)



Source: Eurocontrol

21 Annual Report 2006 Eurocontrol page 29.

2.3 Development for airlines

2.3.1 The low-cost market

The increase of air traffic follows to a large extent the emergence of the low cost market at the end of the 1990s. With lower fares, flying suddenly became for many people an affordable way of travelling. Airlines were hence able to attract new groups of customers. All stakeholders that we interviewed during the course of the study indicated that one of the most important developments in the air transport sector in the past ten years has been the expansion of the low-cost market. The Low Cost Carriers (LCCs) or 'no frills' airlines, introduced a new business model which enabled the operation of scheduled flights at a significantly lower cost per passenger than the 'traditional' airlines.

There exists disagreement in the sector about what 'low cost' exactly constitutes. Since the successful introduction of Southwest Airlines in the US – there were several other attempts that failed- but many other LCCs have been established, each using different formulas. Cost advantages can be obtained through a combination of certain commercial and operational strategic elements, including:

- the focus on point-to-point operations and short haul flights;
- the usage of cheaper secondary airports;
- focus on internet ticket-sales;
- operations with single types of aircraft (mostly B737 or A319/320);
- little or no onboard (free of charge) services for passengers;
- high crew and aircraft utilization (for example through short turn-around times).

Table 2.1 illustrates the lower operating costs for LCCs in comparison with network carriers over the period 2005 – 2006. Despite the fact that operating costs for both types of airlines increase, for example due to rising fuel prices, LCCs still manage to transport passengers against 15 percent lower costs than network carriers do.

Table 2.1 Operating costs per ATK of European LCCs & Charters versus Network carriers (US cents)*

	2005	2006
LCC & Charter	64.8	69.7
Network carrier	73.0	77.3

* Available Tonnage-Kilometer (ATK) is a combined measure of passenger, freight and mail traffic which also takes into account distance (Cf. ICAO).

Source: Cranfield University (2006).

The Boston Consulting Group estimates that the cost-advantages of LCCs can run up until 35 percent in comparison with the traditional airlines like the former 'flag carriers'²². LCCs are for example able to keep their planes longer in the air because of their short haul point-to-point operations. As soon as passengers are cleared and the plane is clean, a low-cost aircraft is ready for take-off. Planes in hub systems (networks) on the contrary,

²² The Boston Consulting Group (2006). New Metrics for Market Share: Lessons from the Airlines.

often depend on passengers from other incoming flights for which they must delay departure²³.

Recent research from Cranfield University suggests that the average load-factors of low cost planes is also higher than for network carriers. Table 2.2. shows a difference of more than 10 percent of passengers per flight over the years 2005 and 2006.. It should be noted however that network carriers often achieve a higher-seat factor on short-haul routes rather than long-haul routes. This impedes a valid comparison between the two types of carriers. Nevertheless LCCs often fly with larger planes on their short-haul routes, which makes it likely for them to realise higher profits per flight than network carriers can.

Table 2.2 Overall load factor of LCC, charters and network carriers (%)

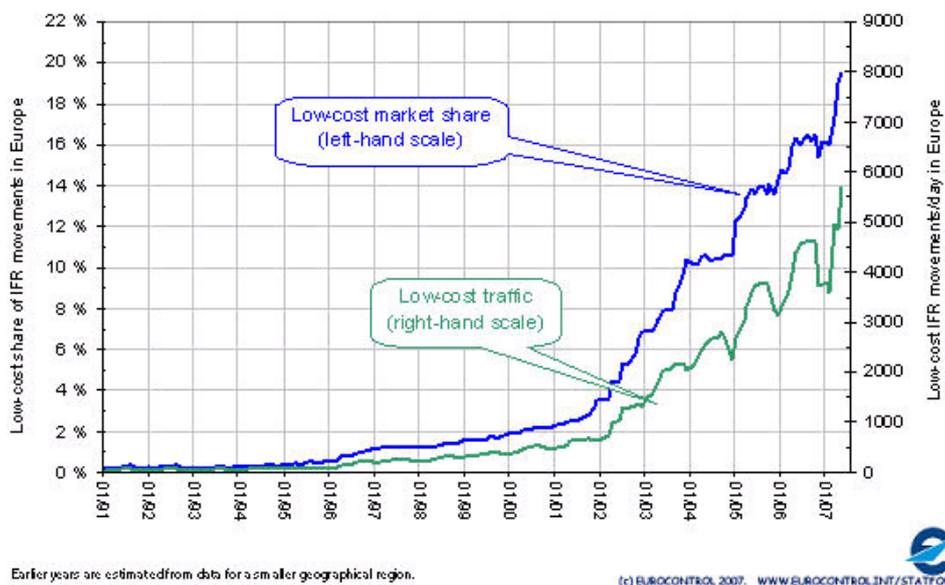
	2005	2006
LCC & Charter	82.1	81.2
Network carrier	67.7	68.7

Source: Cranfield University (2006). Overall load factor of LCC, charters and network carriers (in percent).

Market share

Flights in the EU are increasingly performed on a low cost basis. Figure 2.1 illustrates the increasing market share of low-cost carriers in the intra-Community air transport market. The graph is based on information from the EUROCONTROL Low Cost Panel (2006). Even though the number of LCCs have decreased (because of bankruptcies and take-overs), the number of LCCs performing 50 flights or more per day grew, according to EUROCONTROL, from 13 in 2005 to 15 in 2006. The figure shows that the low-cost market share in terms of IFR movements in Europe expanded to almost 20 percent by the beginning of 2007.

Figure 2.3 Development of the market share of low cost carriers in intra-European flights (1991-2007)



23 Cranfield University (2006).

The low cost market is strongly in flux. LCCs are constantly adapting their routes, i.e. acquiring new bases and new routes while abandoning unprofitable ones. Low cost airlines operate from Germany for example, 396 different routes (within the country as well as international routes).²⁴ One low cost airline added 21 new routes in Germany in 2006 only, while another carrier reduced its amount of routes by 5 percent during that year. But the low cost market is also on the move because of mergers & acquisitions, but also because of bankruptcies. Since 2002, 14 European low cost airlines have been removed from the EUROCONTROL Low Cost Panel as a result of bankruptcies. In 2006 no such cases were reported. On the contrary, a new LCC “Clickair” had been established in Spain, in which Iberia has a 20 percent share. Also, the German LCC HLX merged in 2006 with HapagLloyd in Tuifly. For the year 2007 the top five LCCs in Europe are as follows:

Table 2.3 Top 5 LCCs in Europe in 2007-11-07

Rank	Carrier	Routes	Flights
1	Ryanair	754	5337
2	Easy jet	395	4510
3	Flybe	168	1668
4	Air Berlin (Euro Shuttle)	165	1238
5	Aer Lingus ²⁵	120	1120

Source: EUROCONTROL

2.3.2 The reaction of ‘traditional airlines’

While LCCs constitute a new kind of airline and have used the new opportunities created by liberalisation to develop, ‘traditional’ airlines have had to adapt their business model to resist competition from the low cost model. In this study, we basically make a distinction between ‘network carriers’, or ‘Full Service Carriers’ (FSC) and ‘point-to-point carriers’, the leisure carriers and regional airlines. LCCs are also regarded as ‘point-to-point’ carriers. While network carriers operate in a hub-and-spoke system, point-to-point carriers fly directly to and from one destination. For reasons of simplicity we associate network carriers with AEA member airlines and point-to-point carriers with member airlines from ELFAA, IACA, and ERA²⁶.

Restructuring of ‘Full service carriers’

In 1997 the industry was still dominated by the ‘flag carriers’ or ‘Full Service Carriers’ (FSCs). In that year a gradual reorganisation around the core activities of flag carriers accelerated. In the face of increased competition resulting from the opening of the market, FSCs experienced an urge to increase productivity and lower costs of the network. This included for Air France for example, an expansion of the network and the implementation of more efficient flight-schedules with which the intervals for the flight- and cabin crew

²⁴ See for these figures: ADV (2007). *Low Cost Monitor 2007*. Internet: <http://www.adv-net.org/de/gfx/index.php>.

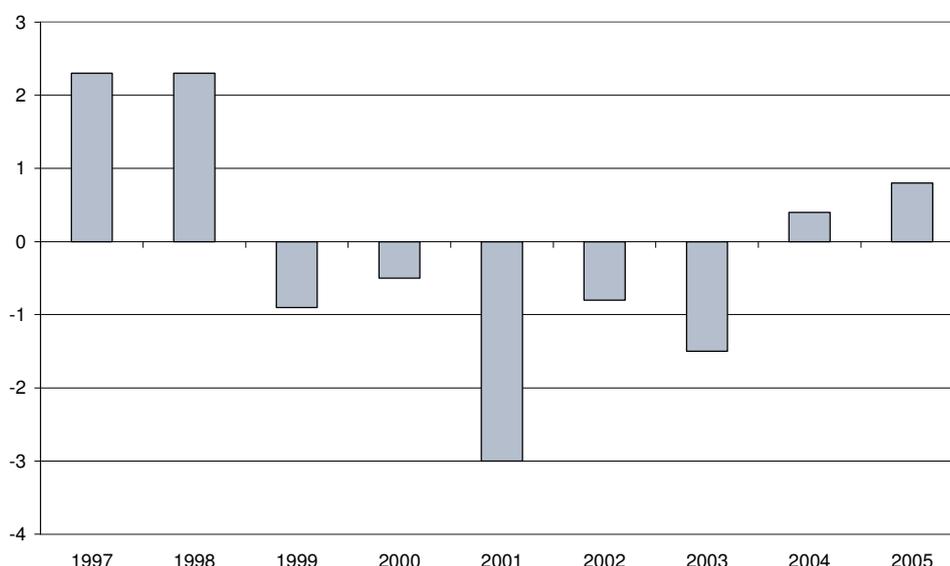
²⁵ The inclusion of Air Lingus in this list is contestable. Its true that the airline is included in the EUROCONTROL Low Cost Monitor, but Air Lingus is at the same time a member of AEA, the European association of full service carriers. This illustrates the unclarity of the ‘low cost’ concept.

²⁶ We do acknowledge that not all of the point-to-point carriers in the EU are member of these organisations.

to return to their base were reduced. Some of the flag carriers had already started to reorganise at the beginning of the 1990s, while others by 1997 had only made a start. These reorganisations contributed to the major shake-up of the sector in the period 1997-2007.

In the period 1999-2003 airlines associated with the AEA posted heavy losses. The development of gross operating profits for AEA associated airlines is shown in figure 2.4. Negative operative results reached their maximum in 2001 following the terror-attacks from 9/11. As a reaction most airlines were forced to implement an extensive restructuring of their operations, including redundancies. On the website of the European Industrial Relations Observatory (EIRO), many examples can be found of the restructuring operations of European flag carriers around that period.²⁷

Figure 2.4 Development of gross operating profits of AEA associated airlines 1997-2006 (in mln USD)



Source: AEA Yearbooks

Since 2004, by when demand had increased and most airlines had restructured their operations, AEA airlines have been posting profits again. However, profit margins remain low. The high fuel prices are an important factor in this.

Given the fact that LCCs have become price setters as well, increased competition from LCCs implies for the FSCs a twofold challenge²⁸: On the one hand they lose passengers and therewith market share. On the other hand, prices for remaining passengers decline and remain at a low level. In order to manage the competition from LCCs, FSCs reacted with the following measures²⁹:

²⁷ <http://www.eurofound.europa.eu/eiro/>.

²⁸ Cf. The Boston Consulting Group (2006).

²⁹ Cf. ECA (2006). *Upheaval in the European Skies. Low Cost Carriers in Europe: Economic Data, Market and Pilot Demand Forecast*.

- offering low fares on competitive routes;
- buying or setting up their own LCC;
- trying to reduce their own production costs;
- withdrawal from unprofitable routes;
- ticket-sales via internet.

FSCs had already been outsourcing activities to specialised companies from before 1997. Such activities included catering, cleaning, aircraft maintenance and IT. However over the last ten years there has been an increase in outsourcing, to include activities such as check-ins, reservations and departure control, in order to cut costs and remain competitive³⁰.

Leisure carriers

Leisure carriers (formerly known as charter carriers) traditionally carry passengers who purchased comprehensive holiday packages. They are therefore firmly attached to the tourist industry. According to ICAO, leisure carriers combine elements of different business models: They fly point-to-point (no network) on intra-European routes and operate at a low-cost level. This provides the leisure carriers with relative comparative advantages to network carriers as well as LCCs: Leisure carriers benefit from a higher average seat load factor, a higher aircraft utilization and a higher crew productivity than network carriers³¹.

But leisure carriers also have the following characteristics which are advantageous over LCCs³²:

- the use of larger aircrafts;
- higher aircraft utilisation, especially when flying at night to airports with no or little restrictions;
- lower sales and advertising costs because of the sales of large contingents of seats to tour operators.

Despite the leisure carriers' business model and its connected comparative advantages, these carriers have become confronted with serious challenges in the last decade. In the first place, leisure carriers operate fewer flights during the 'low season' when the demand for holidays is low. Moreover, there has been a decrease in demand for comprehensive holiday packages and an increase in demand for individualistic holidays. The latter increase is coupled with low cost growth that is based on flights to leisure destinations across the Mediterranean³³.

In order to limit losses from insufficient seat loading, leisure carriers reacted with the selling of 'seat-only' tickets on their existing routes. Some leisure carriers also set up their own LCCs like HLX from Hapag Lloyd (which recently merged in TUIfly). The

30 EIRO (2006). *Sector futures. Transport: which direction?*

31 Cf. ECA. (2006). *Upheaval in the European Skies. Low Cost Carriers in Europe: Economic Data, Market and Pilot Demand Forecast.*

32 Cf. ECA (2006). *Upheaval in the European Skies. Low Cost Carriers in Europe: Economic Data, Market and Pilot Demand Forecast.*

33 Cf. AEA Yearbook 2007. Together with flights to CEEC.

option to wet-lease parts of the fleet was also used by some leisure carriers. In the future, these airlines will certainly need to develop as a mix of charters and LCC.

Regional airlines

Regional airlines basically characterise themselves through the use of relatively small aircrafts (19-120 seats), point-to-point operations between regional airports and between regional airports and hubs, and with a high proportion of business travel.

Even though regional airlines existed before, liberalisation of the EU regional air transport market in 1987 led to a vast increase in the number of regional airlines and the number of passengers on board. According to ERA DG Mike Ambrose, regional airlines specially benefited from the possibility to operate routes to and within EU-Member states³⁴. The momentum of growth following liberalisation took place from before 1997. Growth rates of ERA members reached on average ten percent until 9/11³⁵. While the terror attacks led to a 1 percent year-on-year reduction in September 2001 and a 5 percent year-on-year reduction in October 2001, the number of ERA-passengers overall continued to grow strongly in 2001, 2002, 2003. Rather moderate growth rates were realised in the years afterwards³⁶.

The ERA was created in 1980 with five member airlines carrying 58,000 passengers, while in 2007, it represented 78 regional airlines flying in total 71.5 million passengers (2005)³⁷.

Regional airlines fulfil basically two functions in the air transport market: They keep up a system of hub feeding from smaller cities and they operate point-point routes outside the big hubs³⁸. As long as they don't operate routes with high demand, regional airlines do not directly compete with LCCs. On such routes, the regional airlines benefit from operations with economic Regional Jets and Turboprops.

Moreover, their clients –business travellers- are relatively immune to price increases. At the same time, the share of business related travel of regional carriers decreased from 61 percent in 1992 to 52 percent in 2006, while the percentage of leisure travel increased from 39 percent to 48 percent in that period³⁹.

Regional airlines do compete with LCCs, but pressure to cut costs also comes from high fuel prices and high navigation fees⁴⁰. Some regional airlines like FLYBE reacted by transforming into an LCC through the introduction of ticket sales via internet, paid in-flight catering and an appropriate fleet strategy with larger aircrafts⁴¹. In general, regional airlines (ERA members) increased their average load factor/ passenger load factor, which led to increased efficiency and productivity, particularly since 9/11.

34 Op cit. in Air Transport World (2004). "Indispensable Regionals." Internet: www.atwonline.com .

35 Ibid.

36 ERA (2007). *ERA scheduled passenger growth rate 2001-2006*. Internet: www.eraa.org

37 Cf. ERA Yearbook 2007. Including members outside EU15.

38 ECA. (2006).

39 ERA (2007), Consult: www.eraa.org

40 ATW (2005). "European Regionals at the crossroads".

41 Ibid.

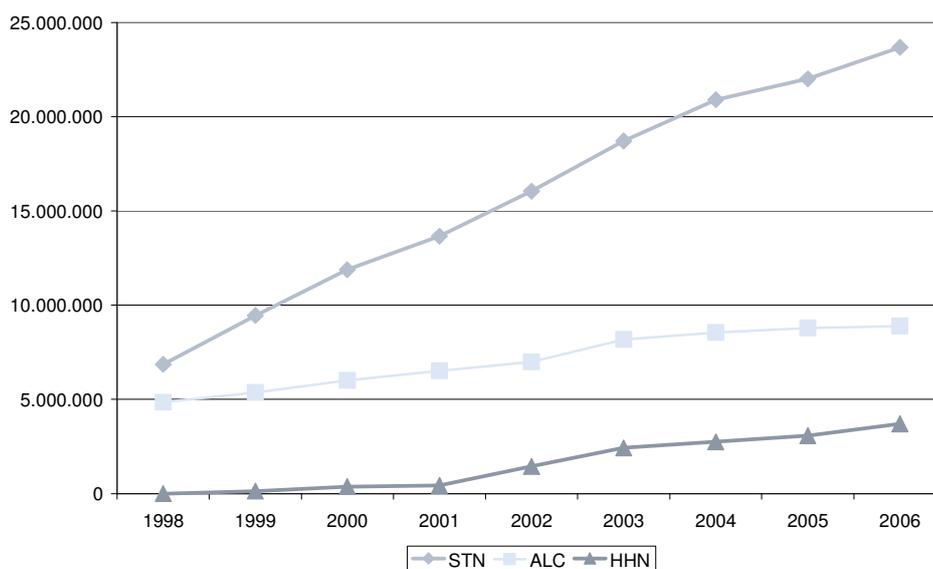
2.3.3 Convergence of business models

The expansion of the low cost market forced airlines with other 'traditional' business models to react. Reactions involved a review of commercial strategies, biased towards the implementation of cost-cutting measures. While leaving aside the discussion about the exact definition of 'low cost', many stakeholders in the industry speculate about convergence of business models⁴². On the one hand one can witness the introduction of 'no frills' elements in for example FSCs, such as paid onboard catering and the sales of tickets via internet. On the other hand, LCCs have meanwhile opted for higher customer service standards, for which customers have to pay extra. Such measures include assigned seating or priority boarding. The ECA is convinced that this business model 'migration' ultimately leads to competition for a similar type of passenger between the different airlines.

2.4 Developments at airports

In line with the increased market share of LCCs an analysis of ACI airport figures shows that the number of operative airports in the EU has increased from 317 airports in 1998 to 405 in 2006 (figures include airports outside EU 15)⁴³. The analysis shows as well that the number of passengers handled by smaller airports has grown quickly. The spectacular growth at the airports of London Stansted, Hahn and Alicante is depicted in figure 2.5. While the number of passengers at Alicante almost doubled from 4,8 million in 1998 to 8,8 million in 2006, growth rates were much more impressive at London STN (from 6,8 million to 23,6 million) and Hahn (from 134, 000 to 3,7 million).

Figure 2.5 Development of passengers at selected smaller airports in the EU 1998-2006



Source: ACI Europe, calculation ECORYS

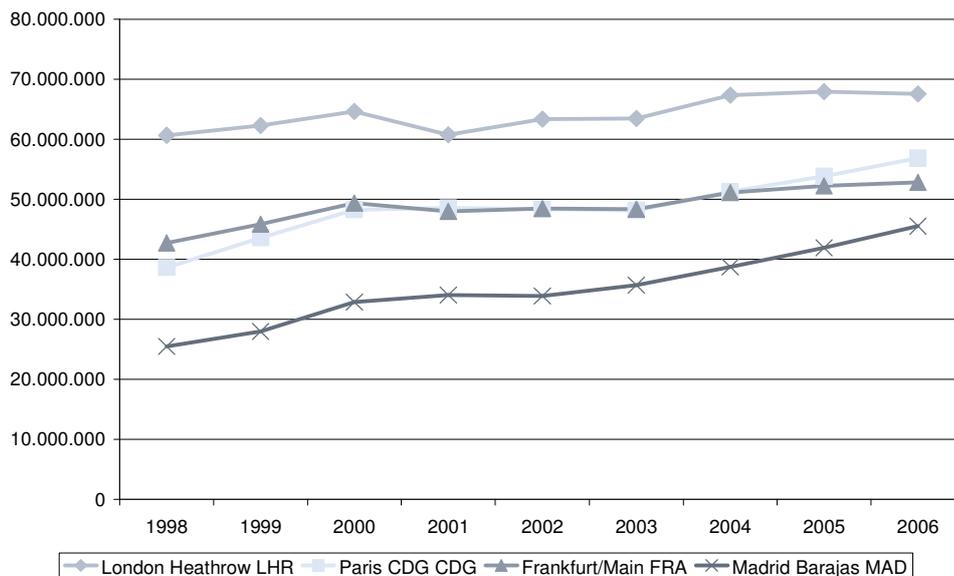
42 Cf. ECA (2006), ERA in ATW (2005), AEA. (2007).

43 Figures exclude non-members of ACI-Europe.

Given the increased significance of regional airports for air traffic in Europe, it is not surprising that some interviewees pointed at the fact that between 1997 and 2007 such airports have been increasingly competing for airlines and passengers with each other. Local governments have considered growth of the airport in their region as a way of increasing economic development. According to the interviewees, some airlines have been able to negotiate advantageous conditions regarding fees and operational issues in return for an increase in the number of routes.

The number of passengers did not only increase at smaller airports during the period considered. Also the largest airports in the EU, such as London Heathrow, Paris CDG, Frankfurt and Madrid Barajas experienced impressive growth rates in the number of passengers handled. Figure 2.6 depicts passenger growth at London Heathrow, Paris CDG, Frankfurt and Madrid Barajas. The number of passengers increased between 1998 and 2006 in London by 7 million, in Paris by 11.5 million, in Frankfurt by 10 million, and in Madrid even by 20 million.

Figure 2.6 Passenger development at selected large airports in the EU 1998-2006



Source: ACI Europe, calculation ECORYS

2.5 Liberalisation of ground handling services

In section 1.1.3 the liberalisation of the ground handling market was discussed. The European Commission published in 2007 a report on the application of Directive 96/67/EC of 15 October 1996 on access to the ground handling market at Community airports⁴⁴.

44 http://ec.europa.eu/transport/air_portal/airports/doc/2007_groundhandling_en.pdf.

In this report, the Commission based its conclusions on its inspections conducted since February 2004, as well as the contents of Member States' annual reports on national quality control in the field of aviation security. It showed that there are no indications suggesting that the number of ground handling service providers active at an airport which differ significantly between Member States, has an actual impact on the quality and the enforceability of the implementation of security requirements.

Furthermore, the report arrived at the following conclusions in relation to the impact of the application of the Directive:

- the introduction of competition at many airports which were previously closed or static markets;
- better value for money on ground handling services;
- greater pressure on the prices for ground handling services;
- dilatory actions in some instances on the part of competent authorities in fully applying the directive;
- some impact on employment conditions in the industry but no evidence of an overall reduction of jobs;
- a modest shake-up in the market shares in ground handling at the economically most important EU airports.

These conclusions were reached concerning the EU-15

The most recent data available to the EC shows that:⁴⁵

- In 2006 there were 151 airports across the EU to which the Ground Handling Directive applied: 104 airports with more than 2 million passenger movements or 50,000 tonnes of freight, and 47 airports with annual traffic of over 1 million passenger movements or 25,000 tonnes of freight⁴⁶. The vast majority of these airports were located in the EU-15.
- Prices of ground handling services have gone down on airports to which the Directive applied.
- Market access has increased, as has the free choice for air carriers between service providers.
- Focus has been on price competition, rather than on quality of services,
- At the majority of airports that are subject to the Directive, the number of service providers has gone up. The number of self-handlers has decreased.
- The private ground handling companies consider that their commercial opportunities have remained limited. They argue that the contestable market is only small (only the larger airports) and that on many airports the hub carrier still self-handles and also provides the handling services to their Alliance partners. Also at several airports the airport operator has remained active in the ground handling market⁴⁷.

45 CEC, *Report to the Commission on the application of Council Directive 96/67/EC of 15 October 1996*, COM 2006/821 final, Brussels, 24-01-2007.

46 Data communicated from Member States to the Commission in accordance with Article 1(4) of Council Directive 96/67/EC of 5 October 1996 on access to the ground handling market at Community airports (OJ No. L272, 25.10.1996, p.36).

47 ACI-Europe and the AEA have different opinions with regards to the extent to which airports are still involved in ground handling service provision. According to the AEA *many* airports are still active ground handling in Germany, Italy, and Portugal and at least at CDG in France. ACI-Europe on the contrary would rather say that only *some* airports in the EU-15 provide ground handling services. According to them the airlines used to have a 60 percent market-share in ground handling and airports a market share of 17 percent in 2002. Both airlines and airports lost market shares in the years afterwards to the benefit of the major independent ground handlers.

2.6 Developments in ATM

Liberalisation of the EU air transport market has not influenced Air Navigation Service Providers (ANSPs) directly. ANSPs were in the last decade preoccupied with the question of how to cope with the increased traffic in an airspace predominantly structured, monitored and controlled along the borders of the European nation states.

ANSPs across the EU have been characterised through their organisational differences. They vary from governmental organisations like DSN to privatised organisations such as NATS. With the SES legislation, it became mandatory that regulatory and supervisory activities be separated from service provision. An independent national body shall verify compliance of service providers with Commission requirements, including their certification, ongoing inspection and audits. They will be separated from the regulatory bodies and managed in a corporate way. Even though the state remains the largest stakeholder, the management is allowed to develop business plans autonomously and raise money at international capital markets which releases them from government spending control⁴⁸.

While ANSPs have invested in the capacity of ATM operations in order to cope with traffic increase in the last 10 years, it has been difficult to match revenues with expenses, in particular during down cycles of demand. ANSPs are mainly funded through charges to airspace users which are set by national governments. Moreover, ANSPs are only to a limited extent allowed to generate profits (e.g. DFS: 8%). At the same time, airspace users are pressing for lower charges.

A more cost-effective and efficient model for ANSPs in Europe is currently debated. In order to be able to deal with increasing air traffic, which is expected to last in the next decade, in a financial and healthy way, a radical overhaul of the existing system of air traffic management will definitely be required.

48 Aerospace America (2005). *Europe tries more ATM privatization* In: Aerospace America May 2005.

3 Development of employment

3.1 Introduction

This chapter covers the development of employment in the air transport sector in the EU-15. In correspondence with the Terms of Reference the study focuses on *direct* employment. All indirect employment effects of the sector (hotel jobs, taxi's, retail, et cetera.) are excluded. At the start of the study we defined employment in the sector as:

Definition direct employment air transport sector

All personnel in the EU-15 employed by airlines, airport operators, ATM-organisations and private ground handling service providers.

The chapter starts with an analysis of the development of employment in EU-15 airline companies (section 3.2). The development of other employment in the air transport sector (airport operators, private ground handling service providers and ATM-organisations) is analysed in section 3.3. Both sections end with an interpretation of the developments in relation to relevant social and economic trends in and outside the sector.

3.2 Employment in airlines

3.2.1 Development of employment in airlines

Figure 3.1 shows the development of employment in EU-15 airlines in the period 1990-2005. For the period prior to 1997 the employment figures are obtained from a study performed for DG Transport in 1997. The basis for our analysis of the development of employment in the period 1997-2005 is the SBS statistics of Eurostat (NACE 62)⁴⁹. For a number of Member States employment data for airlines was not available (The Netherlands, Greece and Ireland). For those Member States we used annual reports of airlines and yearbooks of AEA to estimate the development of employment.

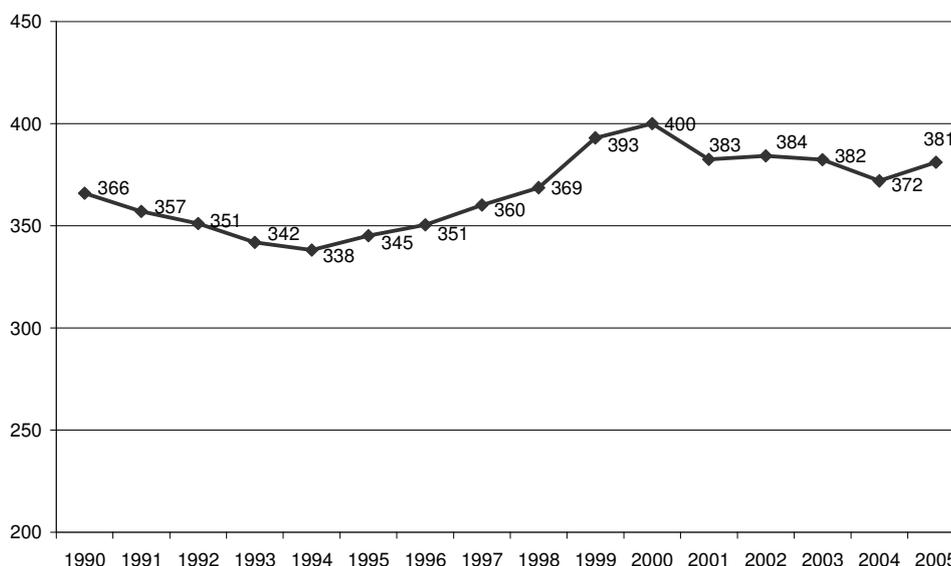
49 Definition Employment (SBS, Eurostat): Employment is the number of persons employed, i.e. the total number of persons who works in the enterprise, as well as persons who work outside the enterprise who belong to it and are paid by it. It also includes part-time workers who are regarded as such under the laws of the country concerned and who are on the pay-roll, as well as seasonal workers, apprentices and home workers on the pay-roll. The number of persons employed excludes manpower supplied to the enterprise by other enterprises, persons carried out repair and maintenance work in the enquiry enterprise on behalf of other enterprises, as well as those on compulsory military service. Persons who are at the disposal of an enterprise for commercial reasons on the basis of a long term contract should be included as employees of the enterprise where they work rather than in the enterprise with which they have their employment contract.

The figure shows that three distinct phases can be recognised in the development of employment in airlines in the EU-15 over the past 15 years:

- 1990-1994: in this period many of the largest EU airlines carried out major changes in their organisations. As a result employment decreased from 366,000 employees to 338,000 employees, a decrease of 8 percent.
- 1995-2000: on the waves of economic growth, employment in EU airlines in this period grew substantially from 338,000 to 400,000 jobs, a growth of 18 percent. Especially in 1999 there was a strong increase in airline employment in the EU-15.
- 2001-2005: In 2001 the sector experienced a drop in employment (-5%). Since then employment remained stable around 380.000 jobs.

On balance airline employment in the EU-15 between 1997 and 2005 has grown by a total of 6 percent from 360,000 employees to 381,000 employees.

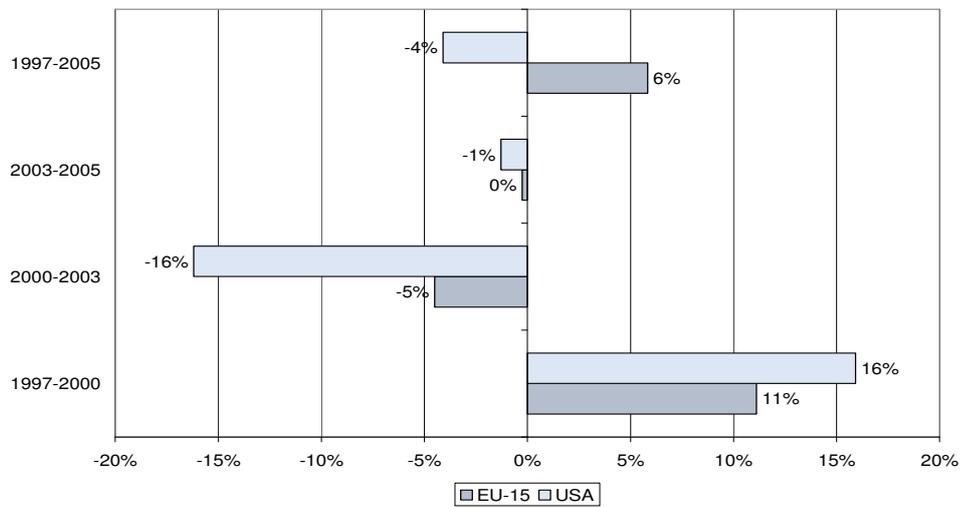
Figure 3.1 Development of employment in airlines in the EU 15, 1990-2005 (x 1,000)



Source: 1990-1996: DM Barry & Associates, 1997-2005: estimation ECORYS based on EUROSTAT, AEA and airline annual reports.

Compared to another major air transport market, the United States, the development in EU airline employment in the period 1997-2005 was relatively positive (see figure 3.2). While EU airline employment grew by 6 percent over the total period, US airline employment in the same period decreased by 4 percent. In the US this was the result of heavy employment growth in the period 1996-2000, but heavy decreases in employment in the period 2001-2003.

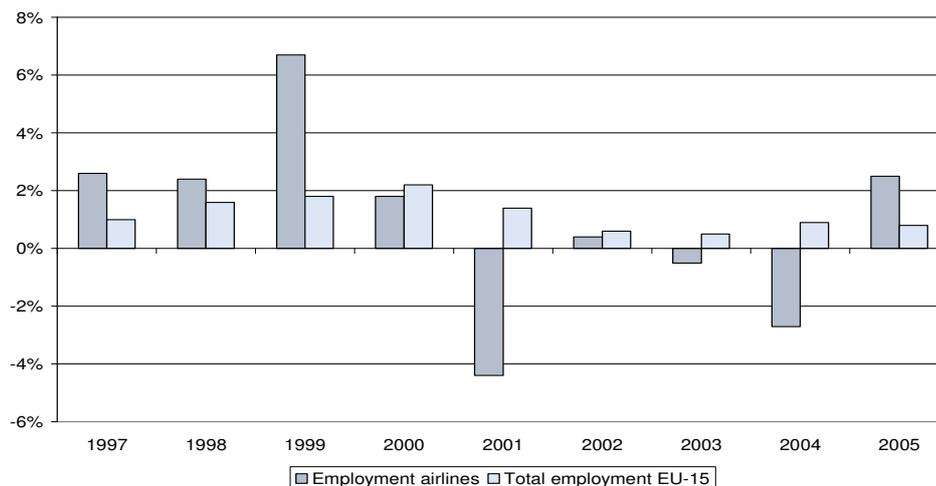
Figure 3.2 Development of employment in airlines in the EU-15 and the USA, 1997-2005



Source: EU-15: estimation ECORYS based on EUROSTAT, AEA and airline annual reports, USA: Air Transport Association, 2007 Economic report⁵⁰.

Figure 3.3 provides a comparison of the development in airline employment and total employment growth in the EU-15. The figure shows that the fluctuations in employment of airlines are much bigger than the average development of employment in the EU-15. Between 1997 and 1999 airline employment grew at a much stronger rate than the EU-average. Between 2000 and 2004 airline employment developed (especially in 2001 and 2004) at a level well below the EU average. Over the total period 1997-2005 EU airline employment grew by 6 percent. This is below the total employment growth in the EU-15 over the same period (11 percent over the total period).

Figure 3.3 Comparison of the development of airline employment and total average employment growth in the EU-15 (1997-2005)



Source: Airlines: estimation ECORYS based on EUROSTAT, AEA and airline annual reports, Total employment: Eurostat.

50 The Air Transport Association of America is the premier trade organization of the principal U.S. airlines. ATA airline members and their affiliates transport more than 90 percent of all U.S. airline passenger and cargo traffic. Source: www.airlines.org.

3.2.2 Regional differences in employment growth

North-South

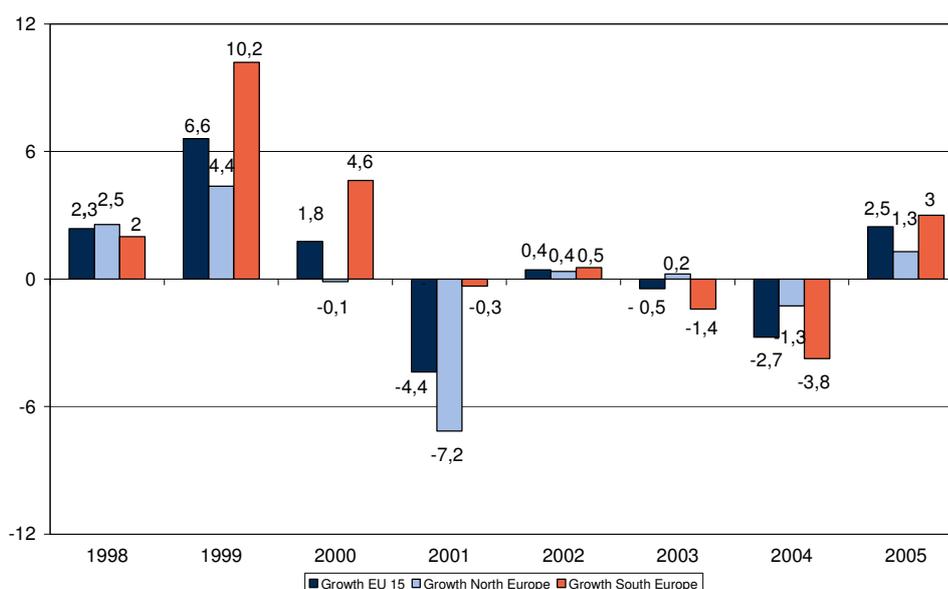
To determine regional difference concerning the development of employment within the European Airlines we divided the EU Member States into two groups:

- *North Region North:* Finland, Sweden, Denmark, United Kingdom, Ireland, Germany, Netherlands, Belgium and Luxembourg;
- *South Region:* France, Austria, Spain, Portugal, Italy and Greece.

Figure 3.3 shows that:

- the increase of airline employment in the EU-15 between 1997 and 2000 is primarily due to the increase of employees in the Southern EU Member States.
- In 2001 the decline of employment was almost totally concentrated in Northern Europe.
- After 2001 the year on year variance in employment has been larger in the Southern Member States.

Figure 3.4 Growth of employment within Airlines in EU 15, North and South Europe; 1998-2005 (in %)



Source: Estimation ECORYS based on EUROSTAT, AEA and airline annual reports.

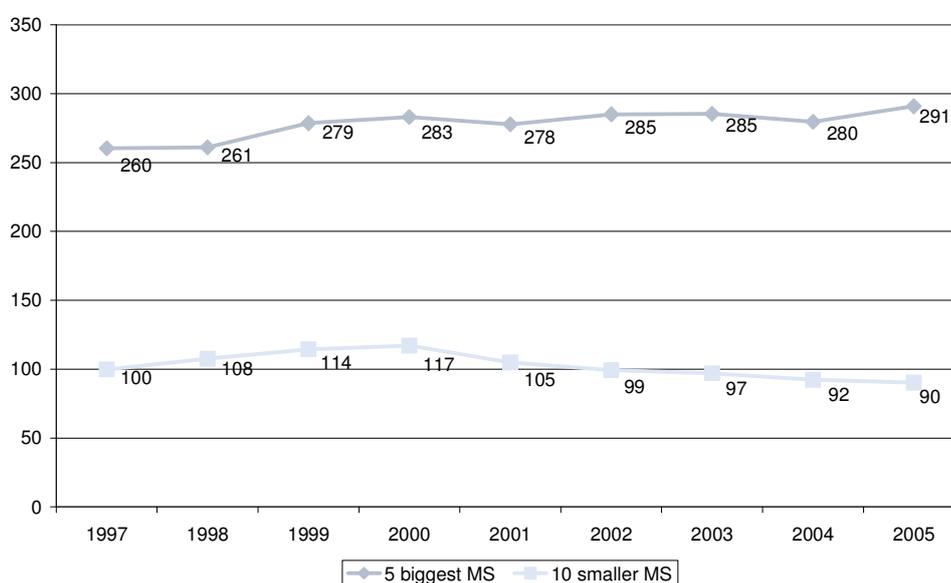
The differences in the development of airline employment in the Northern and Southern EU Member States can be (partially) explained by the growth of the tourist industry. The increased popularity of travelling to holiday destinations in Southern Europe by plane led to additional employment at airlines in this region.

Additional factors which influenced the divergent development of employment in the Northern and Southern EU Member States are the cost advantages for airlines in Southern European Member States, i.e. wage costs are lower than in Northern Europe, and the differences in economic growth in the two regions.

Large versus Small

In figure 3.4 the development of airline employment in the five Member States with the largest share of airline employment in 1997 (UK, France, Spain, Germany and the Netherlands) is compared to the development in the other 10 Member States. The figure shows that in the ten Member States with smaller airline labour markets, employment grew fast during the period until 2000 (+17%), but decreased even faster in the following period (-23%). In the five largest EU airline labour markets employment grew slowly but steadily over the total period. As a result the employment share of the five bigger labour markets grew from 72 percent in 1997 to 76 percent in 2005.

Figure 3.5 Development of employment in airlines in the five Member States with the largest number of airline employees in 1997, compared to the other ten EU Member States, 1990-2005 (x 1,000)



Source: Estimation ECORYS based on EUROSTAT, AEA and airline annual reports.

3.2.3 Differences by type of airline

Apart from the differences between geographical regions in the EU, different types of airlines also experienced different employment developments:

- *Network carriers*: Statistics of the AEA show that employment of network carriers in the EU in 2005 was approximately at the same level as in 1997⁵¹.
- *Regional carriers*: Employment in regional airlines in the past 10 years has grown at a steady pace. In terms of employment the regional carriers represent a small proportion of the employment in the total sector (approximately 50,000 jobs in the whole of the EU, including non-ERA carriers)⁵².
- *Charter/leisure carriers*: Charter/leisure airlines represented in IACA employ approximately 50,000 persons⁵³. As IACA also represents members from outside the EU-15, part of this employment is based outside the EU-15.

51 Source: AEA.

52 Source: estimation ERA

53 Source: website IACA, September 2007

- *Low cost carriers:* In June 2007 the low cost airlines organised in ELFAA employed 18.000 permanent employees. The two largest players in the low cost market, Ryanair and Easy jet together employ approximately 9,000 employees⁵⁴. In 1997 employment at low cost carriers was close to 1,000.

The employment figures presented above show that point-to-point carriers (= non-AEA-carriers, see section 2.3.2 for a definition) in the EU-15 by 2007, employ between 100,000 and 120,000 employees⁵⁵. That is approximately 30 percent of total airline employment in the EU-15. Network carriers employ around 70 percent of total airline employment. In 1996 point-to-point carriers represented approximately 20 percent of total airline employment⁵⁶. In some Member States the employment share of point-to-point carriers was higher than 70 percent. For instance in 2006 employment of Iberia represented 62 percent of total airline employment in Spain. In 1998 the employment share of Iberia was around 75 percent⁵⁷. In the United Kingdom the share of employment of British Airways in 2001 was 62 percent (from 74% in 1991 and 69% in 1995)⁵⁸.

If we concentrate on flight crew and cabin crew in short haul operations we assume that the employment share of point-to-point carriers by 2007 should be distinctly higher than the 30 percent we reported in the paragraph above. We base this assumption on the observation that point-to-point carriers (in comparison to network carriers):

- buy services on the market which network carriers still tend to have integrated within their own operations (ground handling, maintenance, et cetera.);
- are to a much smaller extent active on the long haul market. A substantial part of employment in network carriers is concentrated or linked to their long haul operations.

3.2.4 Factors underlying the development of airline employment

Increased traffic

In chapter 2 we concluded that the air transport market in the EU in terms of numbers of flights and passengers carried has grown significantly in the period 1997-2007. This growth has been induced by factors such as:

- economic growth, especially in the period until 2000;
- enlargement of the EU with 10 new Member States in 2004;
- the downward pressure on ticket prices, particularly on short haul flights;
- the entrance of many new airlines on the market (LCC's).

Both the results of the interviews and the survey among employers and trade unions shows that there is no doubt in the sector, that the increase of the market has had a positive effect on the level of employment in airlines.

54 Source: ELFAA , members' statistics June 2007.

55 50,000 employees at regional carriers (EU-25, including regional airlines not in membership of ERA), 50,000 at charter/leisure carriers (all IACA members) and 18,000 at Low Cost Carriers (EU-25, ELFAA-members).

56 Source: DM Barry & Associates et al., *Study on the social effects of changes in the civil aviation sector, final report*, report prepared for Commission of the European Communities, DG Employment and DG Transport, October 1997.

57 Source: FETCM-UGT, Sector Aereo, Evolucion economica y mercado de trabajo, 1999, 2001 and 2007.

58 Source: CAA, The effect of liberalisation on aviation employment, 2004.

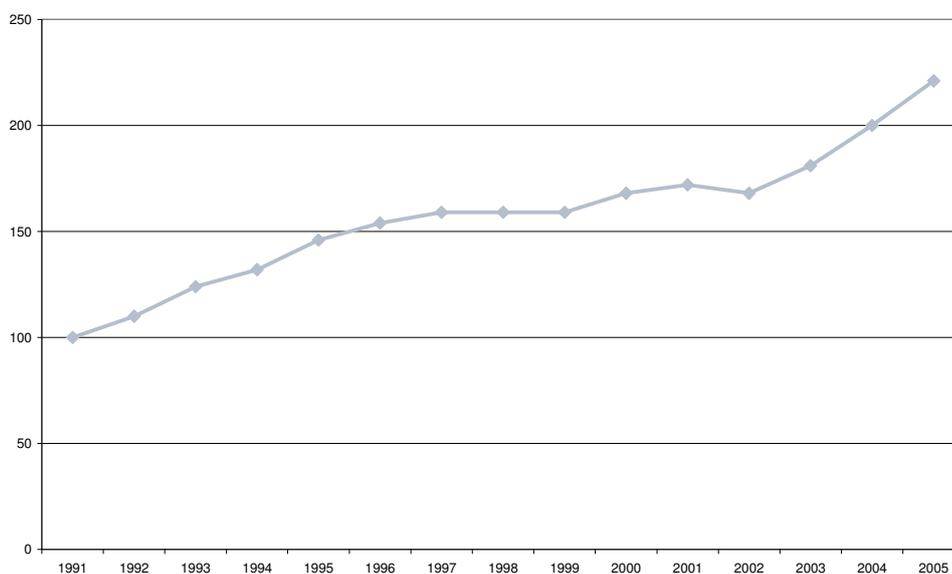
Disappointing financial results for many major airlines after 1999

At the same time, in chapter two we concluded that in a large part of the past decade the network carriers have posted disappointing financial results. Between 1999 and 2003 the major airlines in Europe posted heavy losses for five consecutive years. In 2001 after the 9/11 terror attacks, losses were by far the largest⁵⁹. In 2004 and 2005 the major airlines recorded (small) operating surpluses. AEA expects that, although demand since 2004 is strong, profit margins of AEA airlines will remain small⁶⁰.

As was also pointed out in chapter 2, the disappointing financial results forced many major airlines to restructure their operations. The database of the European Industrial Relations Observatory (EIRO) shows many examples of these restructuring operations in the period 1999-2004. In some cases it also included redundancies. The EIRO database also shows the difficulties of companies like Swissair, Sabena, and Air Libert , which went bankrupt during that period⁶¹.

Figure 3.5 shows that the restructuring operations have led to a strong increase of staff productivity (in terms of ATK/employee) since 2005, implying that the same number of employees now has more work to do.

Figure 3.6 Development of staff productivity (ATK/employee) of AEA airlines, adjusted for constant membership, 1991=100



Source: AEA.

An important annotation with productivity shown in figure 3.5, is that outsourcing and hiving off activities such as aircraft maintenance, ground handling, catering and IT by many airlines, is also likely to have played an important part in the development. Employees that were formerly employed by airlines, through outsourcing and hiving off were transferred to another company that in most cases are not counted in the statistics of

59 Source: AEA, AEA Yearbook 2005 and AEA Yearbook 2006.

60 Source: AEA, AEA Yearbook 2005 and AEA Yearbook 2006.

61 www.eurofound.eu/eiro.

airline employment. Apart from outsourced activities that were taken over by ground handling companies, other airlines or airport authorities, such employees are not counted as employees of the EU air transport sector in our study. This however of course does not mean that the employment was lost and is no longer related to the air transport sector.

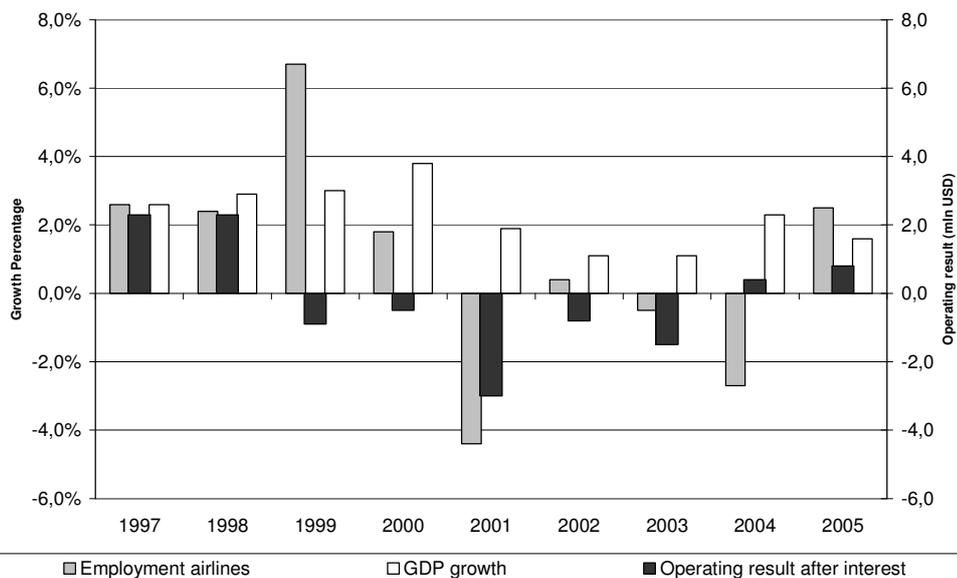
Relation between economic growth, financial results and the development of employment

There is a strong relationship between the profitability of a sector and the development of employment. In sectors in which profits are under pressure employers are forced to implement reorganisations, often with negative employment consequences. Figure 3.3 shows that the main increases in airline employment were realised in the period 1997-1999, a period with relatively high operating results for the majority of airlines in the EU-15. In 2000, employment continued to grow while operating profits of airlines were already in the red.

The relationship between the development of employment and economic development is less strong than the relation between employment and profitability. Figure 3.7 shows that only during 1997-1999 and in the year 2005 employment at AEA carriers developed synchronous with economic growth. The other years reflect a less clearer relationship, which could be the result of factors on the cost side (fuel costs) and the competition side (downward pressure on ticket prices) have become more important during these years. Despite this fuzzy relationship, trade unions and employers considered in our survey economic growth to be one of the main influential factors for the development of employment in air transport sector. This can be explained with the fact that the airline business traditionally is a relatively cyclical sector.

In figure 3.6 the influence of September 11th and SARS on the operating profits and the development of employment (2001 and 2004) can also be clearly seen.

Figure 3.7 Relation between the development of airline employment, operating results of AEA airlines and GDP growth in the EU-15, 1997-2005



Source: Employment: Estimation ECORYS based on EUROSTAT, AEA and airline annual reports, GDP: Eurostat, Operating results: AEA.

3.3 Non-airline employment

3.3.1 Introduction

In this section we discuss the development of the (direct) employment for workers in the air transport sector that are not employed by airlines. Successively we discuss the employment within EU-15 airport operators, private ground handling companies and ATM-organisations.

3.3.2 Airport operators

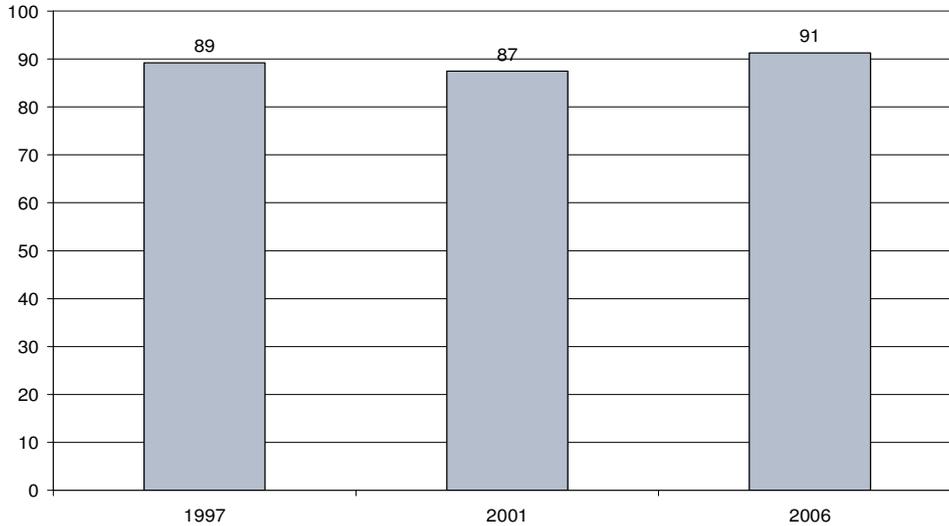
Our analysis of the development of the employment within airport operators in the EU-15 is based on the results of the survey that was sent to all ACI Europe members. Ten airport operators in the EU-15 provided us with figures of the development of employment in their organisations⁶². Although that is only a small number of airport operators, these operators do represent approximately one third of the number of passengers that are processed by airports in the EU-15. We reweighed the survey results by correcting the development in the airports that responded for the development of the number of passengers in other EU airports in respectively 1998, 2001 and 2007. This was done on the basis of ACI data. The airport employment presented in the 1997 DM Barry report was used as a starting point for the time series⁶³.

Based on the analysis described above we estimate that employment within EU-15 airport operators over the period 1997-2006 has remained stable at around 90,000 employees (see figure 3.8). Between 1997 and 2001 employment decreased by 2 percent. In the period 2001-2006 there was a recovery in employment.

⁶² These airport operators are based in Germany, the United Kingdom, Ireland, Portugal, and Sweden.

⁶³ DM Barry & Associates et al., *Study on the social effects of changes in the civil aviation sector, final report*, report prepared for Commission of the European Communities, DG Employment and DG Transport, October 1997

Figure 3.8 Development of employment within airport operators in the EU 15 (x 1,000)



Source: Estimation ECORYS based on DM Barry & Associates (1997), the employers survey and ACI Europe passenger statistics.

In 1997 it was expected that employment in airport operators in the EU-15 would decrease in the following years as a result of the transfer of functions to other types of organisations (private ground handling companies, catering firms, security companies, etcetera).⁶⁴ The liberalisation of the ground handling market was expected to accelerate this trend. In the interviews the stakeholders engaged in airport operations confirmed that the trend towards a transfer of functions to other service providers has occurred (see also section 3.3.3). At the same time it is considered likely that the downward trend was compensated by an upward trend caused by the increase of the number of passengers and the amount of cargo transferred through airports in the EU-15 in the past 10 years (see also chapter 2). According to ACI-Europe, new security regimes after 9/11 have also led to much employment: Security employment can run up to 41 percent of total employment at the airport. As a result employment at airport authorities has remained stable.

3.3.3 Ground handling companies

There are no EU wide statistics available on the development of employment in private ground handling companies. However, there are indications that employment in ground handling companies grew fast in the past 10 years. In 1996 approximately 13,000 employees were employed by private ground handling companies⁶⁵. The IAHA estimates that by 2007 the private ground handling companies employ approximately

⁶⁴ DM Barry & Associates et al., *Study on the social effects of changes in the civil aviation sector, final report*, report prepared for Commission of the European Communities, DG Employment and DG Transport, October 1997.

⁶⁵ DM Barry & Associates et al., *Study on the social effects of changes in the civil aviation sector, final report*, report prepared for Commission of the European Communities, DG Employment and DG Transport, October 1997.

60,000 employees in the EU⁶⁶. The large majority of those employees are based in the EU-15.

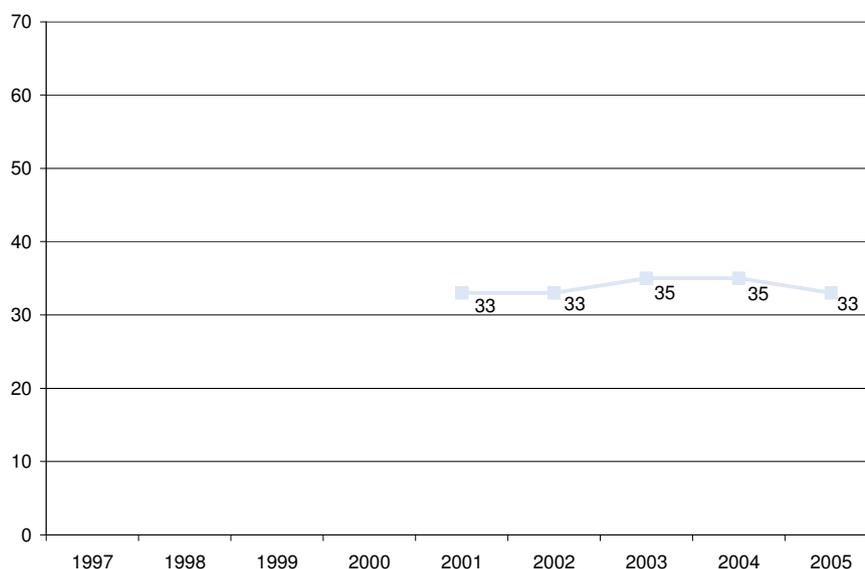
Another source of information regarding the development of employment in ground handling companies is the inquiry we made with the large ground handling companies in the EU-15. Their employment (in the EU-15) in 2006 was five times the number of persons they employed in 1997. This growth was accomplished by mergers and acquisitions and by an increase in the number of contracts in EU-15 airports.

The strong increase in employment in private ground handling companies can be seen as a result of the introduction of competition in the EU ground handling market and a trend of outsourcing of ground handling tasks by airlines and airport operators to private service providers.

3.3.4 Air traffic management

Employment figures for ATM-organisations in the EU-15 are only available for the period from 2001 onward. Figure 3.9 shows that employment in ATM in the EU-15 between 2001 and 2004 increased by 4.2 percent from 33,239 employees to 34,658 employees and in 2005 decreased to 33,077.

Figure 3.9 Employment in ATM in the EU-15, 1997-2005 (x 1,000)



Source: estimation ECORYS based on the ATM cost effectiveness benchmark reports 2001-2007 of Eurocontrol.

The development in the number of employees seems to have affected air traffic controllers in particular. As depicted in table 3.1, the number of ATCOs in OPS in the 15 EU Member States has increased from 10108 in 2001 to 11593 in 2005. The number of technical support staff on the contrary, has decreased between 2001 and 2004, with the

66 Source: estimation of the IAHA.

exception of 2003 when there was a strong increase. It is not possible to make conclusive statements concerning the decrease in technical support staff in the years 2001, 2002, 2004. One reason for the decrease could be that research and development of safety and system engineering and the like has been outsourced to specialised ICT-companies and/or shared between ANSP's. The share of technical support staff might even decrease further in the near future as soon as European ANSP's start to use a more similar technical infrastructure in the framework of the Single European Sky. Similar systems across Europe ultimately require less technical staff (engineers) for maintenance for example.

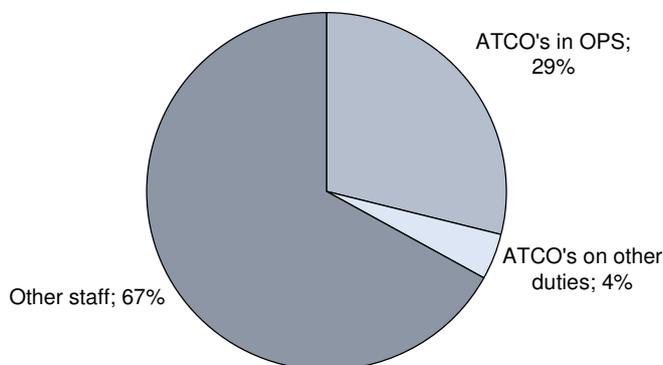
Table 3.1 ATCO in OPS and technical support staff at European ANSP's 2001– 2005

	2001	2002	2003	2004	2005
ATCO in OPS	10108	10535	11393	11473	11593
Technical support staff	8579	8569	9129	8152	-

Source: Eurocontrol ACE data

Figure 3.10 shows the breakdown of staff in ANSP's in Europe in 2004. One third of staff works as an air traffic controller.

Figure 3.10 Breakdown of European ANS system staff in 2004



Source: Eurocontrol, ACE 2004 Benchmarking report

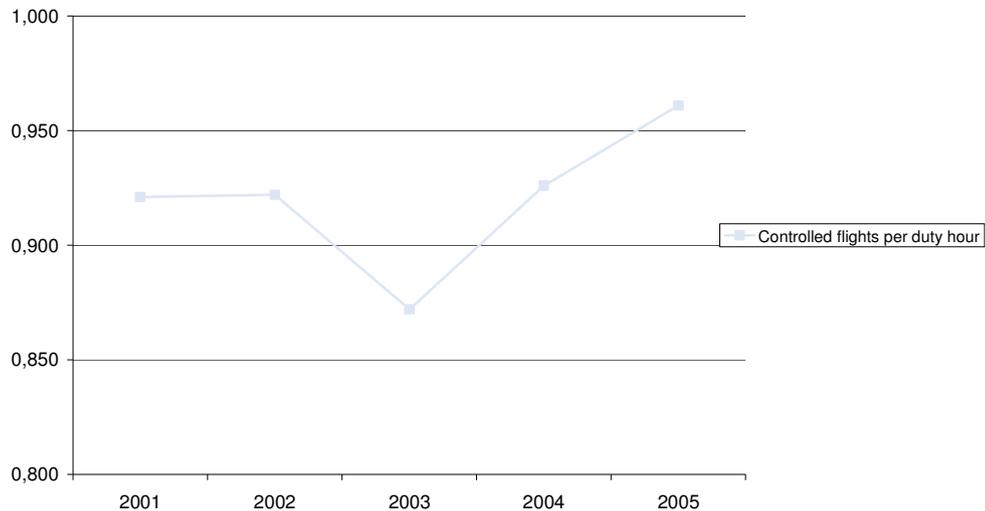
Given the strong growth of air traffic and the stable total employment figure in the same period, the productivity of ANSP's is likely to have increased significantly. Productivity is measured as the ratio of flight hours controlled divided by ATCO-hours on operational duty (ATCO in OPS)⁶⁷. Figure 3.11 shows this increase. While air traffic controllers in the EU15 controlled on average 0,921 flights per duty hour in 2001, this number increased to 0,961 average controlled flights per hour in 2005⁶⁸. According to Eurocontrol, the increases in productivity at European ANSP's since 2002 are mainly due to air traffic increasing at a faster rate than the number of hours worked by air traffic

67 EUROCONTROL (2004). PRR nr. 6 2003, p. 38.

68 Cf. Eurocontrol. ACE data. The operational environment differs significantly between European ANSP's. Some ANSP's like DSNA, DFS, Belgocontrol and NATS naturally control more complex and dense sectors than other ANSPs do. The figures do not take these differences into account.

controllers⁶⁹. Productivity can also improve when ATCO-hours on duty decline. This has not happened: ATCO-hours on duty in the EU increased from 14.118.198 hours in 2001 to 15.828.041 hours in 2005⁷⁰.

Figure 3.11 Development of the average level of productivity of ATCOs in the EU15.



Source: Eurocontrol ACE data

Beyond the differences explained by variations in complexity, there still are large differences in productivity between ANSP's across the EU-15. A comparison of ANSP's in the four largest EU Member States in Figure 3.12 illustrates these differences. While productivity increased only at DFS, it decreased at AENA, DSNA, and NATS. Moreover, ANSP's which operate on the basis of a commercial business model (NATS is fully privatised and DFS is a private law company with the German state as its shareholder) achieve an above average level of productivity than ANSP's that belong to the public administration (AENA and DSNA)⁷¹. Increases in productivity can be achieved by optimising processes for ATM/CNS provision, a more effective usage of resources, adapting sector opening times to traffic demand patterns and improved operational room management⁷². Because commercialised ANSP's (DFS and NATS) are expected by governments to become completely financially self-sufficient⁷³, their above average level of productivity might result out of such latter measures. There should be room for increasing the level of productivity at European ANSP's because the level of productivity at the American FAA was in 2002 on average 29 percent higher than the EU average. The implementation of the Single European Sky is likely to stimulate improvements in ATCO-productivity in the EU and beyond.

69 Cf. EUROCONTROL (2007). ACE 2005 Benchmark report.

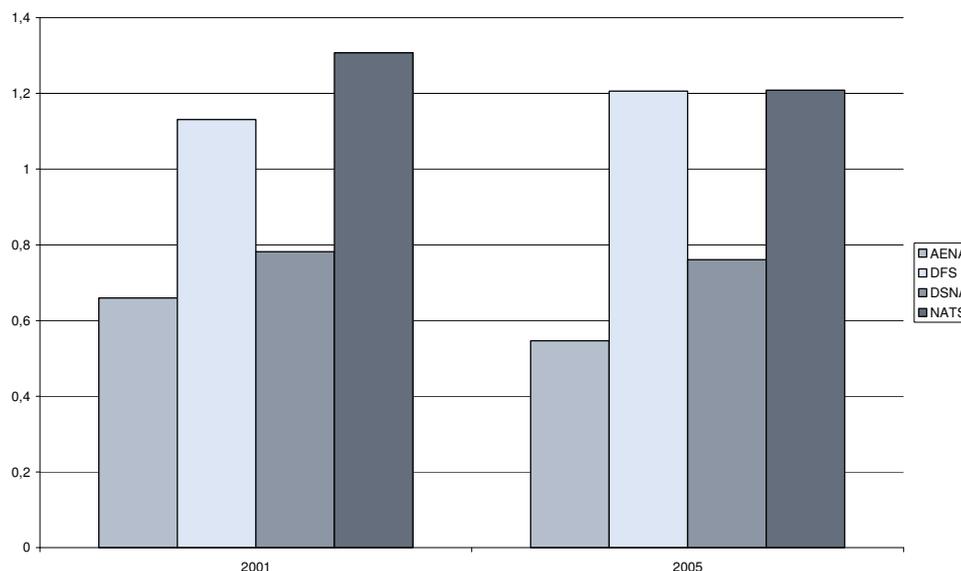
70 Source: EUROCONTROL ACE data.

71 Please consult the McGill Report (2005) on the different legal status of ANSP's. Cf. Dempsey et al. (2005). *The McGill Report on Governance of commercialized Air Navigation Services*.

72 Cf. EUROCONTROL (2007). ACE 2005 Benchmark report.

73 Cf. Dempsey et al. (2005). *The McGill Report on Governance of commercialized Air Navigation Services*.

Figure 3.12 Development of the level of productivity of ATCOs at ANSP's in the largest EU Member States



Source: Eurocontrol ACE data.

3.4 Conclusion

Based on the analysis described above we can conclude that employment in the EU-15 air transport sector in the period 1997-2007 has grown.

For the largest subpart of the sector (airlines) employment growth has equalled 6 percent over the total period (until 2005). The development of airline employment has not been a straight line upwards. Until 2000 employment grew on the waves of a growth in air traffic. In 2001 air line employment dropped by four percent and since then has remained stable (until 2005).

In comparison with the development of total employment in the EU 15, the air transport sector performed with a growth rate of 6 percent below EU-average over the period 1997-2005. While employment in the sector developed between 1999-1997 above the EU average, this performance was annulled in the period 2000-2004 when employment growth developed significantly below the EU average of 11 percent.

There are many factors that have influenced the development of airline employment in the past ten years. The most obvious factors seem to be the strong growth in air traffic (positive influence) but also the financial crisis in many EU airlines in the period 1999-2004 (negative influence). In chapter 2 we illustrated these two factors. The measures taken to increase the profitability of EU airlines resulted in strong growth in labour productivity as of 2002. This increase might imply that more work is performed by the same number of employees and/ or that activities were outsourced.

Concerning non-airline employment we concluded in section 3.3 that we estimate that employment in airport operators remained more or less stable during the total period 1997-2007, while employment in private ground handling companies has grown well. For

employment in ANSP's data is only available for the period 2001-2005, in that period employment in ANSP's remained stable at around 37,000 employees. The productivity of ANSP's has increased in that period.

4 Development in remuneration and contracts

4.1 Introduction

Chapter 4 discusses developments in the remunerative packages and contractual developments for air transport staff in the EU-15. The analysis is mainly based on the results of the survey that we sent to trade unions and employers and the interviews that we conducted with representatives of trade unions and employers on an international level and in Spain, Germany, France and the UK. In addition we have analysed available international information sources such as Eurostat statistics, data from the European Working Conditions Survey 2005 and the European Industrial Relationship Observatory.

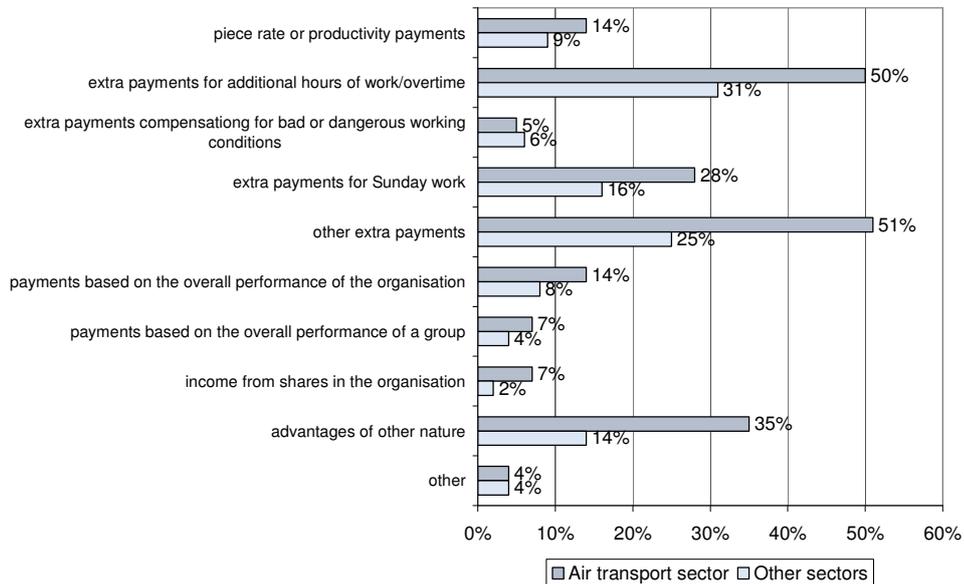
Regarding the results of the survey among trade unions and employers, the following remarks should be made in advance: the response of the employer's survey was relatively low. Therefore the presented results can not be considered as representative of all employers in the sector, but rather as indicative. The presented results for the trade unions are more representative. For instance, for flight crew trade unions from 14 out of 15 EU member states have filled in the questionnaire⁷⁴.

4.2 Developments in the remunerative package

Figure 4.1 shows that the remuneration package for workers in the air transport sector more than average includes extra payments or variable wage components.

⁷⁴ See section 1.3.4 and Annex III for further details.

Figure 4.1 Share of workers in the air transport sector and other sectors whose remuneration include the following types of payments (2005)



Source: EFWLC, European Working Conditions Survey 2005

Workers in the air transport sector in general feel that they are well paid for the work they do. Compared to other sectors more workers are satisfied with the level of their remuneration⁷⁵. Nonetheless, as will be shown in the sections below, there have been important changes in the remuneration package of air transport staff in the past ten years.

4.2.1 Developments in the remuneration package of flight and cabin crew

The level of remuneration

In a sector such as the air transport industry where a large part of total costs are fixed costs (such as fuel, maintenance and security) an important way to cut expenses is freezing or reducing wages. In chapter 2 and 3 we concluded that in the period 1999-2003 many airlines in the EU-15 posted negative financial results. The airlines concerned were forced to implement measures to improve their financial position. In the period following September 11th 2001 a number of analyses were made on the response of the air transport industry to the financial crisis it was in that period. Those analyses among others show that compared to US airlines the EU-15 airlines relatively often have used the wage instrument to cope with the situation. Where US airlines soon after September 11th cut a large number of jobs, most EU airlines in consultation with trade unions implemented alternative measures, including in many cases the freezing or reduction of wages⁷⁶.

75 Source: Analysis of ECORYS on the data of the EFLWC European Working Conditions Survey 2005. The results of the EFLWC survey show that 60% of air transport workers feel that they are well paid for their work, compared to 43% of the workers on other sectors.

76 Sources: DG Employment and Social Affairs, Industrial change and employment: the civil aviation sector, Brussels, 13 march 2002, EMPL/A.1/MSiM D (2002) and EFILWC, report on the aviation sector, an analysis of EIRO articles, Dublin 2001

Despite these measures the results of the survey among trade unions and employers show that trade unions and employers assess that the remuneration package of flight crew in the EU-15 over the total period 1997-2007 has improved fairly⁷⁷. Overall trade unions and employers assess that the total remunerative package for flight crew has increased at least in pace with the development of the national average pay increases. This being said, in the interviews pilot trade unions stated that the increase in their remuneration in the past ten years has been below expectations. As one of the trade union representatives formulated: ‘Wages for pilots have increased along inflation and the average national pay increase, but we are no longer at the top of the ranking of highest paid professions. Other similar professions have seen pay increases that are considerably higher than the increase for pilots.’

Table 4.1 Assessment of the development of the total remunerative package for flight crew and cabin crew compared to inflation and the development of the national average

	Flight crew		Cabin crew	
	According to employers	According to trade unions	According to employers	According to trade unions
Exceeded inflation	5 (71%)	4 (29%)	3 (50%)	0 (0%)
In pace with inflation	2 (29%)	6 (43%)	2 (33%)	8 (57%)
Lagged behind inflation	0 (0%)	4 (29%)	1 (17%)	6 (43%)
Exceeded development of national average	2 (29%)	2 (15%)	1 (17%)	0 (0%)
In pace with national average	5 (71%)	7 (54%)	4 (67%)	8 (57%)
Lagged behind development of national average	0 (0%)	4 (31%)	1 (17%)	6 (43%)
Total	7 (100%)	14 (100%)	6 (100%)	14 (100%)

Source: survey employers and survey trade unions

In comparison to flight crew, trade unions are less positive regarding the development of remuneration of cabin crew (see table 4.1). Still, a majority of trade unions (57%) assess that remuneration for the cabin crew they represent has developed in line with the national average wage increase. Employers have a different assessment. The employers that responded to our questionnaire are somewhat more positive than trade unions in their assessment. Only 1 (out of 6) of the responding employers state that in their organisation remuneration for cabin crew has lagged behind inflation and the development of average national wage increases in the past ten years.

In the interviews trade unions stated that in the period 2001-2004, wages for cabin crew have been frozen or cut by many airlines. According to ETF the effect of these wage measures in many Member States have not yet been recovered. Table 4.1 shows that on a national level 6 out of 14 trade unions share the assessment of ETF (43%).

⁷⁷ In our survey most pilot trade unions (67%) claimed that the wage conditions for their members in the past 10 years have improved fairly.

Seniority and flexible/variable wage components

In most traditional airlines in the EU-15, seniority is still the basis for remuneration of both flight crew and cabin crew. New entrants in the low-cost market have adopted a different model in which crew is not remunerated and/or promoted by seniority but by competence and/or productivity. Across the EU-15, the share of variable or flexible wage components for flight crew and cabin crew has increased (see table 4.2). The interviews show that traditional and low cost airlines have introduced flexible wage components. Remuneration is increasingly linked to productivity and to the financial results of the company. For flight crew the variable wage component is often linked to the number of flying hours per month. Cabin crew in some airlines can earn a bonus for sales on board.

Table 4.2 Extent to which the share of variable wage components for flight crew and cabin crew has increased or decreased between 1997 and 2007

	Flight crew		Cabin crew	
	According to employers	According to trade unions	According to employers	According to trade unions
Increased to a large extent	1 (13%)	2 (14%)	0 (0%)	1 (7%)
Increased somewhat	2 (25%)	7 (50%)	4 (57%)	6 (40%)
No changes	4 (50%)	2 (14%)	3 (43%)	3 (20%)
Decreased somewhat	0 (0%)	3 (21%)	0 (0%)	3 (20%)
Decreased to a large extent	1 (13%)	0 (0%)	0 (0%)	1 (7%)
Not relevant	0 (0%)	0 (0%)	0 (0%)	1 (7%)
Total	8 (100%)	14 (100%)	7 (100%)	15 (100%)

Source: survey employers and survey trade unions

Data published by pilot trade union ECA suggests that the share of flexible wage components for flight crew in LCC's is significantly higher than in FSC's. According to ECA the proportion of the variable component in the total pay of flight crew at a typical LCC is around 25 percent, whereas at the average FSC it is 3 percent. The analysis of ECA also shows that among LCC's there is a large variety in the share of the variable component in wages⁷⁸.

Two-tier wage scales

Since the beginning of the 1990s many traditional airlines have introduced new wage-scales for recently or new hired employees. In most cases this implies that newly recruited staff receives a more restrained remuneration than was previously offered to recruited staff. Most common is that new staff is paid less than formerly hired staff, but also more restrained pension schemes or expense fees are common. In some cases the possibilities for salary growth are also more limited because of a reduction of wage scales. However, it is also possible that the total remuneration package is equal, but that more variable components are introduced⁷⁹.

⁷⁸ Source: ECA, *Upheaval in the European Skies, Low Cost Carriers in Europe: economic data, market and pilot demand forecast, second edition*, June 2006.

⁷⁹ DM Barry & Associates et al., *Study on the social effects of changes in the civil aviation sector, final report*, report prepared for Commission of the European Communities, DG Employment and DG Transport, October 1997

The results of the trade union survey show that according to their knowledge most EU traditional airlines currently have a two tier wage system in place for cabin crew. For flight crew the secondary wage scale seems less common (in most countries less than 50 percent of all airlines have a b-scale for cabin crew according to trade unions).

The results of the interviews and the employer’s survey show that most of the secondary wage scales were already introduced before 1997. As time goes by since the introduction of the secondary wage scale, a greater number of total staff is working under the more restrained remuneration package.

Social benefits

In the period since 1997 a further restructuring of the social benefits offered to air transport employees has taken place. In line with the EU wide actions to overcome the economic effects of the aging EU population, the restructuring of social benefits have mainly been concentrated in the area of pensions and early retirement. In 4 out of the 8 airlines that answered our survey, the retirement age for flight crew and cabin crew has been raised. Also an austerity of the additional pension schemes of flight crew and cabin crew was carried out in many airlines across the EU. The level of contributions from staff has in many cases increased while the generosity of benefits has decreased.

4.2.2 Air traffic controllers

The interviews and the survey indicate that the majority of trade unions and employers that responded to our questionnaire assess that wages for air traffic controllers have increased in pace with, or exceeded the national average pay increase. In table 4.3 trade unions are more reserved about the development of wages than employers. Still, only one of the responding trade unions assesses that its members have experienced a remuneration development that lagged behind inflation and the average national pay increase.

According to CANSO wages increased especially for new air traffic controllers employed by privatised air navigation service providers. While air traffic controllers employed by the state saw only average wage increases (in line with collective agreements for the public sector), privatised providers like NATS or DFS were able to offer more competitive remunerative packages. Air traffic controllers which were already working at NATS and DFS prior to the privatization usually receive remuneration on the basis of public sector agreements.

Table 4.3 Assessment of the development of the total remunerative package for air traffic controllers compared to inflation and the development of the national average

	According to employers	According tot trade unions
Exceeded inflation	4 (80%)	3 (25%)
In pace with inflation	0 (0%)	8 (67%)
Lagged behind inflation	1 (20%)	1 (8%)
Exceeded development of national average	4 (80%)	3 (25%)
In pace with national average	1 (20%)	8 (67%)
Lagged behind development of national average	0 (0%)	1 (8%)
Total	5 (100%)	12 (100%)

Source: survey employers and survey trade unions

4.2.3 Ground handling staff

With the introduction of more competition in the ground handling market (see chapter 1 and 2), many trade unions complained that the jobs of ground handling staff have become less secure than in the old situation. The loss of a licence at an airport or the loss of a contract with a large airline in most cases means a big loss of employment for the staff of the service provider involved. At the same time, another service provider at the same airport, after winning a new license or contract, will be hiring a large amount of new staff⁸⁰.

In order to increase job security for ground handling staff in Spain, trade unions and ground handling service providers have agreed on a compulsory take over of staff when a license or contract is lost to another service provider⁸¹. The new employer is obliged to offer the staff coming from the service provider that has lost the licence or contract, the same wage conditions as their former employer. It has not been clarified whether this collective agreement is compatible with the EU ground handling directive.

In Germany legislation was adopted that facilitated a similar arrangement as in Spain. However, in 2005 the European Court of Justice (ECJ) ruled that the German legislation violated EU law⁸². The court ruled that an obligation to transfer staff from employers who do not provide ground handling activities anymore to new providers would harm competition because it significantly increases the costs of market access. The fact that the German law differentiates between airport operators on the one hand and self handlers and independent ground handlers on the other was considered as particularly problematic, because it allowed the airport operator to shift costs of those employees which he cannot employ anymore to the new entrants. The ECJ reached the same conclusions in a second case concerning Italian legislation⁸³.

Despite these attempts to keep the wage conditions of ground handling staff intact, half of the trade unions across the EU point out that the development of wages for ground handling staff in their country have both lagged behind inflation and the average national wage increase. From the side of the employers that responded to our questionnaire the assessment is more diverse. Seven out of twelve employers state that in their organisation the wages for ground handling staff have exceeded or developed in pace with inflation and the national average pay increase. Still, more than one third of employers stated that the development of wages in their organisation lagged behind inflation. This is significantly higher than in the other three analysed professions.

80 The European Transport Federation (ETF) considers the job insecurity for staff as the most important issue for improvement of the social rights in the ground handling sector. ETF's position is that a ground handling company that partially or totally takes over a license or contract from another service provider should have the obligation to accept the employees of the company that has lost the contract or license under the same wage and working conditions as they had with their former employer. Source: ETF position paper on the transfer of staff in the European ground handling sector.

81 Such arrangements were also introduced in France, according to the IAHA.

82 C-386/03: European Commission versus the Federal Republic of Germany.

83 ECJ judgement of 9 December 2004 in case C-460/02.

Table 4.4 Assessment of the development of the total remunerative package for ground handling staff compared to inflation and the development of the national average

	According to employers	According tot trade unions
Exceeded inflation	3 (25%)	1 (7%)
In pace with inflation	4 (33%)	5 (33%)
Lagged behind inflation	5 (42%)	9 (60%)
Exceeded development of national average	2 (18%)	1 (7%)
In pace with national average	5 (45%)	8 (53%)
Lagged behind development of national average	4 (36%)	7 (47%)
Total	12 (100%)	15 (100%)

Source: survey employers and survey trade unions.

In the interviews one of the employers in the ground handling sector stressed that they did not lower wages in order to be more competitive, but that the real change was that they now expect more flexibility from their staff then in the past. An increasing number of their employees are working on stand by contracts or min-max contracts, which offer the employer a maximum of flexibility.

4.3 Development of contractual conditions

Traditionally air transport employees in the EU were recruited under unlimited term contracts. Employees (especially flight crew) spent their whole career at the same company. Of course there were exceptions to this rule. For instance, charter airlines and airport operators also hired staff only for the summer period under seasonal contracts. Employers in the sector had already started to recruit more of their personnel on a fixed term basis before 1997⁸⁴. This gives the employers more flexibility in number of employees and personnel expenses.

Table 4.5 shows that by 2006 the majority of workers in the air transport sector were still working full time and under permanent contracts. In the past ten years there has been a strong growth in the use of part time contracts in the sector (form 9% in 1997 to 19% in 2006). The share of workers with a fixed term contract has also increased but at a much slower pace.

Table 4.5 Development of the share of workers in the air transport sector (NACE 62) in part time and fixed term contracts, EU-15, 1997-2006

	1997	2000	2006
% full time contracts	91%	87%	81%
% part time contracts	9%	13%	19%
% permanent contracts	91%	90%	89%
% fixed term contracts	9%	10%	11%

Source: Eurostat, Labour Force Survey.

84 For instance contracts for 1 year. Source: DM Barry & Associates et al., *Study on the social effects of changes in the civil aviation sector, final report*, report prepared for Commission of the European Communities, DG Employment and DG Transport, October 1997.

4.3.1 Flight crew

The interviews and the results of the questionnaire show that in the past ten years trends in contracts for flight crew have been diverse. A number of airlines and network carriers, but also some point-to-point carriers, have not changed their policy or have in recent years even returned to the recruitment under unlimited term contracts. This mainly is the case in markets where the demand for qualified (i.e. type-rated) flight crew in recent years has increased (such as the UK). At the same time, a small number of airlines have started working with flight crew on very short time contracts (3 to 6 months) or through temporary employment agencies. These short term contracts suggest that in the past ten years a shell of flexible flight crew has emerged that can be used by airlines whenever they need temporary extra manpower.

Table 4.6 Development in the type of contracts under which flight crew work in the EU 15, 1997-2007

	Increased	Decreased	No change	Not relevant
According to employers				
Share with unlimited contact	5 (63%)	0 (0%)	2 (25%)	1 (13%)
Share with fixed-term contract	2 (25%)	1 (13%)	1 (13%)	4 (50%)
Share via temp agencies	2 (25%)	0 (0%)	2 (25%)	4 (50%)
Share with full time contract	5 (63%)	1 (13%)	2 (25%)	0 (0%)
Share with part time contract	5 (63%)	0 (0%)	1 (13%)	2 (25%)
Share with flexible contract	0 (0%)	0 (0%)	1 (13%)	6 (86%)
According to trade unions				
Share with unlimited contact	5 (39%)	2 (15%)	1 (8%)	5 (39%)
Share with fixed-term contract	5 (42%)	0 (0%)	5 (42%)	2 (17%)
Share via temp agencies	4 (31%)	2 (15%)	4 (31%)	3 (23%)
Share with full time contract	8 (57%)	4 (29%)	2 (14%)	0 (0%)
Share with part time contract	9 (64%)	0 (0%)	3 (21%)	2 (14%)
Share with flexible contract	5 (36%)	1 (7%)	4 (29%)	3 (21%)

Source: survey employers and survey trade unions

4.3.2 Cabin crew

Both employers and trade unions assess that, in comparison to 1997 the share of cabin crew working under fixed term contracts has increased (see table 4.7). In the interviews it was stressed that this is only partly due to a change in policy by traditional airlines. Rather the entrance of new airlines to the market which work under more flexible terms seems to have increased the share of fixed term contracts for cabin crew.

Table 4.7 Development in the type of contracts under which cabin crew work in the EU 15, 1997-2007

	Increased	Decreased	No change	Not relevant
According to employers				
Share with unlimited contract	5 (71%)	0 (0%)	1 (14%)	1 (14%)
Share with fixed-term contract	4 (50%)	1 (13%)	1 (13%)	2 (25%)
Share via temp agencies	3 (42%)	0 (0%)	0 (0%)	4 (58%)
Share with full time contract	5 (71 %)	2 (29%)	0 (0%)	0 (0%)
Share with part time contract	6 (86%)	0 (0%)	0 (0%)	1 (14%)
Share with flexible contract	1 (14%)	0 (0%)	0 (0%)	6 (86%)
According to trade unions				
Share with unlimited contract	5 (36%)	5 (36%)	2 (14%)	2 (14%)
Share with fixed-term contract	9 (69%)	0 (0%)	2 (15%)	2 (15%)
Share via temp agencies	6 (40%)	2 (13%)	6 (40%)	1 (7%)
Share with full time contract	7 (50%)	0 (0%)	3 (21%)	4 (28%)
Share with part time contract	5 (38%)	0 (0%)	1 (8%)	7 (53%)
Share with flexible contract	7 (50%)	0 (0%)	3 (21%)	4 (29%)

Source: survey employers and survey trade unions.

4.3.3 Air traffic controllers

Air traffic controllers are traditionally hired when they leave school, trained by the ANSP and recruited into a full time, unlimited term contract. There have not been many changes to that situation in the past ten years. The results of the survey suggest a light trend towards more part time contracts and more fixed term contracts. Flexible contracts are not common among air traffic controllers.

CANSO commented that ‘flexible’ limited term contracts are becoming a practice only at privatised ANSP’s. Air traffic controllers employed by the state normally enjoy unlimited contracts. Because new air traffic controllers working for NATS or DFS earn more salary, CANSO signals a ‘trade-off’ between the level of remuneration on the one hand and the level of employment protection at the other.

Table 4.8 Development in the type of contracts under which air traffic controllers work in the EU 15, 1997-2007

	Increased	Decreased	No change	Not relevant
According to employers				
Share with unlimited contract	0 (0%)	1 (20%)	3 (60%)	1 (20%)
Share with fixed-term contract	1 (20%)	0 (0%)	2 (40%)	2 (40%)
Share via temp agencies	0 (0%)	0 (0%)	1 (20%)	4 (80%)
Share with full time contract	0 (0%)	3 (60%)	2 (40%)	0 (0%)
Share with part time contract	3 (60%)	0 (0%)	0 (0%)	2 (40%)
Share with flexible contract	0 (0%)	0 (0%)	1 (25%)	3 (75%)
According to trade unions				
Share with unlimited contract	5 (42%)	0 (0%)	6 (50%)	1 (8%)
Share with fixed-term contract	2 (18%)	1 (9%)	1 (9%)	7 (64%)
Share via temp agencies	0 (0%)	1 (10%)	3 (30%)	6 (60%)
Share with full time contract	4 (31%)	0 (0%)	6 (46%)	3 (23%)
Share with part time contract	2 (18%)	1 (9%)	4 (36%)	4 (36%)
Share with flexible contract	0 (0%)	1 (10%)	3 (30%)	6 (60%)

Source: survey employers and survey trade unions

4.3.4 Ground handling staff

In light of the developments that were discussed in section 4.2.3, it is not surprising that the results of the survey show that both trade unions and employers perceive that there has been an increase in fixed term and temporary contracts in the past ten years for ground handling staff (see table 4.9).

Table 4.9 Development in the type of contracts under which ground handling staff works in the EU 15, 1997-2007

	Increased	Decreased	No change	Not relevant
According to employers				
Share with unlimited contact	5 (42%)	5 (42%)	2 (17%)	0 (0%)
Share with fixed-term contract	4 (33%)	3 (25%)	1 (8%)	4 (33%)
Share via temp agencies	7 (58%)	0 (0%)	2 (17%)	3 (25%)
Share with full time contract	6 (50%)	4 (33%)	2 (17%)	0 (0%)
Share with part time contract	6 (50%)	1 (8%)	3 (25%)	2 (17%)
Share with flexible contract	4 (33%)	0 (0%)	1 (8%)	7 (58%)
According to trade unions				
Share with unlimited contact	4 (29%)	7 (50%)	2 (14%)	1 (7%)
Share with fixed-term contract	11 (73%)	0 (0%)	2 (13%)	2 (13%)
Share via temp agencies	5 (36%)	6 (43%)	2 (14%)	1 (7%)
Share with full time contract	11 (73%)	0 (0%)	2 (13%)	2 (13%)
Share with part time contract	12 (75%)	0 (0%)	2 (13%)	2 (13%)
Share with flexible contract	11 (73%)	0 (0%)	3 (20%)	1 (7%)

Source: survey employers and survey trade unions.

4.4 The introduction of the multibased airline: consequences for labour contracts and collective bargaining

A recent development in the EU air transport sector is the introduction of the multibased airline. The most well known examples are Ryanair and Easy jet which in the past years have both opened multiple bases across Europe. Ryanair for example feeds its network with aircrafts from London Stansted, Charleroi and other airports. Staff that operate from these bases are in most cases stationed (semi-)permanently at that base. In addition, LCCs like SkyEurope and WizzAir who have their main bases in Slovakia and Poland also operate from other bases in Central and Eastern European countries. Also, with the merger between Air France and KLM a “traditional” FSC has become a multinational enterprise, operating from both France and the Netherlands. Another important development is that one of the largest FSC’s in the EU (Air France-KLM) in 2007 announced intercontinental flights from London Heathrow to Los Angeles. Other FSC’s are expected to follow.

The establishment of multiple bases across Europe by single airlines raises questions concerning the labour laws which are applicable to staff operating from these bases. Different labour laws apply by definition in each EU Member State where bases are located. A law of one state could however apply to certain situations taking place on the

territory of another state by virtue of conflictual rules of law of the latter (the law of the second state allows the rules of the first one to be applied as the law of this second state makes them binding by reference, e.g. through international agreements).

The issue mainly centres around the question of whether employees who are based across Europe should work under labour laws of the Member State where an establishment through which they are engaged is located, or under the labour laws of the particular Member States where the employees are based.

The Charleroi case

The applicability of national labour law has become several times a “hot issue” for airlines in the EU. A Labour Court in Charleroi ordered an airline in 2005 to compensate three former cabin crew employees for unfair dismissal.⁸⁵ Another case constitutes a decree by which the French government restated in 2006 that airlines are supposed to apply French labour laws for air crews based in France.

The reason for the Charleroi judgement was a lawsuit against an airline by three former Belgian employees who were dismissed in 2002, just before their notice period finished. This notice period was part of their labour contracts which were established on the basis of legislation of the Member State of origin of the airline. The airliner was supposed to employ cabin crew in Belgium, as it did elsewhere in Europe, according to the conditions of the Member State in which it originally is based, because they worked most of the time on board of an Irish aircraft which was registered in that Member State.

The former members of the cabin crew claimed before the court that the dismissal was not in conformity with Belgian labour law. The court accepted this claim on the basis of the following arguments:

- Firstly, the court considered itself competent to judge in this instance because of EC Council Regulation 44/2001 of 22 December 2001, Art. 19, where it is stated that “an employer may be sued in the courts of a Member State other than the one where he is domiciled” when an employee ‘habitually carries out his work’ in this other Member State, i.e. Charleroi (BE)⁸⁶.
- Secondly, the court ruled on the basis of the Rome Convention of 19 June 1980 that Belgian law was applicable to the contract. The Rome Convention ‘allows’ parties to choose freely the law applicable to their contract and the Convention also states that in case of individual employment contracts the laws of the country where the worker habitually works should be applied if this freedom deprives the worker of the protection afforded to him by the mandatory rules of the law which would be applicable in the absence of choice. Art 6.2. of the Rome Convention furthermore states that the main rule in any case is the most close connection of the contract with a particular law. Because Belgian employment protection is more favourable to employees than the Irish legislation is, the court judged that all Belgian rules are applicable in this instance.

85 Tribunal du Travail de Charleroi (24.-3.2005). Jugement 2.086/05. *Madame Anne Legros versus Ryanair*.

86 Cf. Van Bael & Bellis (2005). *VBB on Belgian Business Law, Vol. 2005, no. 3*, p. 12. Internet: <http://www.vanbaelbellis.com/files/BE%2005%2003-150728A.pdf> Retrieved 24.09.07.

The airline was initially ordered by the Labour Court to pay compensation for the former crew's dismissal, holiday pay, overdue salary and various other salary components. In September 2007 however, the Appeal Court of Mons in Belgium declared that in this case, they have no jurisdiction over Belgian cabin crew employed by another EU carrier. The Belgian Labour Court has ruled that in the case of employees whose place of work – namely an aircraft – traverses borders and therefore jurisdictions, it is not possible to determine the country in which the employee habitually carries out his work, and that the only court competent to rule is one in the country where the employer is based and the aircraft registered. Following this new ruling, the claimants are proposing to bring the case to Belgium's Supreme Court.

This ruling addresses the issue from the point of view of the conflict of jurisdictions in the absence of a specific national law applicable. In any case, the principles of the Rome Convention are still valid.

The French decree

While the Labour court in Charleroi re-established the applicability of Belgian labour law as soon as foreign labour contracts for cabin crew threatened to undermine Belgian standards, the French opted at the end of 2006 for a more radical measure. With the decree 2006-1425 dating from 21 November 2006 the French labour law and the French aviation law were modified by two articles:

- The first article stated that airlines with an 'operational basis' in France were obliged to apply French labour laws to their staff. It is remarkable that the French government created the concept of "operation basis" because it is not defined at EU level. The concept refers to those airlines which perform air transport activities in a 'stable, habitual, and continuous way'.
- The second article clarified that this requirement applies to carriers which were licensed and established in France as well as those licensed and established in another EU Member State.

The launch of this decree should be viewed as a reaction to practices of a large US airline in the past. This US airline hired French staff at Paris CDG under American labour conditions which enabled them to dismiss staff much easier than French law allowed. French airlines complained that this meant unfair competition.

Some non-French EU airlines by that time had also established various bases in France, offering low cost flights and employing cabin crew under conditions of their country of origin. These airlines viewed the new Decree as illegal under European law, violating in particular the free movement of workers. As a reaction, they started a lawsuit against the French government in the beginning of 2007 demanding that the decree was annulled.

France's Conseil d'Etat dismissed the claim on the 12th of July 2007⁸⁷. The court ruled that the Decree nr. 2006-1425 is not contradictory to the Directive 96/71/EC concerning

⁸⁷ Conseil D'Etat (12.07.2007). Decision on the requests nr. 299787 and 3007114 made by Easyjet respectively Ryanair to have the Decree 2006-1425 annulled.

the posting of workers in the framework of the provision of services, because this Directive is only applicable to a *temporary* posting of staff. According to the court, the decree sufficiently defines the concept of “operational base” in the first article and this concept refers by no means to activities of a temporary nature: “...à partir desquels une entreprise exerce de façon stable, habituelle et continue une activité de transport aérien avec des salariés qui y ont le centre effectif de leur activité professionnelle.”

The Conseil d’Etat was neither convinced that the Decree violates Council Regulation (EEC) No 2408/92 of 23 July 1992 on access for Community air carriers to intra-Community air routes. It decided that the legal conditions set in the Decree are applicable both to airlines with a French license and to airlines licensed and established in another EU member states and that this in no way harms access to the French air transport market.

Reactions from employers and trade unions

In the interviews with airlines and trade unions for our study the issue described above was raised several times:

- Most of the trade unions we interviewed welcomed the decision of the French court because (according to them) it has made it more difficult for airlines to ‘exploit’ employees that are contracted under labour laws of a ‘lower’ standard than the country in which the employee is based. They argued that the practices of some airlines concerned were an example of what they called ‘social dumping’. It was not possible in the framework of the study to provide any evidence of this concern.
- ECA reported that by the expansion of airlines over national boundaries, the fundamental basis of the employment relationship has changed. In multibased airlines it is effectively impossible to form and negotiate through a single trade union. According to them, the new situation in combination with the barriers to the existence of transnational trade unions and the legal complexity of defending the employees’ rights in a trans-national environment increases the vulnerability of the crews and reduces their capability to preserve good working conditions.
- One of the UK trade unions put forward the difficulty of representing pilots working for the same airline but employed on individual employment contracts governed by different national laws. They argued that the new situation could be used by employers with malicious intents to use the situation in their advantage in the case of collective bargaining. They stated that as a result of the emergence of the multibased airline, trade unions are cooperating more closely with their sister organisations in other Member States to tackle this problem.
- ELFAA, supported by ERAA and IACA, considered that the implied evaluation of comparative law in Member States is inappropriate in such a study⁸⁸.
- One of the interviewed airlines argued that the French court ruling means that foreign airlines with a base in France have to invest extra HR-manpower in their base, in order to be able to comply with the national labour laws. This makes the operations of the airline in France less efficient. Also the airline argued that the court ruling means that within the same company employees that are doing the same job will work under different rules, depending on the base at which they are located.

⁸⁸ It is not the intention of ECORYS to make any normative statements about the appropriateness of any law from any EU Member State.

- In a number of interviews, the introduction of harmonised EU social legislation for the air transport market was suggested as a solution to the current complex situation.

4.5 Conclusion

Level of remuneration

Based on our analysis above we conclude that remuneration of flight crew in the past ten years has increased in pace with or even above the development of the national average wage increases. In many airlines there have been changes in the retirement age and the pension schemes for pilots. Besides, wages have been (temporarily) frozen in the past at many traditional airlines. Furthermore, as time goes by the share of pilots working in a b-scale is growing. This is the result of the two-tier wage system that was introduced in airlines (in many cases before 1997). Overall, for the pilot trade unions, the developments of remuneration and social benefits have been below expectations. In their assessment the development of the remuneration of pilots has lagged behind developments in comparable professions⁸⁹.

For air traffic controllers the development of remuneration has been relatively positive. Remuneration for air traffic controllers seems to have increased in pace with the national average wage increases or exceeded them.

The majority of employers and trade unions also assess that the remuneration of cabin crew has increased in pace with the national average wage increases. However, compared to flight crew and air traffic controllers trade unions have more reservations.

For ground handling staff the results of our study on the point of remuneration are inconclusive. Many employers state that in their organisation the wages have increased in line with the national average wage increases. Trade unions have a different perception. They state that remuneration has lagged behind inflation and the national average wage increases in the past ten years. Compared to the other professions, more employers state that in their organisation wages for ground staff has lagged behind.

Composition of remuneration

The share of variable wage components for flight crew and cabin crew has increased in the past ten years. An increasing part of the remuneration of flight and cabin crew is based on productivity and company performance. Both traditional airlines and LCC's use variable wage components. The share of the variable wage component in the total remuneration generally is higher in LCC's than in traditional airlines.

Contractual developments

Overall there is a trend in the sector towards more flexibility in contracts. This was illustrated in this chapter by Eurostat statistics showing an increase in part time work and in the use of fixed term contracts. The trend is most visible for ground handling staff. The use of fixed term and temp contracts for ground handling staff has increased in the past

⁸⁹ Some unions consider that the wage freeze never recovered. Employers and other unions think that new forms of (additional) remuneration, company shares for example, completely compensated this.

ten years. For flight crew, cabin crew, and air traffic controllers the trend towards more flexible contract forms is more subtle. In the past ten years the use of temp agencies and very short term contracts for flight crew seems to have emerged. However, these are still exceptions. For cabin crew the use of fixed term contracts is likely to have increased. For air traffic controllers there seems a light trend towards the use of more fixed term and part time contracts.

Multibased airlines, labour contracts and collective bargaining

A recent development in the EU air transport market is the introduction of the multibased airline. This means that an airline that originates from one of the EU Member States opens up bases in one or more other Member states. The establishment of multiple bases across Europe by a single airline raises important questions regarding the labour laws which are applicable to staff operating from these bases. Also it has important implications on collective bargaining within the EU air transport sector.

5 Developments in working conditions

5.1 Introduction

There are two sources that provide internationally comparative data on working conditions in the air transport sector. Both are limited in the sense that they do not provide information by profession and do not allow comparison of data over time. The ILO -International Labour Office- published a study on the restructuring of civil aviation and its consequences for people working in the sector in 2001. The European Foundation for the Improvement of Living and Working Conditions (EUROFOUND) publishes more recent data, from 2005, on the basis of its European Working Conditions Survey. It was the fourth time that the survey was conducted. In the EFILW report of the survey the air transport sector is not distinguished. We have performed an additional, secondary analysis of the survey data.

In the EUROFOUND survey, 15,000 employees from the EU were questioned about their working conditions. A small number of these employees are employed in air transport (74 respondents). Although the profession of these respondents is not specifically known, our analysis indicates that in the survey results ground crew is over sampled. Given the small number of respondents in air transport and the overrepresentation of ground crew the results need to be interpreted with care. Although they are strictly speaking not representative of the workers in the sector, they are one of the few sources available and provide a first indication of the working conditions in the air transport sector compared to other sectors.

In order to obtain a better indication of the working conditions in the sector, and especially of the developments over the past ten years, in the survey amongst social partners in the Member States we include a series of questions to measure their opinions and perceptions of the development of the working conditions in the following areas:

- operational pressure;
- professional health and safety;
- the number of working hours (in a fulltime contract);
- the number of holidays (in a full time contract);
- the rest time during and between shifts;
- the scheduling of shifts;
- the influence of employees on their shifts.

The same areas were also covered in the more in-depth interviews we conducted in four Member States. In addition the survey and the interviews also touched upon a number of topics that are closely related to the topic of working conditions such as initial and professional training, mobility and (with less priority) the relation between employers,

trade unions and employees, workers rights in health and safety, equal access to employment and gender equality).

As explained in chapter 1, the results presented for the trade unions are generally of a more complete character than those for employers, also depending on the profession under review. This is taken into account when conclusions are drawn later on in this chapter. Whenever further information was available from earlier studies or reports this information is presented in the relevant sections below.

5.2 Overall assessment of working conditions

Data from the European Working Conditions Survey show most workers (80%) in the air transport sector are in general satisfied with the working conditions which they are working under. There are no indications that workers in the air transport sector are more or less satisfied with their working conditions than workers in other sectors. This does not preclude them from expressing concern regarding a number of specific issues (see e.g. the next section).

The air transport sector by its nature has very specific working conditions for the different types of staff that work in the sector. Table 5.1 provides an overview of the most important issues concerning the working conditions of flight and cabin crew on the one hand and ground staff on the other hand. This overview has been compiled on the basis of the ILO study from 2001 mentioned earlier and the interviews with stakeholders at EU level conducted in the framework of the present study. The issues regarding working conditions have been divided into two categories: occupational safety and health on the one hand and violence and stress on the other hand.

Table 5.1 Main issues in working conditions for air transport personnel

	Occupational safety and health	Violence and stress
Flight deck and cabin crew staff	<ul style="list-style-type: none"> • Accidents • Exposure to radiation • The cabin environment / air quality • Slips, trips and falls (cabin crew) • Exposure to HIV/hepatitis (cabin crew) 	<ul style="list-style-type: none"> • Violence of passengers • Duty hours, rest time and leave time • Schedules, night work and overtime • Operational pressure
Ground staff	<ul style="list-style-type: none"> • Ramp area collisions or accidents (falls in, on or from aircraft) • Back injuries (baggage handlers, check in workers) 	<ul style="list-style-type: none"> • Violence of passengers • Stress (ATC) • Schedules, night work and overtime • Operational pressure

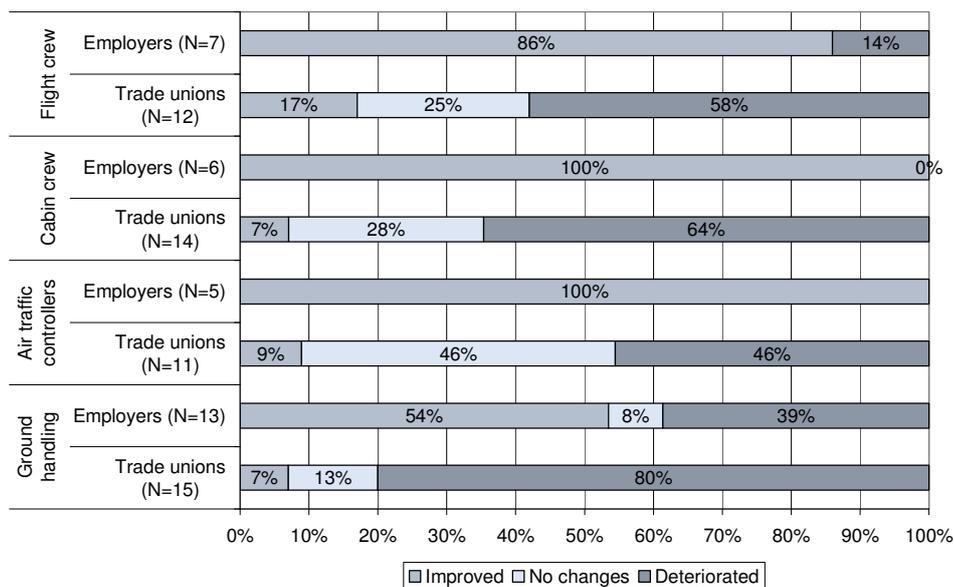
Based on: - ILO, Restructuring of civil aviation: consequences for management and personnel, July 2001
- Interviews with stakeholders on EU level.

Not surprisingly, employers and trade unions usually have different perceptions of the working conditions in their sector and the way they have developed. Figure 5.1 confirms this, but also shows that the opinions of employers and trade unions vary according to the profession under review.

Overall, according to employers the working conditions of flight crew, cabin crew and the air traffic controllers that work in their organisation have improved in the past ten years. Half of the employers that responded to our questionnaire perceive an improvement of working conditions in the past ten years for their ground handling staff. 5 out of the 13 employers perceive a deterioration of the working conditions for ground handling staff in their organisation. The most positive about the development of working conditions are the employers of air traffic controllers, the least positive are those in ground handling.

Trade unions generally feel that working conditions for flight crew, cabin crew and air traffic controllers have not improved. For flight crew and cabin crew most trade unions observe a deterioration of the working conditions. For air traffic controllers almost half of the trade union representatives answer that the working conditions in the past years on balance have neither improved nor deteriorated. The variation across professions is mirrored with that amongst employers. Trade unions in ground handling express the most negative opinions on the overall developments in working conditions and those representing the air traffic controllers are least negative.

Figure 5.1 Perception of employers and trade unions of the development of the working conditions for flight crew, cabin crew, air traffic controllers and ground handling staff in the period 1997-2007



Source: survey employers and trade unions.

From the interviews in the four Member States it became clear that in fact employers and trade unions do agree that substantial changes have occurred over the past ten years. The disagreement arises when asked about the evaluation of these changes. According to employers, on balance the changes have not had a negative impact on working conditions. Trade unions tend to take the opposite view.

The sections below will show that the general picture does not hold up for all areas of working conditions though, as it is not the same across professions.

5.3 Professional health and safety

Professional health and safety is an important issue for workers in the air transport sector. Around 40 percent of the air transport employees that have participated in the 2005 European Working Conditions Survey say that they think that their health or safety is at risk because of their work. This is distinctly higher than workers in other sectors (27%). Half of the air transport employees also answered that (in their opinion) their work affects their health (50% compared to 36% in other sectors).

The main health problems that are mentioned by air transport employees in the EFLWC survey are:

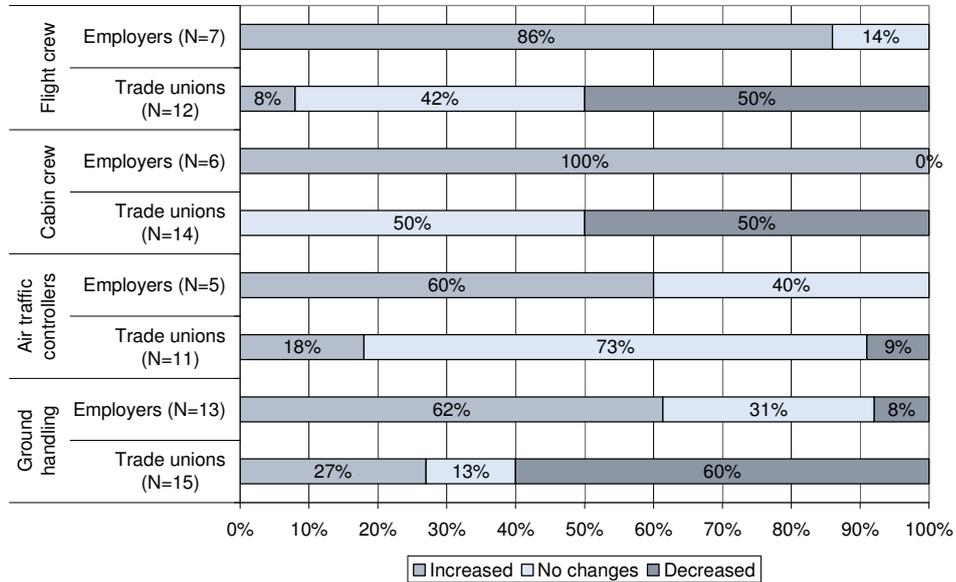
- stress;
- overall fatigue;
- backaches;
- hearing problems.

Our analysis of the data of the European Working Conditions Survey also shows that the share of workers that has been subjected to threats of physical violence at the work place in the air transport sector is above average.

The above is confirmed by the trade unions surveyed in this study, notably those representing cabin crew. Of the responding trade union representatives, 50 to 60 percent assess that the professional health and safety for flight crew, cabin crew and ground handling staff has decreased in the passed ten years. For air traffic controllers, the vast majority of the trade unions consider that health and safety has not changed.

Employers, however, have different views on the development of the professional health and safety of staff working in the air transport sector. A majority of the employers state that professional health and safety in their organisation has improved in the past ten years. Employers in ground handling are somewhat less positive than other groups of employers.

Figure 5.2 Perception of employers and trade unions of the development of professional health and safety for flight crew, cabin crew, air traffic controllers and ground handling staff in the period 1997-2007



Source: survey employers and trade unions.

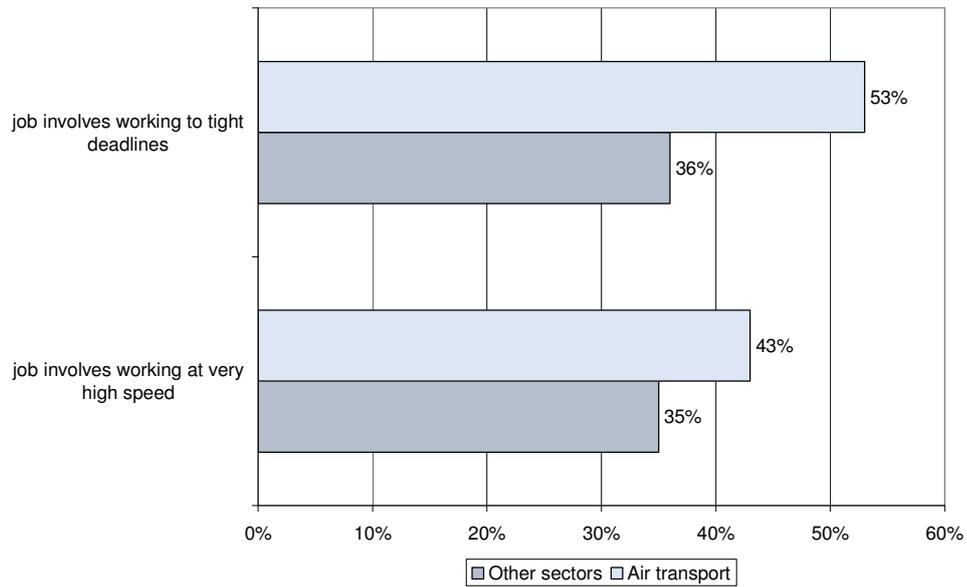
In the interviews with stakeholders at a national level, the issue of professional health and safety was mainly raised for ground handling staff, notably by trade unions. In addition, the concerns expressed in particular relate to the ground handling staff that is involved in more physically demanding tasks such as baggage handling. Although in the past ten years there has been some automation of activities, an important part remains manual work. In the interviews trade unions raised the point that the introduction of more specialised providers for different kinds of ground handling services on the larger airports in the EU had decreased the possibilities for staff to shift to physically less demanding types of work in the case of disability from their previous work.

A point that was raised by trade unions and one of the interviewed airport operators concerns the risk of labour related accidents at the ramp. In their opinion the increasing number of different service providers at the ramp, the pressure for more efficiency and a high turnover of staff increase the risk of work related accidents for ramp workers at larger airports in the EU. During the course of the study we have not obtained proof of an increase in the number of work related accidents at larger airports in the past years.

5.4 Operational pressure

Figure 5.3 shows a comparison between employees in the EU-15 air transport sector and other sectors, on the share of workers that work in jobs that involve tight deadlines or working at high speed. On both variables workers from the air transport sectors score higher than workers from other sectors.

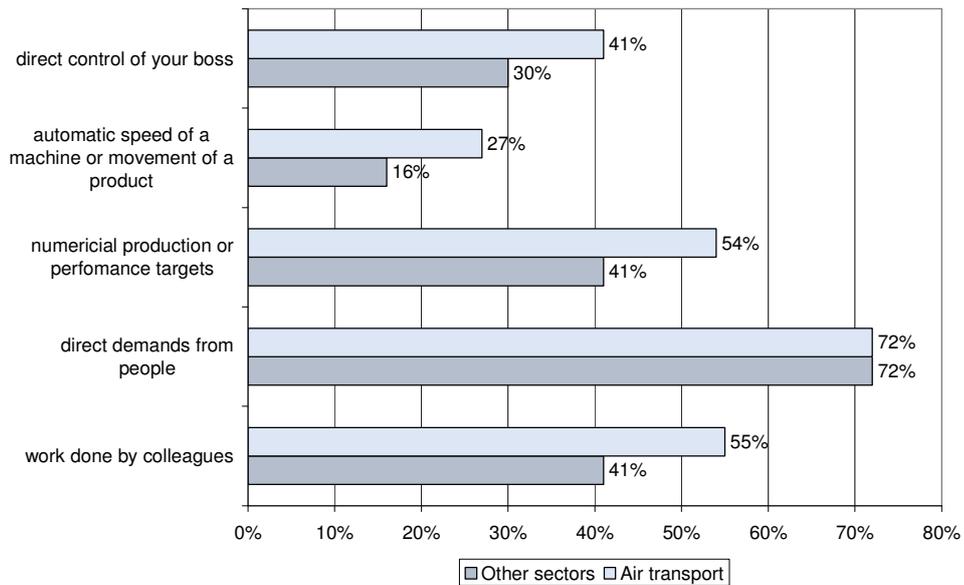
Figure 5.3 Share of workers whose jobs involve working to tight deadlines or working at very high speed around ¾ of the time or more



Source: EFWLC, European Working Conditions Survey 2005

Other common variables to measure the operational pressure that employees are working under concern the extent to which the employee controls their own pace of work. Figure 5.4 shows that direct demands from people are the most determining factor of the pace of work, and that for air traffic workers this is the same as for workers in other sectors. The most important difference between the air transport sector and other sectors is the influence of the automatic speed or movement of a product.

Figure 5.4 Share of workers whose pace of work is dependent on the factors mentioned below



Source: EFWLC, European Working Conditions Survey 2005.

The views of employers and trade unions regarding the development of operational pressure in the past ten years is one of the few areas in which there is some convergence between the two parties. It can be concluded that there is a broad understanding in the sector that the operational pressure that staff are working under has increased in the past ten years. The majority of the employers that answered our questionnaire stated that the operational pressure for flight crew, cabin crew, air traffic controllers and ground handling staff have increased. For flight crew, the results of the trade union survey show a similar outcome. For the other three professions a clear interpretation of the answers of the trade union representatives is difficult, due to possible misinterpretations of the relevant question in the questionnaire.⁹⁰ Nonetheless, it would seem likely that the perception of the development of operational pressure for cabin crew, air traffic controllers and ground handling staff are in line with those for the other professional groups. This is supported by the interviews in the four Member States.

Another indication that confirms the perceived increase in operational pressure (for staff employed by airlines) is the increase in productivity that we reported in chapter 3. The number of ATK's per airline employee has increased significantly in the past ten years. This suggests that the same work is done by fewer employees, which does not automatically imply an increase in operational pressure since activities can also be outsourced⁹¹.

The survey results do not present an answer to the question regarding the extent of this increase in operational pressure, nor regarding the grounds behind this increase. With regard to the latter however, the interviews with trade union representatives give some possible explanations for the perceived increase in operational pressure of flight and cabin crew⁹²:

- Tighter scheduling of flights: to improve productivity on intra EU flights the time between flights has decreased. This leaves less time for delays and less preparation time for flight crew and cabin crew between flights.
- Increase in responsibilities: In some airlines, flight crew have increasing responsibilities. For instance, flight crew in some airlines have been made more responsible for efficient fuel use during the flight. Also they are more responsible for the prevention of delays.
- Increase of duties between shifts: In some airlines, cabin crew are responsible for duties that were previously not part of their job description. An example is the tidying of the aircraft between flights.

90 In the questionnaire the exact answer categories were 'Improved/increased, No changes and Deteriorated/decreased'. Since it was not clear how the question had been interpreted, all respondents were asked these questions a second time. From this it became clear that employers had a uniform interpretation of the question, but that this was not the case for trade unions. Therefore, the overall picture is presented in the text, without a table with specific figures.

91 The ATK/employee ratio is often used in this sector as a ratio for productivity. In addition to the development of productivity also outsourcing activities can have an important influence on the ratio.

92 In the report three explanations for the perceived increase of operational pressure for flight crew mentioned are mentioned. In the opinion of ECA there are two more explanations: the increase in the precariousness of employment contracts for flight crew in the past 10 years and the increase of the share of variable wage components. In the opinion of ECA these variable wage components based on high productivity and the pursuit of costs and delay reduction pushes crews to work more, quicker and at the limits of the operational margins. ECA reports that some of its members feel threatened with the not renewal of their contracts or fear dismissals if the objectives for delays avoidance or cost reductions are not met. They claim that, according to pilots reports, there are several cases in which an employer has put pressure (such as threat of dismissal, blame etc.) on the pilot. They consider that such a situation may lead to a deterioration of safe working conditions.

- According to the European Cockpit Association, new working contracts and variable types of remuneration also increases the operational pressure of flight crew⁹³.
- Low cost carriers (ELFAA) consider that the reference to increased operational pressure on flight crews does not take proper account of technological advances in aircraft design to ease workload. Also cabin crew on LCCs are not required to offer the same complexity of on-board services as their counterparts on FSCs.

Regarding the operational pressure for air traffic controllers interviewed, trade union representatives mentioned that operational pressure for air traffic controllers is ‘a part of the job’. In the past ten years they argue that the increased amount of air traffic in combination with the scheduling system of air traffic controllers in their organisation has brought along an increase in operational pressure. Due to the increased amount of air traffic throughout the year it has become more difficult to estimate far in advance the amount of traffic that will occur in a sector on a specific date. Because the planning of shifts is regularly done on a long term basis (e.g. three months in advance) the chance that an air traffic controller will have to handle a sector with (too) large amounts of traffic has increased in the past ten years. Interviewed employers stress that they carefully select air traffic controllers on their ability to deal with stress before positioning them in sectors. This includes the possibility of a promotion to busier sectors and a demotion to sectors where there is less traffic (along with an in-/ decrease in salary). Employers also stated that they carefully monitor the amount of stress an air traffic controller can handle, for example through medical check ups.

5.5 Number of duty hours

The survey amongst employers and trade unions and the interviews show that the number of duty hours (per month or per year) in the past ten years has increased for flight crew and cabin crew. For air traffic controllers and ground handling staff not many changes seem to have occurred. Although the figures are lower than for operational pressure, duty hours is also one of the few areas in working conditions where some employers have seen an increase over the past ten years.

Regarding flight crew and cabin crew we can conclude the following:

- In three out of the seven airlines that responded to our questionnaire (=43%) the number of duty hours for flight crew have increased in the period 1997-2007.
- All six airlines that responded said the number of duty hours for cabin crew has increased.
- The large majority of pilot trade unions that have responded saw an increase in the number of duty hours for the flight crew they represent in the past ten years.
- The interpretation of the survey results regarding the perception of trade unions of the development of duty hours is difficult for the same reason as has been explained in

93 ECA states: “Precarious employment contracts and variable wage components, based on high productivity and on the pursuit of cost and delays reduction, pushes crew to work more, quicker and at the limit of the operational margins. ECA reports that some of their members feel threatened with the not renewal of their contracts or fear dismissals if the objectives for delays avoidance or cost reductions are not met. This may lead to a deterioration of safe working conditions. According to pilots reports, it is quite frequent that an employer puts pressure (such as threat of dismissal, blame etc.) on the pilot.”

the section regarding operational pressure, but again point at a deterioration of their situation.

In the interviews trade unions and employers stated that the developments in the past ten years concentrate on the number of flying hours rather than the total duty hours. The minimal requirements regarding the number of flying hours for flight and cabin crew in the EU are regulated in Directive 2000/79. In the interviews employers stated that they honour the rules laid down in the Directive and stay well below the maximum allowed number of flying hours for flight crew and cabin crew as laid down in the Directive. Some interviewed employers indicated that in the past ten years they have increased the flexibility for flight crew to fly more hours in a certain period and less hours in another period. Interviewed pilot trade unions stated that on average the annual number of flight hours that an airline demands from their flight crew has moved closer to the maximum number allowed by Directive 2000/79⁹⁴. The extent to which differs per airline.

5.6 Scheduling of shifts

The air transport sector by its nature is a sector in which activities continue 24 hours a day, 365 days a year. The EUROFOUND survey shows that in comparison to other sectors staff in the air transport sector (on average):

- work in the evening and at night more often;
- work on the weekends more often;
- have more variation in the number of days they work in a week;
- have more variation in starting and finishing time at work;
- work more in alternating/rotating shifts.

As a result workers in the air transport sector experience more problems fitting their working hours with their family and social commitments⁹⁵.

Since irregular hours and in shifts is a core part of the job of workers in the air transport sector, the way the scheduling of shifts is organised is an important part of the working conditions in the sector.

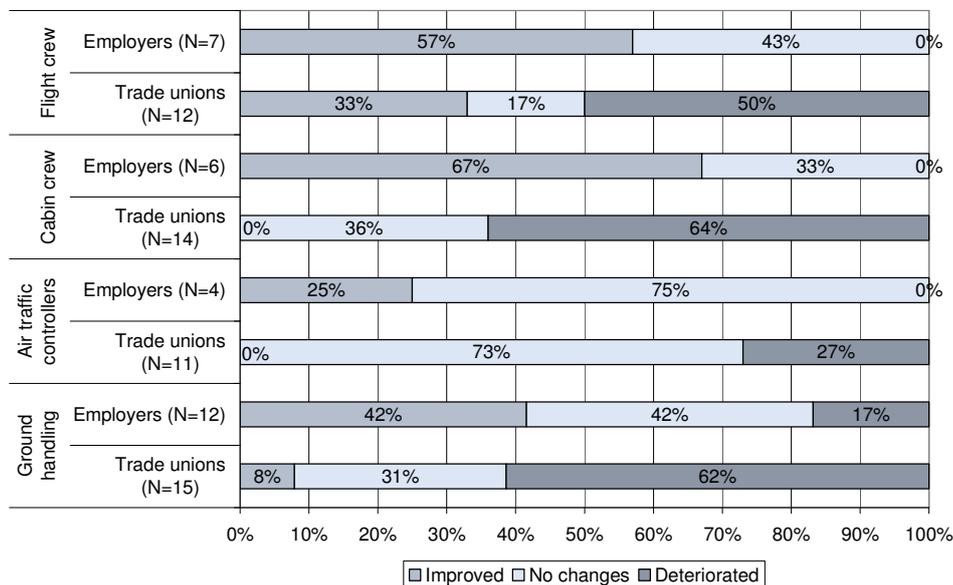
Figure 5.5 shows that employers and trade unions have a different perception of the developments in the scheduling of shifts. Whereas employers assess that developments in the field of scheduling of shifts have led to equal or even improved working conditions, trade unions assess that the developments have more likely led to a deterioration of working conditions than to an improvement.

Compared to other areas of working conditions, shift scheduling seems to be relatively more important for cabin crew than for the other three professional groups. For air traffic controllers there is consensus to a large extent that working conditions in relation to the scheduling of shifts have remained more or less equal in the past ten years.

94 Results of a survey performed by the British pilot trade union BALPA among 600 of its members in June 2007 confirm the claim of trade unions that the number of flying hours per pilot has increased. In the BALPA survey almost half the responding pilots state that they are currently flying more hours than 5 years ago. Around 10 percent of the pilots say they fly fewer hours than 5 years ago.

95 Analysis of ECORYS on the basis of data from the EFLWC European Working Conditions Survey 2005.

Figure 5.5 Perception of employers and trade unions of the development of the scheduling of shifts for flight crew, cabin crew, air traffic controllers and ground handling staff in the period 1997-2007



Source: survey employers and trade unions.

In the interviews trade unions and employers pointed out that in the past ten years scheduling of shifts for flight and cabin crew has been (further) computerised and developed. Employers emphasise the advantages of further development of the scheduling tools in terms of more regularity in the shifts and a longer planning period (leading to earlier insight in the work schedule for the coming months). Trade unions emphasise that further developed planning tools have led to more intensive schedules resulting in a reduction of rest time and a bigger claims on pilots and cabin crew in case colleagues are ill.

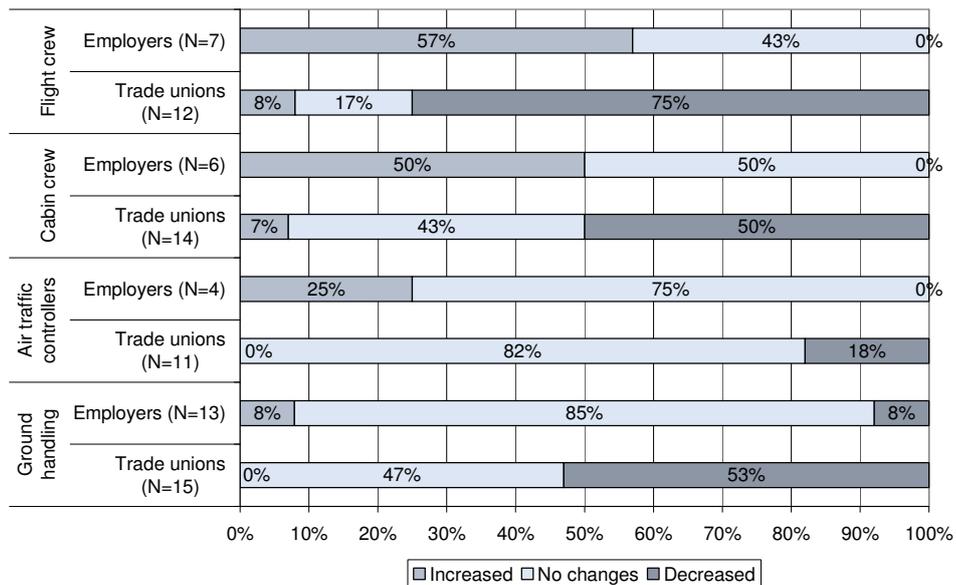
5.7 Rest time

The assessment of the development of rest time between and within shifts resembles the one for scheduling of shifts. The employers that responded to our questionnaire state that in their organisation, rest time between and within shifts has either increased or has remained the same. Trade unions have in most cases perceived either a stabilisation or a decrease of rest time.

According to the trade unions the development of rest time between shifts appears to have changed far more than the rest time during shifts for flight crew. For them this constitutes the second main change in the fast ten years, after the increase in operational pressure. Regarding the development of rest time *between* shifts, the perception of employers and trade unions differ the most for flight crew. For air traffic controllers there is a relatively good consensus regarding development, in most cases amounting to no change. The development of rest time *within* the shift is perceived with the most difference between trade unions and employers, for cabin crew. Again, regarding the development for air traffic controllers the highest degree of consensus between employers and trade unions exists.

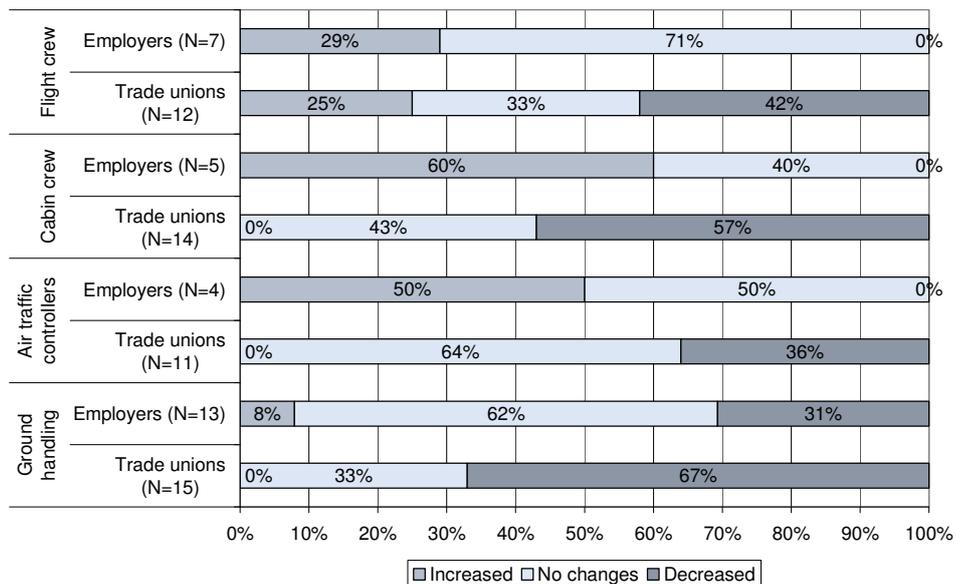
When we further compare figure 5.6 and 5.7 we can see that for flight crew, more trade unions report a decrease of rest time between shifts than a decrease of rest time within the shift. The results of the interviews for flight crew confirm this conclusion. For ground handling staff, the rest time within the shift seems to be a bigger concern for the trade unions than the rest time between shifts.

Figure 5.6 Perception of employers and trade unions of the development of the rest time *between* shifts for flight crew, cabin crew, air traffic controllers and ground handling staff in the period 1997-2007



Source: survey employers and trade unions.

Figure 5.7 Perception of employers and trade unions of the development of the rest time *within* shifts for flight crew, cabin crew, air traffic controllers and ground handling staff in the period 1997-2007



Source: survey employers and trade unions.

5.8 Training and skill requirements

In general workers in the EU air transport sector feel that they are well equipped to perform their job. Only 15 percent of employees assess that they need further training to cope with their present duties. There are no important differences on this point between workers in the air transport sector and workers in other sectors. Initial and professional training in the air transport sector is either provided by employers themselves or by external training institutes. Compared to other sectors the training is more often paid for by the employer⁹⁶.

In this section we discuss the developments in training and skill requirements in four important professions in the air transport sector. Successively we discuss the developments for flight crew, cabin crew, air traffic controllers and ground handling staff.

Flight crew

Initial and professional training for flight crew consists to a large extent of obtaining and keeping different kinds of licenses. Without the appropriate licenses and the passing of recurrent training pilots lose their rights to fly (a certain type of) aircraft. Potential flight crew first has to obtain a basic license, the Air Transport Pilot License (ATPL). Subsequently, pilots need to obtain type-ratings in order to fly different, usually bigger and more advanced, aircrafts. Recurrent trainings and checks are necessary to maintain the skills of flight crew, in particular when abnormal or emergency situations emerge, on an adequate level.

The training necessary to obtain the ATPL is nowadays usually financed by the pilot. In some cases carriers pre-finance the costs to obtain an ATPL. Interviewees mentioned cases in which pilots, once they are operational, pay the loan back through his or her salary.

Regarding the type ratings carriers seem to differ. The interviews have shown that at some FSC's, with a relatively large variety of types of aircraft, flight crew has much freedom in choosing the type rating they want to obtain (depending on seniority and experience). In many of these cases the type rating is paid by the employer. Trade unions (including ECA) stressed in the interviews that they have seen a development in the past ten years where pilots more often partly or completely have to reimburse the costs of their type rating to their employer in the years following the type rating training.

Airlines with a relatively small variety of aircraft reported during the interviews that they require new pilots to pay for his or her first type rating. These airlines are reluctant to pay for type ratings because of the risk that pilots will afterwards move to another employer. This would mean a loss of investment. Some of these airlines that do pay for the type ratings have introduced payback schemes for flight crew leaving the company within a certain period after they acquired their type rating.

96 Analysis of ECORYS on the data of the EFLWC European Working Conditions Survey 2005.

More in general, the ECA raised concern that carriers are increasingly tempted to hire type-rated pilots. In their opinion this development creates disruptions in the labour market (the new employer taking advantage of training investments made by the former employer of the pilot) and makes it more difficult for pilots without an ‘appropriate type rating ‘to enter the labour market’⁹⁷.

Interviews with both employers and trade unions clarified that the character of recurrent training changed over the last years. Nowadays flight crew are obliged to learn much more theory by heart, spend more time in the air but less time in the simulator. These trainings (which are legally obliged) are always fully covered by the employer.

In 2006 a new type of pilot-license was introduced. The Multi-crew Pilot License (MPL) is intended to qualify the holder to perform co-pilot tasks on aircrafts operated with more than one pilot. The MPL is intended to complement existing ways of qualifying as a co-pilot for multi-crew operations⁹⁸.

The results of the survey show that in the perception of employers and trade unions, the skill requirements for flight crew in the past ten years have increased. The increase of technological innovation and computerisation has made the job significantly more demanding.⁹⁹ In spite of this the trade unions perceive a decrease in the number of hours of initial and professional training for flight crew in the past ten years. The majority of employers that responded to our questionnaire stated that in their organisation the number of hours of initial and professional training for flight crew has either remained stable or increased (initial training: 4 out of 7 respondents, professional training: 6 out of 7 respondents).

Cabin crew

Initial and professional training for cabin crew is usually provided by the employer. Contrary to flight crew there are only licensing schemes for cabin crew in some EU Member States. Recent research by Egoa showed however that all training requirements for cabin crew laid down in the JAR OPS 1 apply in all EU Member States, albeit with some variations¹⁰⁰.

Employers and trade unions are relatively satisfied with the development of the quality of training for cabin crew. In the survey the majority of (responding) employers answered that the quality of initial and professional training for cabin crew has increased in the past ten years. Trade unions are more reserved. They assess that the quality of training for cabin crew has remained stable over the past ten years¹⁰¹.

97 ECA claimed that on the one hand there is an increasing demand for qualified pilots, but on the other hand pilots without an appropriate type rating remain unemployed. Within the scope of this study it was not possible to study this claim.

98 ATW (October, 2005). “Shortcut or Fasttrack?” Internet: www.atwonline.com.

99 This was confirmed by both employers and trade unions in the interviews.

100 Egoa (2007). *Survey and analysis of the scope and contents of existing legal rules governing Cabin Crew licensing, recruitment and vocational training in 25 EU Member States*.

101 An exception is the quality of initial training performed by point-to-point carriers. According to the responding trade unions there was a reduction of quality of initial training in this part of the sector. Responding employers from these kind of carriers have a different perception.

The conclusion from the survey was confirmed by most interviewed trade unions. According to one trade union, in the past ten years all types of carriers (including LCCs) have invested in maintaining the quality of services provided by the cabin crew on a high level. Training is an important part of this. Another trade union reported that a fast evacuation in case of emergency required well-trained personnel. An employer moreover, stated in an interview that quality of (onboard) service is one of the most important competitive advantages of FSCs in the air transport market. It is therefore unlikely that the quality of training of cabin crew will deteriorate in the near future¹⁰².

Ground handling staff

Training of ground handling staff is to a large extent related to safety and security. Ground handling staff that operates near aircrafts or with machines receives at least a minimum of safety instructions, since airfields constitute very complex environments¹⁰³.

Regarding the development in the quality of training, the majority of responding trade unions assess that the quality of initial training for ground handling staff performed by employers has decreased in the past ten years. Regarding the quality of professional training trade unions see neither an increase nor a decrease in quality. The majority of the responding employers state that the quality of initial and professional training for ground handling staff in the past ten years has increased.

In the interviews ground handling companies stated that training for ground handling staff to a large extent depends on the priorities companies set themselves. In some companies the amount of training increased with the implementation of a ‘health and safety’ campaign. Every employee received a basis training ‘health and safety’ and further professional training depending on the job. Also recurrent trainings were offered.

In addition the amount of training for ground handling staff also depend on the requirements set by individual Member States. The French state for example recently introduced new legal requirements for all ground handling staff in the framework of anti-terror measures. These requirements included additional security training.

Some trade unions and employers that we interviewed stated that an important negative factor that influences the willingness of employers to provide (more than the basic) training to ground handling staff is the high turnover of staff. High turn-over of staff makes it less attractive for employers to invest in training for their employees.

Air Traffic controllers

Initial training of air traffic controllers (ATCs) is in the majority of cases provided by employers or the air navigation service providers (ANSP). The content of trainings are to a great extent laid down in regulations from national aviation authorities and also from EUROCONTROL. Both employers and trade unions stated in the interviews that students are sometimes trained according to their capacity. High potentials receive extra training in

¹⁰² The ETF has a different opinion on this issue. While the ETF believes that it is true that employers introduced new elements in cabin crew training, they do not see an increase in the hours dedicated to training. The ETF questions whether cabin crew training balances sufficiently safety on the one hand and customer care on the other. It suspects employers to focus too much on customer care and too little on safety.

¹⁰³ Source: interviews with airport operators and private ground handling service providers.

order to prepare them for the busy sectors in which they will work later. The interviewed employers and trade unions also stated that ATCs who wish to change to a busier sector receive extra training.

A majority of employers (3 out of 5) stated in the questionnaire that the quality of both initial and professional training has improved. They also responded that the number of hours of initial and professional training has increased. The majority of trade unions were more conservative in their answers: in their perception the quality of initial and professional training for ATCs has not changed in the past ten years.

Both employers and trade unions however commented in the interviews that the development of initial and professional training for ATCs has been in line with the growing complexity of the air space in Europe. The adaptation to these new circumstances occurred especially through the introduction of new training tools and facilities, such as new simulators.

5.9 Other issues

Mobility

Table 5.2 shows that the possibilities for international mobility mainly have increased for flight crew and also mainly at LCC's, which less often apply a seniority system and whose collective agreements with trade unions are less strict, enabling greater possibilities for foreign flight crew. For instance, many former Sabena and Swiss Air pilots found a new job at LCC's after the bankruptcy of their company. At network carriers, possibilities for foreign staff are still limited.

Table 5.2 Percentage of trade unions and employers that notice an increase in the possibilities for air transport staff to work in other EU Member States

	According to trade unions	According to employers
Flight crew	90%	50%
Cabin crew	30%	50%
Air traffic controllers	25%	50%
Ground handling staff	20%	13%

Source: survey employers and trade unions.

Gender equality and equal access to employment

Both trade unions and employers assess that gender equality and equal access to employment in the air transport sector has improved (somewhat, see figure 5.8). In the interviews interviewees stated that there are now more women working in the sector than ten years ago. Still, compared to other sectors, management positions in the sector still seem to be dominated by men¹⁰⁴.

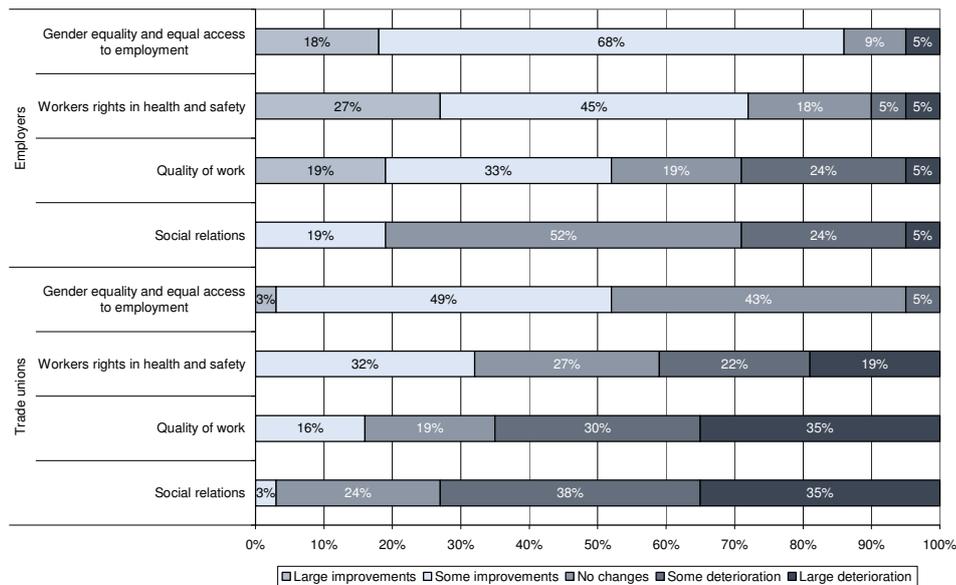
¹⁰⁴ The results of the European Working Conditions Survey 2005 indicate that 80% of workers in the air transport sector have a man as their direct boss. In other sectors this is 70 percent.

Social relations

The interviews demonstrate that employers and trade unions judge the development of the social relations to a large extent on the basis of recent developments. In those cases where recent agreements were reached on wages or transfer of staff for example, the relation between the social partners was thought to have significantly improved. Most of the interviewees stated that the relations didn't change.

Some pilot trade unions indicated in the interviews that the relationship between pilots and their employers has changed significantly in the past ten years. They indicated that pilots are less involved in the organisation of work or operational or strategic decisions that their employers make. The European Cockpit Association complained that some carriers refuse to maintain a dialogue with trade unions and that these employers are unlikely to do so in the future. Employers on the contrary, consider that there was no change in the relationship with pilots.

Figure 5.8 Assessment of trade unions (n=37) and employers (n=21) in air transport on the development in social relations, quality of work, workers rights in health and safety and gender equality in the EU air transport sector 1997-2007



Source: survey employers and trade unions.

Workers rights in Health and Safety

Most of the interviewees mentioned that developments of such rights were either a consequence of national legislation or international agreements (e.g. JAR OPS). These rights generally improved.

Quality of work

A number of employers and trade unions which were interviewed by us stated that the quality of work stayed the same or improved. In those cases they argued that employers had invested in better facilities, new equipment or improved training opportunities.

5.10 Conclusion

Whereas one would be hard pressed to draw one overall overriding conclusion regarding the development of working conditions between 1997 and now, some tentative conclusions regarding specific areas and for professions can be drawn:

- With regard to the health and safety situation it seems that air traffic controllers have been unaffected whereas the developments in ground handling would warrant some further study.
- Operational pressure is the one area which has clearly changed in the past ten years. The direction of this change is clear – increasing pressure- but the degree of change would require further investigation. For the stakeholders the increase of operational pressure bears different implications. Trade unions like ECA see the safety of airlines at stake, while employers stress the improvements of productivity achieved, without compromising safety standards.
- It seems fairly clear that duty hours have increased for flight and cabin crew, but not for air traffic controllers and ground handling staff.
- With regard to the development in the scheduling of shifts, it can be concluded that the situation remained unchanged for air traffic controllers. For other professional groups the changes cannot be determined with any certainty, though if relevant they would seem to have affected cabin crew in particular.
- The opinions on the development of rest time between and within shifts appear to be similar to those on shift scheduling. However, for flight crew the development of rest time *between* shifts appears to be the main change in the past ten years, after the increase in operational pressure, at least according to trade unions.
- The many important changes that have occurred in training in particular relate to the past to flight crew, e.g. the introduction of the Multi-Crew Pilot Licence, and the fact that employers increasingly demand that pilots co-finance their own training.

6 Conclusion

6.1 Introduction

This summary recapitulates the main conclusions of a study carried out by ECORYS Netherlands concerning the development of direct employment and the working and wage conditions in the EU air transport labour market in the period since 1997. The 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).

The study did not aim to give a full account of the three objectives. Rather, the study aimed to present the European Commission with:

- a more complete, detailed and independent insight of the development of direct employment in the EU air transport market;
- a first overview of the main trends and issues on working and wage conditions in the most significant professions in air transport;
- a qualitative evaluation on the relation between these developments and the liberalisation of the EU air transport market.

The methodology used for this study included:

- desk research;
- interviews with stakeholders at the European level;
- an internet survey among trade unions and employers in the EU air transport sector in 27 Member States, focusing primarily on the EU-15;
- interviews with employers and trade unions from the sector in the four largest EU Member States (The United Kingdom, France, Germany, and Spain).

This study has shown the difficulties to find the comprehensive and complete data which would be required to have the most accurate vision of the current market situation. It will certainly have to be completed, in particular by the information provided by Civil Aviation Authorities, and widened to cover the EU-27.

6.2 The developments in relation to the EU liberalisation of the sector

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 gave new opportunities which are an important explanation for the recent developments. New routes, new carriers, development of low-cost sector and more productivity: all these elements have contributed to the important changes and the growth of air transport in the EU.

It is clear that the strong growth of the low cost carriers in the past ten years has had an important impact on the developments in the sector, both economic and social, and on the way that airline companies are organised and managed in recent years. Their operations have changed the sector in many ways, including employment, wages and working conditions.

More generally, by 2007:

- a larger part of airline staff is working at point-to-point carriers;
- the increased competition (and lower fares) on the short haul market stimulated a productivity increase of airlines operating in this market;
- the new business model of the LCC's included an increase in the use of variable wage components in the sector.

Nevertheless, it appears that in the European Union the impact of liberalisation on direct employment was good, with an increase at airlines and ground handling companies and an overall stability in the airports and air traffic control.

Another point which 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.

For air traffic controllers the developments in the past ten years most likely have not had a large influence on employment, wages and working conditions.

However, the evolution in the air transport sector does not seem very different to what could be observed in other sectors of the European economy: the improved competitiveness has direct consequences in the type of contracts and working conditions.

6.3 Development of employment

Airline employment

The study shows that the air transport sector in the EU-15 has experienced a growth of employment in the past ten years. Employment in EU-15 airlines, by far the largest part of employment in the sector grew by **six percent** over the total period, which can be mainly explained by the growth of air traffic -in the EU and worldwide- in the past ten years. The growth in airline employment was completely realised in the period prior to 2001. In 2001 airline employment decreased by four percent and since then remained stable around 381,000 employees (figure of 2005). The drop in employment in 2001 was undoubtedly linked to the reactions of the public and governments to 9/11, which hit the industry hard. However, even prior to 9/11 the sector was experiencing a financially difficult period. From 1999 to 2004 most major airlines reported negative financial results for four years in a row, making restructuring of their operations inevitable, leading to a strong increase in productivity as from 2002. Finally, the development of employment at airlines has been influenced by the outsourcing of activities by airlines to companies not included in the total employment figures in this report (e.g. Aircraft maintenance, cleaning, IT, et cetera.).

Compared to US airlines the drop of employment in 2001 was relatively modest. This can be explained by the different response of EU airlines compared to their US counterparts. Where in the US airlines soon after 9/11 announced employment cutbacks up to 20 percent, in the EU many airlines implemented alternatives to direct job losses.

Our research shows that the growth in airline employment is concentrated in specific parts of the market:

- The share of employment of point-to point carriers in the past ten years substantially increased from 20 percent in 1996 to approximately 30 percent in 2006. This increase is for a large part caused by the significant growth of the low cost market in EU. Employment of network carriers remained stable in the past ten years.
- Airline employment shows a further concentration in the five biggest air transport markets in the EU-15 in the period 1997-2005¹⁰⁵. Where the five biggest Member States (in terms of airline jobs) experienced a growth of 12 percent, the other ten Member States together suffered a decrease of employment of 10 percent over the total period. The current growth in new Member States (since 2004) will have to be assessed.

Non-airline employment

Regarding the development of non-airline employment the conclusions of the study are less detailed and less concrete than for the development of airline employment due to a

105 UK, France, Spain, Germany and the Netherlands.

lack of available statistics. The following conclusions regarding non-airline employment can nonetheless be drawn:

- The number of persons employed by airport authorities in the EU-15 in the period 1997-2006 seems to have remained stable around 90,000 employees. The introduction of (more) competition in the ground handling market on the larger EU airports on the other hand, is likely to have had a downward influence on employment at airport authorities. This trend was compensated by an upward trend caused by the increase of the number of passengers and cargo transferred by airports as well as by the new airport obligations on security activities.
- 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.
- Employment of Air Navigation Service Providers (ANSP's) at the EU-level is only known as from 2001. In the period 2001-2005 employment in ANSP's remained stable around 37,000 persons.

6.4 Development of wages and contractual conditions

6.4.1 The remunerative package

One of the measures implemented by many EU airlines after 9/11 was a temporary freeze of the wages or in some cases a reduction of wages. Despite these measures, wage increases have occurred during the period studied.

The level of remuneration

There exists a fairly broad agreement between employers and trade unions that the total remunerative package of flight crew has increased in pace with or even above the development of the national average pay increases in the past ten years, although trade unions feel that this increase lags behind wage developments in comparable professions.

For air traffic controllers the development of remuneration has seems to have increased in pace with the national average wage increases or exceeded them.

For cabin crew and especially ground handling staff the results of our 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 for employees in ground handling than for cabin crew.

Many airlines have introduced two-tier wage scales for cabin crew in particular. For flight crew a secondary wage scale for new employees seems less common.

Variable wage components for flight crew and cabin crew

In the past ten years the share of variable wage components for flight crew and cabin crew has increased. An increasing part of the remuneration of flight and cabin crew is

based on productivity and company performance. Both traditional airlines and LCC's use variable wage components. On average the share of the variable wage in the total remuneration is higher in LCC's than in the traditional airlines.¹⁰⁶

6.4.2 Contractual developments

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 for 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.

For flight crew, cabin crew and air traffic controllers the trend towards more flexible contact forms is less pronounced. In the past ten years temporary agencies and very short term contracts for flight crew have entered the picture. However, these are still exceptions. For cabin crew the use of fixed term contracts seems to have increased, partly as a result of the entrance of new airlines to the market in the past ten years. Also for air traffic controllers there seems a light trend towards the use of more fixed term and part time contracts.

6.4.3 Multibased airlines, labour contracts and collective bargaining

A recent development in the EU air transport market is the introduction of the multibased airline. This means that an airline that originates from one of the EU Member States opens up bases in one or more other Member States. The establishment of multiple bases across Europe by a single airline raises important questions regarding the labour laws which are applicable to staff operating from these bases. Also it has important implications for collective bargaining within the EU air transport sector.

6.5 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. When speaking about the development of working conditions in general, this is the case here also. Trade unions generally feel that working conditions have deteriorated in the past ten years. Employers state that working conditions on balance have improved. Nonetheless, the study also shows that the opinions

¹⁰⁶ ECA considers that "the time and financial pressure on crews pushes them to work more, quicker and at the limit of operational margins. They fear the consequences of the lack of attention as a consequence of operational pressure."

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.

The health and safety situation of air traffic controllers has not changed or improved, according to both employers and trade unions. In the other professions employers are positive and trade unions are negative about the developments in health and safety. For the ground handling occupations, however, employers are somewhat less positive than for other professions. This profession also was the ground for much concern for trade unions during the in-depth interviews.

There is relatively strong agreement that in all four investigated profession the amount of operational pressure that air transport employees have to work under has increased. The survey and the interviews also show that the number of duty hours has increased for flight crew and cabin crew. The increase of operational pressure for flight and cabin crew seems to result out of a tighter scheduling of flights, an increase of responsibilities of the crew, and of an increase of duties between shifts. The flexibility of employment contracts and the increase importance of variable wage components contribute also to the operational pressure felt by individual crew members.

For air traffic controllers and ground handling staff not many changes seem to have occurred. Duty hours is also one of the – few- areas in working conditions where some employers see an increase taking place over the past ten years.

Developments in the scheduling of shifts are rated predominantly positive by employers and negative by trade unions. It is worth noting though, that these developments seem to be of particular importance for cabin crew. For air traffic controllers neither side of industry sees a clear change over the past ten years.

The opinions on the development of rest time between and within shifts appear to be similar to those on shift scheduling. However, for flight crew the development of rest time *between* shifts appears to have changed far more than the rest time *during* shifts. For them this constitutes the second main change in the past ten years, after the increase in operational pressure.

Regarding training many important changes have occurred in the past ten years. These changes mainly relate to flight crew. One of the important developments is the introduction of the Multi-Crew Pilot Licence, a licence which allows the holder to perform co-pilot tasks in multicrew situations, with substantially less training hours than in the case of the normal licence. Another important development is that employers increasingly demand that pilots finance (parts of) their own training (both the ATPL-license and the type-ratings) or demand that pilots pay back (part of) the investment made by the employer when they leave the company.

Annex I: Members of the Steering Committee

Name	Organisation	Unit/Function
Gilles Gantelet	European Commission DG TREN	Internal Market, air transport agreements & multilateral relations
Koen de Vos	European Commission DG TREN	Single sky and modernization of air traffic control
Arantxa Hernandez-Antunez	European Commission DG TREN	Air Safety
Roderic van Voorst (followed by Kyriacos Ktenas)	European Commission DG TREN	Infrastructures and airports
Ellen Durst	European Commission DG EMPL	Social dialogue, Social rights, Working conditions, Adaptation to Change
Luis de la Fuente Layos	European Commission Eurostat	Transport Statistics
Aude Neuville	European Commission DG ECFIN	Economic analysis and impact assessment of Community policies and the sustainable development strategy
Athar Husain Khan	Association of European Airlines (AEA)	General Manager Infrastructure
Andrew Clarke	European Regions Airline Association (ERA)	Director Air Transport Policy
Koen Vermeir	International Air Carrier Association (IACA)	Director Aeropolitical & Industry Affairs
John Hanlon	European Low-fares Airlines Association (ELFAA)	Secretary general
Vanessa Rullier	Civil Air Navigation Services Organisation (CANSO)	Assistant Director European Affairs
Vanessa Holve	Airports Council International (ACI)	Policy Analyst
Luc Meurrens	International Aviation Handlers' Association (IAHA)	Secretary general
Francois Balletero	European Transport Workers Federation (ETF)	Political Secretary
Ignacio Plaza	European Cockpit Association (ECA)	Industrial affairs officer
Monique de Smet	International Air Transport Association (IATA)	Regional Director, Europe

Annex II: List of interviewed organisations

Table 0.1 Interviews Germany

Company	Person	Function
Cirrus Airlines	Rainer Biewer	Captain/ HR manager
Arbeitsgemeinschaft Deutscher Verkehrsflughäfen	Ralph Beisel	Chief Executive Director
	Jobst Wellenkamp	Economic and Legal Affairs
Dienstleistungsgesellschaft Verdi	Ingo Kronsfoth	Director Air Transport
Fraport	Ruth Jüngling	Human Resource Manager
	Frank Fink	Marketing, Strategy, Boards and Committees
	Ekkehard Franke	Project Manager Ground Handling
Deutsche Flugsicherheit DFS	Martin Isermann	Human Ressource Manager
	Corinna Schwanz	
VCockpit	Mr. Gertz	Captain at Eurowings
	Cesar Holzem	FO at TuiFly
Verdi	Ingo Kronsfoth	

Table 0.2 Interviews France

Company	Person	Function
KLM/Air France	Béryl Baldous	Legal Counsel – European Affairs
	Jean-François Certain	HR-International Social Relations
	Pierre Rocheron	HR-International Social Relations
Bordeaux Airport	Thierry Couloumiès	
Confédération générale du travail CGT	Olivier Sekai	

Table 0.3 Interviews United Kingdom

Company	Person	Function
British Airways	Phil Stubbs	
Easyjet	Mike Campbell	Easyjet HR Director
British Airports Authority BAA	Clifton Brown	HR Solutions Consultant
Prospect	Laurence King	
National Air Traffic Services NATS	Mark Gregory	
British Air Line Pilots Association BALPA	Jim McAuslan	General Secretary
	Dr. John McGurk	Special adviser Research and Policy
Transport and General Workers' Union TGWU	Brendan Gold	

Table 0.4 Interviews Spain

Company	Person	Function
Iberia	Juan Fransisco Potrero Cruz	Chief executive labour relations
	Luis Rázquin	HR International Relations
Aeropuntos Espanoles y Navegacion Aerea AENA	Begona Gosalvez	
	Ramon Martin Calderin	
Confederation sindical de comisiones obreras CCOO	Enrique Carmona Fernández	Secretaria International
União Geral de Trabalhores UGT	Amparo Sanchez	
Spanish Air Line Pilots' Association SEPLA	Carlos Salas Ortiz de Villajos	Institutional affairs department director, IFALPA director
	Juan Carlos Lozano Pacios	Technical department director

Table 0.5 Interviews Independent ground handling companies

Company	Person	Function
Menzies Aviapartner	Dirk Goovaerts	
	Bertrand Janssen/	HRM Manager
	Gerrit Bellon	Legal affairs

Annex III: Justification of response to the internet survey

Table 0.1 Distribution of the response of the employers survey by type of organisation, Member State and representing organisation (only respondents from within the EU-15)

	Airline	ANSP	Airport operator	Private ground handling company
Member State				
Austria	0	0	0	0
Belgium	0	0	1	1
Denmark	0	1	0	0
Finland	1	1	1	0
France	0	0	0	0
Germany	1	1	11	0
Greece	0	0	1	0
Ireland	1	0	1	0
Italy	0	0	0	1
Luxembourg	1	0	0	0
The Netherlands	0	1	1	0
Portugal	0	0	1	0
Spain	1	0	0	0
Sweden	1	1	1	0
United Kingdom	3	1	1	0
Organisation				
AEA	4	0	0	0
IACA	1	0	0	0
ELFAA	2	0	0	0
ERA	0	0	0	0
Other / no response	2	0	0	0
CANSO	0	6	0	0
ACI Europe	0	0	19	0
IAHA	0	0	0	2

Source: Employers survey

Figure 0.1 Distribution of the response of the employers survey by Member State (only respondents from within the EU-15)

Member State	
Austria	2
Belgium	2
Denmark	0
Finland	4
France	6
Germany	3
Greece	2
Ireland	2
Italy	2
Luxembourg	2
The Netherlands	2
Portugal	0
Spain	4
Sweden	3
United Kingdom	4
	36

Source: Trade unions survey

Annex IV Questionnaire internet survey employers

A. BackgroundThe following questions concern your contact details and general information about your organisation. This information will be treated strictly confidential.

What is the name of your organisation?

What is your name?

What is your email address?

In which country is your organisation based? Multiple answers possible.

- | | |
|---|---|
| <input type="checkbox"/> Austria | <input type="checkbox"/> Belgium |
| <input type="checkbox"/> Bulgaria | <input type="checkbox"/> Croatia |
| <input type="checkbox"/> Cyprus | <input type="checkbox"/> Czech Republic |
| <input type="checkbox"/> Denmark | <input type="checkbox"/> Estonia |
| <input type="checkbox"/> Finland | <input type="checkbox"/> France |
| <input type="checkbox"/> Germany | <input type="checkbox"/> Greece |
| <input type="checkbox"/> Hungary | <input type="checkbox"/> Ireland |
| <input type="checkbox"/> Italy | <input type="checkbox"/> Latvia |
| <input type="checkbox"/> Lithuania | <input type="checkbox"/> Luxembourg |
| <input type="checkbox"/> Malta | <input type="checkbox"/> Netherlands |
| <input type="checkbox"/> Poland | <input type="checkbox"/> Portugal |
| <input type="checkbox"/> Romania | <input type="checkbox"/> Slovakia |
| <input type="checkbox"/> Slovenia | <input type="checkbox"/> Spain |
| <input type="checkbox"/> Sweden | <input type="checkbox"/> United Kingdom |
| <input type="checkbox"/> Other
..... | |

In which country is your main base located?

- | | |
|---|---|
| <input type="checkbox"/> Austria | <input type="checkbox"/> Belgium |
| <input type="checkbox"/> Bulgaria | <input type="checkbox"/> Croatia |
| <input type="checkbox"/> Cyprus | <input type="checkbox"/> Czech Republic |
| <input type="checkbox"/> Denmark | <input type="checkbox"/> Estonia |
| <input type="checkbox"/> Finland | <input type="checkbox"/> France |
| <input type="checkbox"/> Germany | <input type="checkbox"/> Greece |
| <input type="checkbox"/> Hungary | <input type="checkbox"/> Ireland |
| <input type="checkbox"/> Italy | <input type="checkbox"/> Latvia |
| <input type="checkbox"/> Lithuania | <input type="checkbox"/> Luxembourg |
| <input type="checkbox"/> Malta | <input type="checkbox"/> Netherlands |
| <input type="checkbox"/> Poland | <input type="checkbox"/> Portugal |
| <input type="checkbox"/> Romania | <input type="checkbox"/> Slovakia |
| <input type="checkbox"/> Slovenia | <input type="checkbox"/> Spain |
| <input type="checkbox"/> Sweden | <input type="checkbox"/> United Kingdom |
| <input type="checkbox"/> Other
..... | |

*** What is the main activity of your organisation? Please choose the activity which generates the majority of your turn-over.**

- Airline
- Ground handling (incl. aviation catering)
- Airport operator
- Air Navigation Service Provider
- None of the above

What was the size of the staff in your organisation in the years 1997, 2001, and 2006? Please provide figures per professional group in full-time equivalents (fte's).

	31-12-1997	31-12-2001	31-12-2006
Flight crew			
Cabin crew			
Ground staff			
Other staff			
Total staff			

What percentage of your total staff was based in EU Member States in 2006? In case you don't know the exact percentage, please provide an approximation.

* **Did your organisation outsource activities since 1997 which may have affected the size of your staff?**

Yes

No

Which activities were outsourced?

Administration

Reservation & ticketing

Aircraft maintenance

Other, please specify

.....

What has been the capacity of your organisation in 2006?

Available Seat Kilometres (ASKs)

Available Tonne Kilometres (ATKs)

How would you characterise your organisation? Please limit your answer to the core activity of your organisation.

- Network carrier
- Point-to-point carrier

**Of which international interest group is your organisation a member?
Multiple answers possible.**

- IACA
- AEA
- ERA
- ELFAA
- Other
- None

Which ground handling services does your organisation currently provide?

- Ground administration and supervision (e.g. representation & liaison services with local authorities on behalf of the airport user);
- Passenger handling (e.g. assistance to arriving, departing, transfer or transit passengers);
- Baggage handling (e.g. sorting of baggage, preparing it for departure)
- Freight and mail handling (e.g. physical handling of export, transfer and import freight/ of incoming and outgoing mail)
- Ramp handling (e.g. marshalling the aircraft on the ground at arrival and departure)
- Aircraft services (e.g. external and internal cleaning, and the toilet and water services)
- Fuel and oil handling (e.g. organization and execution of fuelling and defuelling operations)
- Aircraft maintenance (e.g. routine services performed before flight)
- Flight operations and crew administration (e.g. in-flight assistance, including re-dispatching if needed)
- Surface transport
- Catering services
- Other, please specify
.....

What was the size of the staff in your organisation in the years 1997, 2001, and 2006? Please provide figures per professional group in full-time equivalents (fte's).

	31-12-1997	31-12-2001	31-12-2006
Ground handlers			
Other staff			
Total staff			

What percentage of your total staff was based in EU Member States in 2006? In case you don't know the exact percentage, please provide an approximation.

*** Did your organisation outsource activities since 1997 which may have affected the size of staff?**

Yes

No

Which activities were outsourced?

Administration

ICT

Other, please specify

.....

On how many EU-airports did your organisation carry out ground handling activities in 2006?

**What was the total number of the staff that your organisation employs?
Please provide figures in full-time equivalents (fte's) and specify the number
of ground handling staff in the separate boxes.**

	Total staff	Of which ground handling staff
31 December 1997	<input type="text"/>	<input type="text"/>
31 December 1998	<input type="text"/>	<input type="text"/>
31 December 1999	<input type="text"/>	<input type="text"/>
31 December 2000	<input type="text"/>	<input type="text"/>
31 December 2001	<input type="text"/>	<input type="text"/>
31 December 2002	<input type="text"/>	<input type="text"/>
31 December 2003	<input type="text"/>	<input type="text"/>
31 December 2004	<input type="text"/>	<input type="text"/>
31 December 2005	<input type="text"/>	<input type="text"/>
31 December 2006	<input type="text"/>	<input type="text"/>

What percentage of your total staff was based in EU Member States in 2006? In case you don't know the exact percentage, please provide an approximation.

In case your organisation currently provides ground handling services, please specify which of the following services:

- My organisation does not provide ground handling services
- Ground administration and supervision (e.g. representation & liaison services with local authorities on behalf of the airport user);
- Passenger handling (e.g. assistance to arriving, departing, transfer or transit passengers)
- Baggage handling (e.g. sorting of baggage, preparing it for departure)
- Freight and mail handling (e.g. physical handling of export, transfer and import freight/ of incoming and outgoing mail)
- Ramp handling (e.g. marshalling the aircraft on the ground at arrival and departure)
- Aircraft services (e.g. external and internal cleaning, and the toilet and water services)
- Fuel and oil handling (e.g. organization and execution of fuelling and defuelling operations)
- Aircraft maintenance (e.g. routine services performed before flight)
- Flight operations and crew administration (e.g. in-flight assistance, including re-dispatching if needed)
- Surface transport
- Catering services
- None
- Other, please specify
.....

*** Did your organisation outsource activities since 1997 which may have affected the size of staff?**

- Yes
- No

Which activities were outsourced?

- Administration
- Information- and communication technologies (ICT)
- Ground handling activities
- Other, please specify

.....

What has been the capacity of your organisation in the following years?

	31-12-1997	31-12-2001	31-12-2006
Tonnage cargo			
Number of passengers			

Which type of airport does your organisation manage? Multiple answers possible.

- International hub
- Regional airport

What was the size of the staff in your organisation in the years 1997, 2001, and 2006? Please provide figures per professional group in full-time equivalents (fte's).

	31-12-1997	31-12-2001	31-12-2006
Total staff			
Of which ATCO in OPS			

What percentage of your total staff was based in EU Member States in 2006? In case you don't know the exact percentage, please provide an approximation.

*** Did your organisation outsource activities since 1997 which may have affected the size of staff?**

Yes

No

Which activities were outsourced?

Administration

ICT

Training

Other, please specify

.....

What has been the capacity of your organisation over 2006? Please specify the total number of flight movements (including both approach and en-route).

* Which of the following professional groups are employed in your organisation? Multiple answers possible.

- Flight crew
- Cabin crew
- Air traffic controllers
- Ground handlers (incl. caterers)
- Other

.....

B. Contract and Remuneration These questions concern the way employees were hired and how they were remunerated during 1997-2007.

Please specify the development of the share of flight crew with the following types of labour contracts in your organisation during 1997-2007.

	1 Increased	2 Decreased	3 No change	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B. Contract and Remuneration These questions concern the way employees were hired and how they were remunerated during 1997-2007.

Please specify the development of the share of cabin crew with the following types of labour contracts in your organisation during 1997-2007.

	1 Increased	2 Decreased	3 No change	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

B. Contract and Remuneration These questions concern the way employees were hired and how they were remunerated during 1997-2007.

Please specify the development of the share of air traffic controllers with the following types of labour contracts in your organisation during 1997-2007.

	1 Increased	2 Decreased	3 No change	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

B. Contract and Remuneration These questions concern the way employees were hired and how they were remunerated during 1997-2007.

Please specify the development of the share of ground handling staff (incl. employees working in aviation catering) with the following types of labour contracts in your organisation during 1997-2007.

	1 Increased	2 Decreased	3 No change	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent has the share of flexible/ variable wage components in the remunerative package of your staff increased or decreased during the period 1997 – 2007? Please click 'not relevant' for the group your organisation does not employ.

	1 Increased to a large extent	2 Increased somewhat	3 No changes	4 Decreased somewhat	5 Decreased to a large extent	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How, in your opinion, did the remunerative packages (basic/ fixed wage as well as flexible/ variable wage components) of staff develop in relation to the development of inflation during the period 1997- 2007? Please click 'not relevant' for the group your organisation does not employ.

	1 Package evolved in pace with the development of inflation	2 Package exceeded the development of inflation	3 Package lagged behind inflation	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

How, in your opinion, did the remunerative package (basic/ fixed wage as well as flexible/ variable wage components) of your staff develop in relation to the development of remunerative packages on average during the period 1997- 2007? Please click 'not relevant' for the group your organisation does not employ.

	1 Package evolved in pace with the average remunerative package	2 Package exceeded the development of the average remunerative package	3 Package lagged behind the development of the average remunerative package	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

* **Does your organisation currently apply a different wage-scale for new employees (a so-called two-tier system)? Please specify whether this is the case and whether the two-tier system existed before 1997. Please click 'not relevant' for the group your organisation does not employ.**

	1 Yes, introduced since 1997	2 Yes, existed before 1997	3 No	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

To what extent do the wage conditions for new staff vary from the wage-conditions of personnel that was hired before the two-tier system was introduced? Please click 'not relevant' for the group your organisation does not represent and in case a two-tier system does not exist for a specific professional group.

	1 Far better	2 Better	3 No differences	4 Worse	5 Far Worse	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How do you assess the development of wage conditions in general in your organisation in the period between 1997 and 2007? Please click 'not relevant' for the group your organisation does not employ.

	1 Improved to a large extent	2 Improved fairly	3 No changes	4 Decreased fairly	5 Decreased to a large extent	Not relevant
Flight crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How do the wage conditions in general of flight- and cabin crew in your organisation compare with those in (other) network carriers and (other) point-to-point carriers?

	1 Far better	2 Better	3 No difference	4 Worse	5 Far worse	Not relevant
Vis-à-vis network carriers	<input type="checkbox"/>					
Vis-à-vis point- to-point carriers	<input type="checkbox"/>					

How do the wage conditions in general of ground handling staff in your organisation compare with those in other organisations providing ground handling services?

	1 Far better	2 Better	3 No difference	4 Worse	5 Far Worse	Not relevant
Vis-à-vis ground handling companies	<input type="checkbox"/>					
Vis-à-vis airport operators	<input type="checkbox"/>					
Vis-à-vis self- handlers	<input type="checkbox"/>					

C. Working conditions The questions in this section concern the development of the working conditions for flight- and cabin crew, air traffic controllers and ground handlers that your organisation employed in the period 1997-2007.

In your opinion, how did the working conditions of your flight crew develop in the period 1997 - 2007 with respect to the following aspects?

	1 Improved/Increased	2 Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

C. Working conditions The questions in this section concern the development of the working conditions for flight- and cabin crew, air traffic controllers and ground handlers that your organisation employed in the period 1997-2007.

In your opinion, how did the working conditions of your cabin crew develop in the period 1997 - 2007 with respect to the following aspects?

	1 Improved/Increased	2 Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

C. Working conditions The questions in this section concern the development of the working conditions for flight- and cabin crew, air traffic controllers and ground handlers that your organisation employed in the period 1997-2007.

In your opinion, how did the working conditions of your air traffic controllers develop in the period 1997 - 2007 with respect to the following aspects?

	1 Improved/Increased	2 Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

C. Working conditions The questions in this section concern the development of the working conditions for flight- and cabin crew, air traffic controllers and ground handlers that your organisation employed in the period 1997-2007.

In your opinion, how did the working conditions of your ground handling staff develop in the period 1997 - 2007 with respect to the following aspects?

	1 Improved/Increased	2 Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

The answer possibilities (improved/increased and deteriorated/decrease) of the questions relating to the working conditions has led to misunderstandings within the participants. Thus we decided to send additional question concerning these issues with the answer possibilities, improved and decrease.

How do the working-conditions in general of flight- and cabin crew in your organisation compare with those in (other) network carriers and (other) point-to-point carriers?

	1 Far better	2 Better	3 No difference	4 Worse	5 Far worse	Not relevant
Vis-à-vis network carriers	<input type="checkbox"/>					
Vis-à-vis point- to-point carriers	<input type="checkbox"/>					

How do the working conditions in general of ground handling staff in your organisation compare with those in other organisations providing ground handling services?

	1 Far better	2 Better	3 No difference	4 Worse	5 Far Worse	Not relevant
Vis-à-vis ground handlers companies	<input type="checkbox"/>					
Vis-à-vis airport operators	<input type="checkbox"/>					
Vis-à-vis self- handlers	<input type="checkbox"/>					

D. Initial and professional training The following questions are intended to clarify possible changes in skill requirements and the quality of initial and professional training in the period 1997-2007.

Does your organisation offer initial and professional training to your staff? Please click 'not relevant' for the group your organisation does not employ.

	1 Only initial training	2 Only professional training	3 Initial & professional training	4 Initial & professional training is provided by an external institute	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In your opinion, did the quality of initial and professional training for flight crew improve or deteriorate during 1997 – 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Initial training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In your opinion, did the quality of initial and professional training for cabin crew improve or deteriorate during 1997 – 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Initial training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Professional training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

In your opinion, did the quality of initial and professional training for air traffic controllers improve or deteriorate during 1997 – 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Initial training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

In your opinion, did the quality of initial and professional training for ground handling staff improve or deteriorate during 1997 – 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Initial training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Can you please describe the main improvements or deteriorations in the quality of initial and professional training for your staff?

To what extent did the following aspects of initial- and professional training of your flight crew change in the period 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution of students to initial training costs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per year per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on the training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent did the following aspects of initial- and professional training of your cabin crew change in the period 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution of students to initial training costs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per year per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on the training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent did the following aspects of initial- and professional training of air traffic controllers change in the period 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution of students to initial training costs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per year per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on the training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent did the following aspects of initial- and professional training of ground handling staff change in the period 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Contribution of students to initial training costs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per year per employee	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on the training	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

E. Social Security In this section questions are asked about the development of social security provisions that are complementary to the national statutory schemes.

Please specify the development of the regular retirement age of the staff in your organisation during the period considered? Please click 'not relevant' for the group your organisation does not employ.

	1 Increase	2 Decrease	3 No change	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground handlers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Did your organization try to make early retirement for the staff less attractive between 1997 and 2007? Early retirement refers here to retirement below the legal retirement age in your country. Please click 'not relevant' for the group your organisation does not employ.

	1 Less attractive	2 More attractive	3 No change	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ground handlers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the level of contributions to complementary social security provisions paid by the flight crew in your organisation increased or decreased during 1997-2007?

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the level of contributions to complementary social security provisions paid by the cabin crew in your organisation increased or decreased during 1997-2007?

	1 Increase	2 Decrease	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the level of contributions to complementary social security provisions paid by the air traffic controllers in your organisation increased or decreased during 1997-2007?

	1 Increase	2 Decrease	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the level of contributions to complementary social security provisions paid by the ground handling staff in your organisation increased or decreased during 1997-2007?

	1 Increase	2 Decrease	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the flight crew in your organisation increased or decreased during 1997-2007?

	1 Increase	2 Decrease	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the cabin crew in your organisation increased or decreased during 1997-2007?

	1 Increase	2 Decrease	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the air traffic controllers in your organisation increased or decreased during 1997-2007?

	1 Increase	2 Decrease	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the ground handling staff in your organisation increased or decreased during 1997-2007?

	1 Increase	2 Decrease	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. Mobility These questions concern the development of possibilities for employees in the air transport sector to work at organizations across the EU.

* **To what extent have the possibilities for your staff to pursue their career in other EU-countries changed since 1997? Please click 'not relevant' for the group your organisation does not employ.**

	1 Increased to a large extent	2 Increased somewhat	3 No changes	4 Decreased somewhat	5 Decreased to a large extent	Not relevant
Flight crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are the main positive or negative effects that you have experienced that are linked to the increased workers' mobility in the EU air transport sector since 1997? Max. two answers.

- Larger pool of talented employees
- More job opportunities
- Downward pressure on wages
- Longer working hours
- More flexibility of workers
- Larger administrative burden
- Other, please specify

.....

What, in your opinion, are currently the two main obstacles for the EU-wide mobility of your staff?Max. two answers.

- Discrimination of licenses by employers
- Lack of clear shared standards concerning skills in the industry
- Language barriers
- Uncertainty of social rights
- Other, please specify

.....

Does your organization currently employ staff originating from other EU-countries than the locations where it is based? Figures in % as proportion of all staff employed in that respective profession. Please fill in '0' for the group your organisation does not employ.

	1997	2001	2007
Foreign flight crew	<input type="text"/>	<input type="text"/>	<input type="text"/>
Foreign cabin crew	<input type="text"/>	<input type="text"/>	<input type="text"/>
Foreign ground handlers	<input type="text"/>	<input type="text"/>	<input type="text"/>
Foreign ATC	<input type="text"/>	<input type="text"/>	<input type="text"/>

G. Other issues

Please indicate how, in your opinion, the following issues in the air transport sector have changed in the period 1997-2007

	1 Large improvements	2 Some improvements	3 No changes	4 Some deterioration	5 Large deterioration
Social relations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of work	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers rights in health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gender equality and equal access to employment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent are the developments in the total employment in the EU air transport sector in the period 1997-2007 influenced by the following events?

	1 Very large influence	2 Large influence	3 Some influence	4 No influence
EU liberalisation of the sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
National liberalisation process air transport sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Threat of) terrorist attacks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Diseases (SARS, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rising fuel prices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Competition from other modalities (high speed trains, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Economic growth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EU enlargement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

To what extent are the developments in the wage conditions in the EU air transport sector in the period 1997-2007 influenced by the following events?

	1 Very large influence	2 Large influence	3 Some influence	4 No influence
EU liberalisation of the sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
National liberalisation process air transport sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Threat of) terrorist attacks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Diseases (SARS, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rising fuel prices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Competition from other modalities (high speed trains, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Economic growth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EU enlargement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

To what extent are the developments in the working conditions in the EU air transport sector in the period 1997-2007 influenced by the following events?

	1 Very large influence	2 Large influence	3 Some influence	4 No influence
EU liberalisation of the sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National liberalisation process air transport sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Threat of) terrorist attacks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diseases (SARS, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rising fuel prices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competition from other modalities (high speed trains, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic growth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EU enlargement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your cooperation! If you have any further comments or suggestions that can be relevant for our study, please fill in the form below.

Annex V Questionnaire internet survey trade unions

A. BackgroundThe following questions concern your contact details and general information about your organisation. This information will be treated strictly confidential.

What is the name of your organisation?

What is your name?

What is your email address?

In which country does your organisation represent staff in the air transport sector?

- | | |
|------------------------------------|---|
| <input type="checkbox"/> Austria | <input type="checkbox"/> Belgium |
| <input type="checkbox"/> Bulgaria | <input type="checkbox"/> Croatia |
| <input type="checkbox"/> Cyprus | <input type="checkbox"/> Czech Republic |
| <input type="checkbox"/> Denmark | <input type="checkbox"/> Estonia |
| <input type="checkbox"/> Finland | <input type="checkbox"/> France |
| <input type="checkbox"/> Germany | <input type="checkbox"/> Greece |
| <input type="checkbox"/> Hungary | <input type="checkbox"/> Ireland |
| <input type="checkbox"/> Italy | <input type="checkbox"/> Latvia |
| <input type="checkbox"/> Lithuania | <input type="checkbox"/> Luxembourg |
| <input type="checkbox"/> Malta | <input type="checkbox"/> Netherlands |
| <input type="checkbox"/> Poland | <input type="checkbox"/> Portugal |
| <input type="checkbox"/> Romania | <input type="checkbox"/> Slovakia |
| <input type="checkbox"/> Slovenia | <input type="checkbox"/> Spain |
| <input type="checkbox"/> Sweden | <input type="checkbox"/> United Kingdom |
| <input type="checkbox"/> Other | |
| | |

*** Which of the following professional groups does your organisation represent? Multiple answers possible.**

- Flight crew
 - Cabin crew
 - Air Traffic controllers
 - Ground handling staff (incl. caterers)
 - Other
-

B. Contract and remuneration The questions in this section concern the development of contracts and remuneration for staff employed in the air transport sector that you represent in the period 1997-2007.

Please specify the development of the share of flight crew in your country with the following types of labour contracts during 1997-2007.

	1 Increased	2 Decreased	3 No changes	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

B. Contract and remuneration The questions in this section concern the development of contracts and remuneration for staff employed in the air transport sector that you represent in the period 1997-2007.

Please specify the development of the share of cabin crew in your country with the following types of labour contracts during 1997-2007.

	1 Increased	2 Decreased	3 No changes	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

B. Contract and remuneration The questions in this section concern the development of contracts and remuneration for staff employed in the air transport sector that you represent in the period 1997-2007.

Please specify the development of the share of air traffic controllers in your country with the following types of labour contracts during 1997-2007.

	1 Increased	2 Decreased	3 No changes	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

B. Contract and remuneration The questions in this section concern the development of contracts and remuneration for staff employed in the air transport sector that you represent in the period 1997-2007.

Please specify the development of the share of ground handling staff in your country with the following types of labour contracts during 1997-2007.

	1 Increased	2 Decreased	3 No changes	Not relevant
With unlimited contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
With fixed-term contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
With full-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
With flexible contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Via temp agencies	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
With part-time contracts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

To what extent has the share of flexible/ variable wage components in the remunerative package of air transport employees increased or decreased during the period 1997 – 2007? Please click 'not relevant' for the group your organisation does not represent.

	1 Increased to a large extent	2 Increased somewhat	3 No changes	4 Decreased somewhat	5 Decreased to a large extent	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

How, in your opinion, did the remunerative package (basic/ fixed wage and flexible/ variable wage components) of your members develop in relation to the development of inflation during the period 1997 – 2007? Please click 'not relevant' for the group your organisation does not represent.

	1 Package evolved in pace with the development of inflation	2 Package exceeded the development of inflation.	3 Package lagged behind inflation	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

How, in your opinion, did the remunerative package (basic/ fixed wage and flexible/ variable wage components) of your members develop in relation to the remunerative package on average in your country during the period 1997 – 2007? Please click 'not relevant' for the group your organisation does not represent.

	1 Package evolved in pace with the average remunerative package	2 Package exceeded the development of the average remunerative package.	3 Package lagged behind the development of the average remunerative package	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

* To what extent did employers in your country introduce a different wage-scale for new employees (a so-called two-tier system) during 1997 – 2007? Please click 'not relevant' for the group your organisation does not represent.

	1 Yes, all employers	2 Yes, most employers	3 Approximately 50-50	4 Yes, some employers	5 No, none	Not relevant
Flight crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent do the wage conditions for new staff vary from the wage-conditions of personnel that was hired before the two-tier system was introduced? Please click 'not relevant' for the group your organisation does not represent and in case a two-tier system does not exist for a specific professional group.

	1 Far better	2 Better	3 No differences	4 Worse	5 Far worse	Not relevant
Flight crew	<input type="checkbox"/>					
Cabin crew	<input type="checkbox"/>					
Air traffic controllers	<input type="checkbox"/>					
Ground handling staff	<input type="checkbox"/>					

How would you assess the development of wage conditions in general for the employees you represent in the period between 1997 and 2007? Please click 'not relevant' for the group your organisation does not represent.

	1 Improved to a large extent	2 Improved somewhat	3 No changes	4 Deteriorated somewhat	5 Deteriorated to a large extent	Not relevant
Flight crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How do the wage conditions in general of flight- and cabin crew at network carriers compare to those at point-to-point carriers in your country?

	1 Far Better	2 Better	3 No differences	4 Worse	5 Far worse	Not relevant
Flight crew	<input type="checkbox"/>					
Cabin crew	<input type="checkbox"/>					

How do the wage conditions in general of ground handling staff employed by airport authorities, airlines (self handlers) and ground handling companies compare in your country?

	1 Far better	2 Better	3 No difference	4 Far worse	5 Worse	Not relevant
Airport authorities compared to airlines	<input type="checkbox"/>					
Airport authorities compared to ground handling companies	<input type="checkbox"/>					
Ground handling companies compared to airlines	<input type="checkbox"/>					

C. Working conditions The questions in this section concern the development of the working conditions for the staff employed in the air transport sector that you represent in the period 1997-2007.

How do you assess the development of working conditions of the flight crew you represent since 1997 on the following issues?

	1 Improved/ Increased	2 Deteriorated/ Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

C. Working conditions The questions in this section concern the development of the working conditions for the staff employed in the air transport sector that you represent in the period 1997-2007.

How do you assess the development of working conditions of the cabin crew you represent since 1997 on the following issues?

	1 Improved/ Increased	2 Deteriorated/ Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

C. Working conditions The questions in this section concern the development of the working conditions for the staff employed in the air transport sector that you represent in the period 1997-2007.

How do you assess the development of working conditions of the air traffic controllers you represent since 1997 on the following issues?

	1 Improved/ Increased	2 Deteriorated/ Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

C. Working conditions The questions in this section concern the development of the working conditions for the staff employed in the air transport sector that you represent in the period 1997-2007.

How do you assess the development of working conditions of the ground handling staff you represent since 1997 on the following issues?

	1 Improved/ Increased	2 Deteriorated/ Decreased	3 No change
Working conditions in general	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Operational pressure	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Professional health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of duty hours (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
The number of holidays (full time contract)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time between shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rest time during a shift	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Roistering of shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Influence of employees on their shifts	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The answer possibilities (improved/increased and deteriorated/decrease) of the questions relating to the working conditions has led to misunderstandings within the participants. Thus we decided to send additional question concerning these issues with the answer possibilities, improved and decrease.

How do the working conditions in general for flight- and cabin crew at network carriers compare to those at point-to-point carriers in your country?

	1 Far better	2 Better	3 No differences	4 Worse	5 Far worse	Not relevant
Flight crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

How do the working conditions in general of ground handling staff employed by airport authorities, airlines (self handlers) and ground handling companies compare in your country?

	1 Far better	2 Better	3 No differences	4 Worse	5 Far worse	Not relevant
Airport authorities compared to airlines	<input type="checkbox"/>					
Airport authorities compared to ground handling companies	<input type="checkbox"/>					
Ground handling companies compared to airlines	<input type="checkbox"/>					

D. Initial and professional training The following questions are intended to clarify possible changes in skill requirements and the quality of initial and professional training in the period 1997-2007.

What is your opinion on the development of the quality of initial and professional training for the flight crew in your country between 1997 and 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Quality of initial training performed by point-to-point carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of initial training performed by network carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of initial training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by point-to-point carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by network carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D. Initial and professional training The following questions are intended to clarify possible changes in skill requirements and the quality of initial and professional training in the period 1997-2007.

What is your opinion on the development of the quality of initial and professional training for the cabin crew in your country between 1997 and 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Quality of initial training performed by point-to-point carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of initial training performed by network carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of initial training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by point-to-point carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by network carriers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

D. Initial and professional training The following questions are intended to clarify possible changes in skill requirements and the quality of initial and professional training in the period 1997-2007.

What is your opinion on the development of the quality of both initial and professional training for the air traffic controllers in your country between 1997 and 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Quality of initial training performed by employers	<input type="checkbox"/>	<input type="checkbox"/>	◀	▶
Quality of initial training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	◀	▶
Quality of professional training performed by employers	<input type="checkbox"/>	<input type="checkbox"/>	◀	▶
Quality of professional training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	◀	▶

D. Initial and professional training The following questions are intended to clarify possible changes in skill requirements and the quality of initial and professional training in the period 1997-2007.

What is your opinion on the development of the quality of both initial and professional training for the ground handling staff in your country between 1997 and 2007?

	1 Improved	2 Deteriorated	3 No change	4 Don't know
Quality of initial training performed by employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of initial training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of professional training performed by external training institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Can you please describe in a few words the main improvements or deteriorations in the quality of initial and professional training for air transport employees in your country?

To what extent did the following aspects of initial and professional training for the flight crew in your country change during 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution of student to initial training costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per person per year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on training package	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent did the following aspects of initial and professional training for the cabin crew in your country change during 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution of student to initial training costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per person per year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on training package	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent did the following aspects of initial and professional training for the air traffic controllers in your country change during 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution of student to initial training costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per person per year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on training package	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent did the following aspects of initial and professional training for the ground handling staff in your country change during 1997-2007?

	1 Increased	2 Decreased	3 No change	4 Don't know
Skill requirements demanded by employers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of initial training per person	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Contribution of student to initial training costs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hours of professional training per person per year	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influence of student/employee on training package	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

How, in your opinion, does the quality of training for flight- and for cabin crew at network carriers relate to the quality of training at point-to-point carriers in your country?

	1 Far better	2 Better	3 Worse	4 Far worse	5 No differences	Not relevant
Flight crew	<input type="checkbox"/>					
Cabin crew	<input type="checkbox"/>					

How does the quality of the initial and professional training for ground handling staff employed by airport authorities, airlines (self handlers) and ground handling companies compare in your country?

	1 Far better	2 Better	3 No differences	4 Worse	5 Far worse	Not relevant
Airport authorities compared to airlines	<input type="checkbox"/>					
Airport authorities compared to ground handling companies	<input type="checkbox"/>					
Ground handling companies compared to airlines	<input type="checkbox"/>					

E. Social security In this section questions are asked on the development of social security provisions that are complementary to the national statutory schemes.

Has the level of contributions to complementary social security provisions paid by the flight crew in your country increased or decreased during 1997-2007?

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

E. Social security In this section questions are asked on the development of social security provisions that are complementary to the national statutory schemes.

Has the level of contributions to complementary social security provisions paid by the cabin crew in your country increased or decreased during 1997-2007?

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

E. Social security In this section questions are asked on the development of social security provisions that are complementary to the national statutory schemes.

Has the level of contributions to complementary social security provisions paid by the air traffic controllers in your country increased or decreased during 1997-2007?

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

E. Social security In this section questions are asked on the development of social security provisions that are complementary to the national statutory schemes.

Has the level of contributions to complementary social security provisions paid by the ground handling staff in your country increased or decreased during 1997-2007?

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the flight crew in your country increased or decreased during 1997-2007? Relevant are only the complementary provisions to national statutory schemes.

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the cabin crew in your country increased or decreased during 1997-2007? Relevant are only the complementary provisions to national statutory schemes.

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the air traffic controllers in your country increased or decreased during 1997-2007? Relevant are only the complementary provisions to national statutory schemes.

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Has the generosity of benefits under complementary social security provisions for the ground handling staff in your country increased or decreased during 1997-2007? Relevant are only the complementary provisions to national statutory schemes.

	1 Increased	2 Decreased	3 No change	Not relevant
Pension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Unemployment insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Disability insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sickness insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

F. Mobility These questions concern the development in the possibilities for employees in the air transport sector to work at organizations in other EU countries.

* **To what extent have the possibilities for air transport employees in your country to pursue their career in other EU member states changed since 1997? Please click 'not relevant' for the group your organisation does not represent.**

	1 Increased to a large extent	2 Increased somewhat	3 No changes	4 Decreased somewhat	5 Decreased to a large extent	Not relevant
Flight crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Cabin crew	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Air traffic controllers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ground handling staff	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

What are the main positive or negative effects that you have experienced that are linked to the increased workers' mobility in the EU air transport sector since 1997? Max. two answers.

- Larger pool of talented employees
- More job opportunities
- Downward pressure on wages
- Longer working hours
- More flexibility of workers
- Larger administrative burden
- Other, please specify

.....

What, in your opinion, are currently the two main obstacles for EU-wide mobility of air transport employees from your country? Max. two answers.

- Discrimination of licenses by employers
- Lack of clear shared standards concerning skills in the industry
- Language barriers
- Uncertainty of social rights;
- Other, please specify

.....

G. Other issues

Please indicate how, in your opinion, the following issues in the air transport sector have changed in the period 1997-2007.

	1 Large improvement	2 Some improvement	3 No changes	4 Some deterioration	5 Large deterioration
Social relations	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Quality of work	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Workers rights in health and safety	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gender equality and equal access to employment	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent are the developments in the total employment in the EU air transport sector in the period 1997-2007 influenced by the following events?

	1 Very large influence	2 Large influence	3 Some influence	4 No influence
EU liberalisation of the sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National liberalisation process air transport sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Threat of) terrorist attacks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diseases (SARS, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rising fuel prices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competition from other modalities (high speed trains, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic growth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EU enlargement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

To what extent are the developments in the wage conditions in the EU air transport sector in the period 1997-2007 influenced by the following events?

	1 Very large influence	2 Large influence	3 Some influence	4 No influence
EU liberalisation of the sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
National liberalisation process air transport sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
(Threat of) terrorist attacks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Diseases (SARS, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Rising fuel prices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Competition from other modalities (high speed trains, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Economic growth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EU enlargement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

To what extent are the developments in the working conditions in the EU air transport sector in the period 1997-2007 influenced by the following events?

	1 Very large influence	2 Large influence	3 Some influence	4 No influence
EU liberalisation of the sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National liberalisation process air transport sector	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(Threat of) terrorist attacks	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diseases (SARS, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rising fuel prices	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Competition from other modalities (high speed trains, etc.)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Economic growth	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
EU enlargement	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Thank you for your cooperation! If you have any further comments or suggestions that can be relevant for our study, please indicate them below.

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Annex VII Eurocontrol low cost panel

	Airlines	Country
1	Aer Arann	Ireland
2	Air Berlin	Germany
3	Air Southwest	Great Britain
4	Atlas Blue	Marocco
5	Blu Express	Italy
6	Blue 1	Finland
7	Blue Air	Romania
8	Bmi Baby	Great Britain
9	Brussels Airlines	Belgium
10	Budget Air	Ireland
11	Central Wings	Poland
12	Clickair	Spain
13	Corendon	Germany
14	Deutsche BA	Germany
15	Easy Jet	Great Britain
16	Easy Jet Switzerland	Switzerland
17	Fly Baboo	Switzerland
18	Fare4u	Malta
19	Fly Be	Great Britain
20	Fly Globespan	Great Britain
21	Fly Niki	Austria
22	Fly Nordic	Sweden
23	Germania Gexx	Germany
24	German Wings	Germany
25	Gotlandsflyg	Sweden
26	Hapag Lloyd Express	Germany
27	Helvetic Airways	Iceland
28	Intersky	Austria
29	Jet2	Great Britain
30	Kullaflyg	Sweden
31	Monarch Scheduled	Great Britain
32	My Air	Italy
33	Norwegian	Norway
34	Onur Air	Turkey
35	Ryanair	Ireland
36	Sky Europe	Slovakia
37	Sky Europe Hungary	Hungary
38	Smartwings	Czech Republic
39	Sterling Airlines	Denmark
40	Sundsvallsflyg	Sweden
41	Sun Express	Turkey
42	Thomson Fly	Great Britain
43	Transavia	Netherlands
44	Virgin Express	Belgium
45	Vueling	Spain
46	Windjet	Ireland
47	Wizz Air	Hungary