

OECD REVIEWS OF REGULATORY REFORM

REGULATORY REFORM IN FRANCE

**REGULATORY REFORM IN THE CIVIL
AVIATION SECTOR**



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

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Publié en français sous le titre :

La réforme de la réglementation dans le secteur de l'aviation civile

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FOREWORD

Regulatory reform has emerged as an important policy area in OECD and non-OECD countries. For regulatory reforms to be beneficial, the regulatory regimes need to be transparent, coherent, and comprehensive, spanning from establishing the appropriate institutional framework to liberalising network industries, advocating and enforcing competition policy and law and opening external and internal markets to trade and investment.

This report on *Regulatory Reform in the Civil Aviation Sector* analyses the institutional set-up and use of policy instruments in France. It also includes the country-specific policy recommendations developed by the OECD during the review process.

The report was prepared for *The OECD Review of Regulatory Reform in France* published in 2004. The Review is one of a series of country reports carried out under the OECD's Regulatory Reform Programme, in response to the 1997 mandate by OECD Ministers.

Since then, the OECD has assessed regulatory policies in 20 member countries as part of its Regulatory Reform programme. The Programme aims at assisting governments to improve regulatory quality — that is, to reform regulations to foster competition, innovation, economic growth and important social objectives. It assesses country's progresses relative to the principles endorsed by member countries in the 1997 *OECD Report on Regulatory Reform*.

The country reviews follow a multi-disciplinary approach and focus on the government's capacity to manage regulatory reform, on competition policy and enforcement, on market openness, specific sectors such as electricity and telecommunications, and on the domestic macroeconomic context.

This report was principally prepared by Philippe Gugler, Consultant in the Directorate for Financial and Fiscal Affairs of the OECD. It benefited from extensive comments provided by colleagues throughout the OECD Secretariat, as well as close consultations with a wide range of government officials, parliamentarians, business and trade union representatives, consumer groups, and academic experts in France. The report was peer-reviewed by the 30 member countries of the OECD. It is published under the authority of the OECD Secretary General.

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1. The civil aviation sector in France

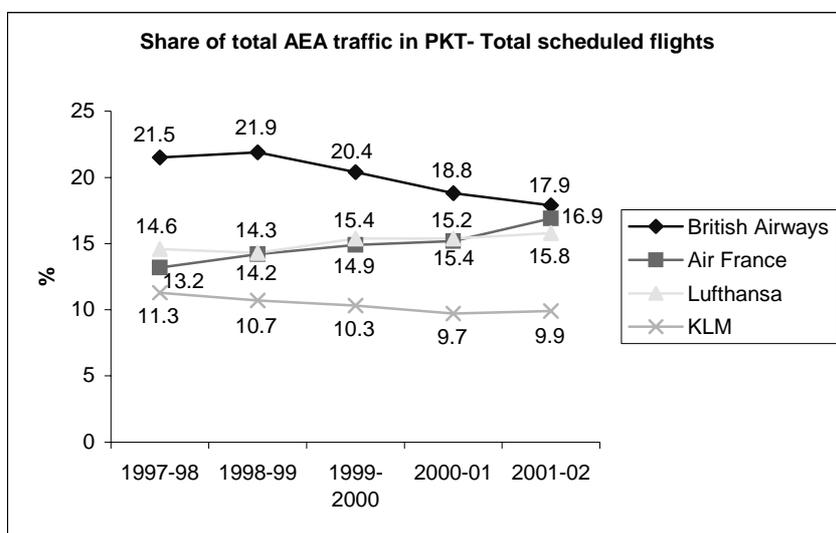
1.1. General data on the civil aviation sector in France

French civil aviation occupies an important place in international comparisons. On a global level, France accounts for 7% of air traffic but only 1% of the population. In 2000, 125 million passengers were transported to or from French airports. French air traffic rose by 63% between 1990 and 2000—an average annual growth rate of 4.6%, versus 3.3% for global air traffic over the same period¹. International flights accounted for 68%, of which 53% were European flights, while domestic traffic represented 32% of the total.

In 2002, Air France was the world's third-largest carrier, and the second-largest in Europe, in terms of international passenger transport (Table 1). The company ranked fourth for international freight transport. Over the course of that same year, Air France transported 43.3 million passengers in 83 countries and served 198 destinations². Aéroports de Paris (ADP) ranked sixth amongst major airports in terms of commercial passenger traffic, after London, Tokyo, Chicago, New York and Atlanta (according to data for 2001)³.

The past ten years have seen major developments in French regulatory reform in the realm of civil aviation. These developments have entailed substantial adjustments on the part of enterprises and their employees. The reforms were carried out without compromising two overriding objectives, which are safety and security. Because of the sharp rise in air traffic, a third objective—environmental protection—has claimed an important place in government policymaking and will undoubtedly influence the extent, nature and outcome of future reforms.

Table 1. Share of total international flight traffic* (1997-2002)



*Share as a percentage of aggregate traffic of carriers belonging to the Association of European Airlines (AEA).

Source: Air France (2002b), *Rapport annuel et de développement durable 2001-2002*, p. 15.

In a context of far-reaching regulatory adjustment, the performance of the French civil aviation sector has been good in international comparisons in a number of areas. Clearly, the sector faces major challenges for the future. How these challenges are perceived will shape the nature and the extent of regulatory reform efforts and, as a result, the sector's performance in a radically changing European and global competitive context.

1.2. Community framework of regulatory reform

Much of the regulatory reform undertaken by France over the past ten years reflects the adoption of the three “packages” of Community air transport liberalisation decided in 1987, 1990 and 1992 respectively. The European Commission has in fact spearheaded the major process of regulatory reform that has been undertaken in France, as in the other EU Member States, in the realm of civil aviation. The European Community has adopted a series of measures covering such matters as liberalisation of traffic rights, pricing on those routes, reservation systems, ground handling services and slot allocation rules⁴. Concretely, since 1 April 1997, when the final phase of the last package entered into force, all traffic rights, including cabotage, have been liberalised in the European Community. Furthermore, a new Community agreement on air traffic control services (the “Single European Sky”) was reached in December 1992.

Clearly, and *inter alia* because of the unique and highly regulated nature of the civil aviation sector, the Community framework of market liberalisation in this area is more limited and gradual than what was adopted subsequently in other sectors, such as telecommunications. Accordingly, France's regulatory reform—like those of other EU countries—reflects these minimal standards of liberalisation agreed to at the Community level.

1.3. National framework for regulatory reform

The Civil Aviation Code consolidates legislative and regulatory provisions in respect of issues including air transport, aircraft, airports and flight personnel. Three main characteristics need to be noted in order to understand the workings of France regulation in the realm of civil aviation.

First, the regulatory authority is not one that is structurally independent from all other public bodies that provide services in the realm of civil aviation, insofar as French aviation is governed by a single government agency, the Directorate-General for Civil Aviation (Direction générale de l'aviation civile, or DGAC), which is placed under the authority of the Minister of Transport. The DGAC plays a dual role, which is a source of conflict of interest: on the one hand, it performs missions of regulation, supervision, co-ordination, training and administration in respect of all aspects of civil aviation, whether in the public or private sectors; and on the other, it is also a service provider (air traffic services for which it is paid fees).

Second, French civil aviation is an area in which the public-service model is widely prevalent and where there is a risk of overlapping of roles between the State as regulator, the State as shareholder, the State as licensing authority and the State as service provider⁵. The primary players (the flag carrier, airports) belong to the State or to public bodies and are administered by public institutions. A large number of them perform public service missions with public power prerogatives.

Lastly, while the air transport sector is subject to competition rules, a great many activities escape supervision by the Competition Council (Conseil de la concurrence). Relatively few cases are taken before the Council, insofar as the power to take administrative decisions in the performance of public service missions using public power prerogatives lies with the administrative authorities and not the Competition Council. Because decisions to authorise concentrations are a prerogative of the Minister for the Economy, the Competition Council—to which submissions in such cases are merely elective—was not called upon to

hand down opinions on the recent concentration operations, such as the equity investments or acquisitions of small regional airlines by Air France in a sector that is especially concentrated.

2. Regulatory structures, reforms and performance in the realm of passenger transport services⁶

2.1. Overall regulatory context of passenger transport services

The international framework for national regulation of air transport is set primarily by the Chicago Convention of 1944⁷. National regulatory provisions fit into this complex framework, which is well-known to the States and carriers involved, which provides limited market access on the basis of bilateral agreements that govern all of the scheduled international air traffic of airlines⁸. *Inter alia*, such agreements establish, on a reciprocal basis, the rights of each carrier for scheduled air transport of passengers and freight. The agreements therefore do not comply with the main fundamental principles of the WTO (and in particular the most-favoured nation clause and national treatment), insofar as air transport is not fully covered by the General Agreement on Trade in Services (GATS)⁹. This system of bilateral agreements impedes free trade in air transport services and the optimisation of movements, and it raises production costs at passengers' expense. The conclusions and recommendations of the 33rd Conference of the International Civil Aviation Organization (ICAO), held in March 2003, herald the beginning of a liberalisation process in the sector, in particular as concerns restrictions on the control and ownership of airlines by foreign interests. This trend is in fact going to influence the next stages of French regulatory reform in the realm of air transport.

The far-reaching reform of the French passenger air transport sector was implemented in conjunction with application of the three packages of Community liberalisation. The French Government transposed the Community provisions without inserting a single reservation. In accordance with the Community timetable, access to the French market was opened up in three stages:

- 1 January 1993: liberalisation of all services between France and EU Member States;
- 1 January 1996: opening of the French domestic market to competition from French carriers;
- 1 April 1997: opening of the French domestic network to competition from Community carriers.

In terms of market access, implementation of the third package, and primarily the provisions of Regulation 2408/92, was significant¹⁰. European companies theoretically have access to all national and international routes within the Community and may price those services freely, subject only to *ex post* supervision by the competition authorities. The development of competition has taken three main forms, albeit without posing a serious threat to the market held by the flag carrier, Air France. First, the main trend is network competition between major international alliances. Second, the performance of low-cost carriers on certain routes constitutes one of the main competitive breakthroughs which might gather strength in the future if these carriers are granted sufficient market access (slot allocation). Lastly, the development of high-speed rail links has made competition keener on certain routes, both domestic (such as Paris-Marseille) and international (such as Paris-London and Paris-Brussels)¹¹. However, in France, as in most other European countries, the national airline operates a large share of the scheduled intra- and extra-Community flights originating or terminating on its soil—the logical consequence of competition involving networks of alliances and its dominant position within its platform of concentration and “hubs and spokes”¹² (Table 2).

On domestic routes, French companies enjoy a very large combined share of the market (Table 3). Air France tends to hold a very strong position which has yet to be eroded by the arrival of low-cost carriers or the development of high-speed rail service—a fact noted in reports by a number of official bodies, such as the Economic and Social Council (Conseil économique et social)¹³ and the Senate.¹⁴

Table 2. Percentage of flights operated by the main carrier in selected European Union airports (based on data for 2002)

Airport	Main carrier	Percentage of flights
Paris Roissy/CDG	Air France	55%
Paris Orly	Air France	55%
London Heathrow	British Airways	38%
London Gatwick	British Airways	65%
Frankfurt	Lufthansa	59%
Munich	Lufthansa	53%
Amsterdam Schiphol	KLM	41%
Madrid Barajas	Iberia	55%
Rome Fumicino	Alitalia	50%

Source: BAE System (2001), pp. 8-6 and 8-7.

Table 3. Domestic traffic in France by nationality of carrier in 2001

Between Paris and provincial airports	Number of passengers
French carriers	19 178 805
Foreign carriers	1 816
Total	19 180 621
Between provincial airports	Number of passengers
French carriers	5 681 207
Foreign carriers	124 357
Total	5 805 185

Source: DGAC.

Regulatory reform in the air transport services market has not produced all of the effects anticipated; this can be explained, *inter alia*, by the fact that the sector is grounded in a concept of public service that is not yet viewed from an entirely competition-oriented standpoint because of the conflicts of interest that can be seen primarily in three areas: the slot allocation difficulties encountered by carriers in the most congested airports; to a limited extent, the regime of subsidies granted to carriers, primarily for reasons of regional planning; and lastly, the status and governance of the national airline, Air France, although the French government has just enacted a law authorising a substantial reduction in the State's shareholding.

2.2. Slot allocation

The allocation and scheduling of slots (the scheduled time of arrival and/or departure allocated to an aircraft movement on a specific date) constitute one of the essential pillars of market access, and of effective competition between airlines. The issue is crucial primarily at congested airports. Without available slots, the benefits of liberalisation are spread unevenly, and competition is subject to distortions. Furthermore, the allocation of slots at different times of day can also be a source of distortion of competition if certain carriers, and the national airline in particular, are allocated the best slots in terms of passenger demand. Any carrier depends on these essential concessions in respect of both possibility of access to infrastructure and equality of access.

2.2.1. *Implementation of Community Regulation 95/93*

Since 1993, slot allocation within the EU has been governed by Council Regulation (EEC) No. 95/93 of 18 January 1993 on common rules for the allocation of slots at Community airports (hereinafter, “Regulation 95/93”)¹⁵. Under this Community Regulation, prior allocation of a slot is required in order to land or take off at “fully co-ordinated” airports, i.e., at airports where the level of saturation poses serious problems that cannot be solved by other means. Slot allocation at congested airports must be based on rules that are neutral, transparent and non-discriminatory.

Responsibility for the decision to co-ordinate an airport lies with the Member States. Slots are allocated by an authority designated as the “co-ordinator”¹⁶. All slots that are used properly (i.e., over at least 80% of the period for which they are allocated) are automatically re-allocated to the carriers operating them when they reapply for the following equivalent season (under the principle of “grandfather rights” or “historic rights”). Lastly, available slots (i.e., those that are given back by carriers, not re-allocated, or newly created) are pooled and split evenly between new entrants (carriers new to an airport or those deemed to have few slots) and incumbents. Regulation 95/93 also stipulates that States may enact special measures to preserve adequate domestic air services by allocating a number of slots to routes serving certain regions.

A number of provisions have been adopted in France in application of Regulation 95/93. Orly and Roissy/Charles de Gaulle (hereinafter, “CDG”), along with Lyon/Saint-Exupéry, were designated as fully co-ordinated airports, and Nice/Côte d’Azur was designated a co-ordinated airport¹⁷. Air traffic congestion is particularly acute at the Paris airports, where demand for slots far exceeds supply. For this reason, market access is restricted. Given the constraints arising from traffic congestion at the Paris airports, especially at certain peak times, the slot allocation mechanism runs up against three problems that restrict market access to certain carriers and might cause distortions of competition: application of the historic rights (or “grandfather”) clause in allocating slots; quantitative restrictions on movements of aircraft, which therefore limit the number of slots available; and the decision-making process of the body responsible for allocating slots (Association pour la Coordination des Horaires, or COHOR).

2.2.2. *Application of the historic rights clause*

The historic rights clause significantly limits market access and institution of effectively competitive conditions in the main co-ordinated airports of European Union countries, including French airports.¹⁸ With respect to the French co-ordinated airports, and primarily those managed by ADP, Air France found itself in a position of strength when markets were opened to competition, enjoying a substantial number of slots at choice times.¹⁹ Air France holds nearly 50% of the slots at Roissy/CDG and Paris-Orly airports.²⁰

The mechanism of allocating slots on the basis of historic rights—which also aggravates congestion²¹ and which many governments view as a means of satisfying carriers’ need to recoup their very heavy investments and maintain jobs—reduces competition as compared with what might transpire if all slots were allotted on a non-discriminatory basis. Armed with the observation of this fact in all of the EU countries, the European Commission is planning in the medium term to revise Regulation 95/93. Independently of how Community law in this area evolves, a variety of possible solutions have been studied and explored in France, often at the request of public institutions, although this has not prompted a change in the system²² since the regulations are of supranational origin. To achieve optimal allocation of a scarce resource, one solution might be to abolish the historic rights clause and put all available slots up for auction. To price slots on the basis of supply and demand (with higher charges at peak times) would also lead to a more rational allocation of this scarce resource.

2.2.3. Quantitative restrictions on slots

The anti-competitive effects of basing slot allocation on historic rights are magnified by quantitative restrictions on slots at Paris airports²³. Orly Airport has seen its maximum number of aircraft movements set at 250 000 per year by virtue of the Decree of 6 October 1994 of the Minister for Infrastructure, Transport, Housing, Tourism and the Sea. This decision was taken in response to the serious concern expressed by nearby residents disturbed by the noise from aircraft landing and taking off at this airport located in a very dense urban environment. At present, potential new entrants have no hope of obtaining a significant number of slots unless those slots are relinquished by carriers active at the airport. The situation is such that the pool of available slots at Orly is often equal to zero. However, Roissy/CDG Airport is not subject to this kind of regulatory ceiling. Construction of a third airport or extension of the existing ones would not seem to be feasible options in the short term. Moreover, a number of slots are set aside at Orly airport for domestic services in connection with regional planning schemes, which further reduces the number of slots available to Air France's competitors.

2.2.4. Independence of the body responsible for slot allocation

The task of allocating slots has been assigned to the COHOR Association, composed of airlines that join voluntarily and the airports concerned. COHOR appoints a designated co-ordinator who allocates slots. COHOR's by-laws and mandates state explicitly that slots should be allocated independently, subject to rules of neutrality, transparency and equal treatment. The facts, however, would seem to belie these principles. For instance, following the demise of Air Lib in February 2003, and as a result of the availability of the carrier's 48 000 slots, official statements indicated that the Government was exploring the possibility of allocating the available slots to airlines that would pledge to hire former Air Lib employees²⁴. Admittedly, while this sort of statement would not necessarily reflect actual practice, the fact is that it does indicate a lack of clarity in this regard. Apart from this recent event, the allocation of available slots at Paris airports in recent years, in terms both of the choice of recipients and of the proportion of slots allotted to them (with slots being spread thinly), has spared Air France from an intense head-to-head confrontation with more aggressive rivals such as the low-cost carriers. The redistribution of Air Lib slots in the spring of 2003 was not carried out in a way that enhanced competition for incoming or outgoing flights at ADP. For example, Virgin Express, which received only 5 840 slots, ultimately abandoned the idea of launching a platform in Paris because its small number of slots kept it from making a profit²⁵. EasyJet also got a limited number of slots, which do not allow the carrier to compete effectively with Air France. Only by setting up an authority fully independent from government can it be ensured that the general interest will prevail over that of the flag carrier, or of certain domestic regional airlines, when slots are allocated at co-ordinated airports.

Box 1. Allocation of the 44 528 available slots following the demise of Air Lib in 2003

Recipient	Number of slots
EasyJet (UK)	7 300
Aeris (F)	7 612
Virgin Express (B)	5 840
Volare (I)	3 650
Aigle Azur (F)	2 920
Air France (F)	2 190
State *	8 906
Others	6 110

* Slots reserved by the State for services under regional planning schemes.

Source: *Le Figaro*, 1 April 2003, pp. 1 and 3.

2.3. *Subsidies*

Government aid to airlines—be it direct or indirect—can distort the market and harm the recipients' current and potential competitors, and ultimately the travelling public. In many cases, these subsidies are explicit and direct, but in others they take the form of indirect and cross-subsidies. In France, the notion of public service has been invoked by the Council of State ever since the companies were founded to justify government intervention and the assistance handed out in return²⁶.

French regulations have followed Community law on State aid (Articles 92 and 93 of the EC Treaty). A Communication sets forth Community policy regarding State aid in the aviation sector²⁷. These measures are not compatible with the Treaty unless they correspond to one of the exemptions provided for by Community law. Nevertheless, whether or not they are compatible with European law, subsidies can distort competition and therefore prevent the market from operating properly, as seems to be the case in the French air transport market. A distinction must be made between two main types of government aid: first, the aid authorised under Article 92, paragraph 3 of the Treaty and Article 61, paragraph 3 of the Agreement on the European Economic Area; and second, aid in connection with public service obligations in respect of domestic services under Article 4 of Regulation 2408/92. Observation of the facts shows that there is relatively wide-scale use of direct and indirect government aid, and also that the distortion of competition caused by this aid is detrimental to competing carriers and to the public.

2.3.1. *Aid authorised under Article 92, paragraph 3 of the Treaty and Article 61, paragraph 3 of the Agreement on the European Economic Area*

As part of the implementation of the programme of liberalisation of the air transport sector within the Community, a number of Member States, including France, were authorised to recapitalise their flag carriers. The recapitalisation of Air France, amounting to 20 billion French francs paid in three instalments between 1994 and 1996, was authorised by the European Commission subject to certain restrictions which were lifted at the end of the company's restructuring plan, i.e. on 31 December 1996²⁸. These measures to benefit Air France created distortions of competition that may have contributed to the failure of efforts to create a second major airline in France²⁹. Other carriers present in the market, as well as potential rivals, were hurt by unequal competition from the flag carrier favoured in this manner. Subsequently, Air France, like other carriers abroad, received subsidies following the attacks of 11 September 2001 to compensate the losses suffered between 11 and 14 September (aid authorised by the European Commission). Aid payments to Air France after 14 September were challenged by the European Commission, which also launched an inquiry in 2002 into the French authorities' support of Air Lib³⁰, although this company was liquidated by court order in February 2003.

2.3.2. *Aid authorised under Article 4 of Regulation 2408/92*

Community Regulation 2408/92 authorises the Member States to impose public service obligations in respect of services that are considered vital for regional economic development, to the extent necessary to ensure adequate provision of services satisfying standards of continuity, regularity, capacity and pricing that carriers would not assume if they were considering their economic interest alone (Article 4). Compensation may be granted to an air carrier, selected according to the criteria stipulated by the said Regulation, to enable the company to meet the standards arising from the public service obligations. In connection with its regional planning policy, the French Government set up an intervention fund for airports and air transport known as FIATA³¹. Public service obligations have been published in respect of some 80 routes in France. Clearly, not all of these routes receive subsidies, since some of them are operated without financial compensation. About a third of the routes are subsidised.³²

France is the EU Member State that invokes Article 4 of Regulation 2408/92 most frequently, and thus subsidises domestic routes. In the view of some, France has made the provision the cornerstone of public policy in the realm of air transport services³³. However, the total number of passengers transported on these subsidised routes is in fact extremely small, since it is in the range of per cent of French domestic traffic. A limited number of European countries have invoked Article 4. Moreover, when they do, and unlike the case of France, it is in respect of a very small number of routes, primarily serving islands (e.g., the Azores and Madeira for Portugal), which are not comparable to some of the French routes in question, such as Montpellier-Bordeaux or Béziers-Paris. Furthermore, FIATA's operations are not immune from criticism, as noted in a French Senate report highlighting the lack of clarity in the Fund's operation³⁴. The Court of Audit (*Cour des Comptes*), which audited FIATA transactions between 1995 and 2000, noted, based on an analysis of overall budget out-turn data, that the Fund's income significantly exceeded the level of its actual financing requirements;³⁵ in any event, this trend has now been reversed, for since 2002 applications to participate in the Fund have been denied.

2.4. Governance and status of Air France

If the flag carrier is a public enterprise and the air transport sector is not governed by a totally independent authority, the overlapping of roles can be a source of market dysfunctions and distortion of competition, since the interests of the flag carrier can prevail over the common good in the decisions of the supervisory authority.

2.4.1. Air France's framework of governance

Air France, which is 54.4% State-owned, is set up as a corporation (*société anonyme*) with a board of directors. Air France's board of directors is constituted in accordance with the Act on the Democratisation of Public Service and comprises 21 members, a majority of whom—six representatives and five personalities selected because of their special expertise—are appointed by the State. Although these personalities are appointed by the Ministers for civil aviation and for the economy, they have no functional or hierarchical connections with the Government. Shareholders other than the State, as well as company employees, are also represented on the board.

The chairman of the Air France board of directors is appointed by decree, in application of the Civil Aviation Code, from amongst the members of the board, and on the board's proposal. The Act of 15 May 2001 on new economic regulations clarified the respective roles of the chairman of the board of directors and the managing director of corporations with boards of directors, the choice of whether to combine or separate the two functions lying with the board of directors. Accordingly, the board of directors of Air France opted in September 2002 to combine the functions of board chairman and company managing director.

2.4.2. Government's supervisory role

Air France is subject to the general supervision of the Minister for Civil Aviation, and to State economic and financial supervision, pursuant to Article L.342-1 of the Civil Aviation Code. The new guidelines for the governance of public enterprises introduced by the Minister for the Economy, Finance and Industry in the spring of 2003 also govern the operation of State supervision.

For Air France, economic and financial supervision is performed, under the Decree of 26 May 1955, by a supervisory team comprising two State supervisors who are officials of the Ministry for the Economy, Finance and Industry, and who are based at the company itself. The supervisory team advises the Ministry of its opinions on proposed deliberations or decisions when such proposals are submitted to the Minister for approval, and it presents an annual report on the company's economic and financial condition. General

supervision, covering operations of all sorts carried out by Air France, is exercised by the Government's commissioner and his or her deputy, who sit on the company's board of directors without the right to vote. Pursuant to the Civil Aviation Code, the Government's commissioner and deputy commissioner are respectively the Director-General of Civil Aviation and the Director of Air Transport.

The modification of Air France's legal framework by the entry into force of the Act of 4 January 2001 and its implementing Decree of 21 June 2001 refocused the State-as-shareholder's supervisory role on the board of directors. In addition, the principle of management autonomy for company officers, extending to all areas of activity, was affirmed by the Government in 1997 to the Chairman of Air France.

Supervision by the National Assembly and the Senate is exercised *ex post*, through questions posed during the parliamentary debate on the annual budget bill and through the Government's annual report to parliament on the financial condition of enterprises in which the State is a shareholder, in application of the aforementioned Act of 15 May 2001. In addition, the Court of Audit is empowered to audit the accounts and management of the Air France group.

2.4.3. *Proposed privatisation of Air France*

Air France is one of the few remaining public airlines in Europe, along with Alitalia and Olympic Airways. However, the French Government has gradually reduced its interest in the company. The State's share in the capital of Air France, which had been 94.1% just before the company's February 1999 initial stock market listing, was subsequently decreased in stages. In December 2002, the Government presented a bill that would lower the State's shareholding to roughly 20%, with a further 20% of the shares set aside for group employees. This development is to be given a concrete form in the alliance concluded by Air France and KLM in September 2003. The bill provides for employee representation on the board of directors, thereby introducing a distinctive feature for a private enterprise³⁶. Implementation of this legislation would be a first step towards lessening the overlapping of roles that has prevailed in the French air transport market.

2.5. *Performance*

The main performance indicators available in the passenger air transport sector are limited primarily to Air France, given the demise of Air Lib and the lack of comparable data on small regional carriers, some of which are in fact affiliated with Air France. Air France has made a good showing in terms of growth of its activities, market shares and balance sheet as compared with other European companies. Nevertheless, the good health of Air France—to which the government aid measures are not unrelated—contrasts sharply with the fragility of the second-ranking French carrier, whether the SAir Group or its successor, Air Lib.

2.5.1. *Operating margins and the wage bill burden*

For European airlines, the 2000-01 financial year saw a sharp increase in operating costs, due in particular to rising fuel prices and appreciation of the dollar over the course of the year. In FY2001-02, carriers suffered the consequences of the US economic slowdown, and then the air transport crisis triggered by the events of 11 September 2001. Despite this context, Air France posted an operating surplus in FY2001-02, with an operating margin of 1.9% (Table 4). In contrast, the operating margins of the other major carriers were in the red. Air France's net margin dropped by 2.2 percentage points but was still positive (at 1.2%). Those of British Airways (-1.7%), KLM (-2.4%) and Lufthansa (-3.8%) all became negative.

The Air France group has the highest ratio of total wage bill to turnover of any major European airline, but the differential narrowed from the previous year³⁷. To boost profitability, Air France has taken steps to trim its total wage bill; the main measures, concerning pilots, were introduced as part of a multi-

year agreement signed in October 1998 providing for shares in exchange for pay cuts when the company's capital was opened in February 1999. As a result, the ratio of the wage bill to turnover, which had been 32.5% at the end of the 1998-99 financial year, declined by 2.7 points at the end of FY2001-02, to 29.8%.

Table 4. Operating margins and wage bill burdens for FY2001-02

2001-02 Financial year From To in millions of euros	Air France Group 01 April 2001 31 March 2002 Co. annual report	British Airways Group 01 April 2001 31 March 2002 Co. annual report	KLM Group 01 April 2001 31 March 2002 Co. annual report	Lufthansa Group 01 January 2001 31 December 2001 Co. annual report
Turnover	12 528	13 618	6 532	16 690
Operating profit (loss)	235	- 180	- 94	- 316
Net profit (loss)	153	- 232	- 156	- 633
Operating margin	1.9%	- 1.3%	- 1.4%	- 1.9%
Net margin	1.2%	- 1.7%	- 2.4%	- 3.8%
Wage bill	3 738	3 223	1 747	4 481
Wage bill / turnover	30%	24%	27%	27%

Source: DGAC

2.5.2. *Physical productivity*

Comparisons of the physical productivity of airlines are tricky because of differences between route networks, average stage length, and activity (passenger or freight transport).

The comparisons shown in Table 5 have been established on a calendar-year basis, in equivalent passenger kilometres transported (EPKTs)—a unit of measure that can be used to compare carriers having a high volume of both freight transport and passenger transport. The use of EPKTs can take account of freight tonnage by applying a coefficient representing the number of passengers that it would have been necessary to transport in order to generate an equivalent amount of income (the TKT³⁸/EPKT conversion coefficient used here is 3.5—the coefficient generally used by Air France). EPKTs have been divided by the number of employees in order to compare physical productivity³⁹. The overall physical productivity of Air France personnel is lower than that of British Airways, KLM or Lufthansa.

Table 5. Production, employment and productivity

	1997	1998	1999	2000	2001
Air France					
PKT (millions)	67 918	74 598	83 823	91 801	95 822
TKT-freight (millions)	4 905	4 596	4 732	4 980	4 633
TKT-total (millions)	12 059	11 501	12 464	13 436	13 461
EPKT (millions) (1)	85 086	90 684	100 385	109 230	112 038
Employees	49 410	49 092	52 721	56 426	59 160
TKT-total/employee (thousands)	244.1	234.3	236.4	238.1	227.5
<i>EPKT/employee (thousands)</i>	<i>1 722.03</i>	<i>1 847.23</i>	<i>1 904.09</i>	<i>1 935.81</i>	<i>1 893.80</i>
British Airways					
PKT (millions)	105 701	116 001	118 016	118 890	103 374
TKT-freight (millions)	3 914	4 047	4 249	4 564	3 936
TKT-total (millions)	13 593	14 658	15 018	15 439	13 337
EPKT (millions) (1)	119 400	130 166	132 887	134 864	117 150
Employees	54 200	55 751	55 905	55 263	55 308
TKT-total/employee (thousands)	250.8	262.9	268.6	279.4	241.1
<i>EPKT/employee (thousands)</i>	<i>2 202.95</i>	<i>2 334.77</i>	<i>2 377.02</i>	<i>2 440.40</i>	<i>2 118.14</i>
KLM					
PKT (millions)	55 396	57 279	58 113	60 331	57 544
TKT-freight (millions)	3 776	3 709	3 911	3 964	3 878
TKT-total (millions)	9 490	9 607	9 887	10 175	10 205
EPKT (millions) (1)	68 612	70 261	71 801	74 206	71 117
Employees	26 428	27 303	28 358	27 523	27 009
TKT-total/employee (thousands)	359.1	351.9	348.6	369.7	377.8
<i>EPKT/employee (thousands)</i>	<i>2 596.19</i>	<i>2 573.36</i>	<i>2 531.95</i>	<i>2 696.14</i>	<i>2 633.09</i>
Lufthansa					
PKT (millions)	71 353	75 438	86 154	94 170	91 336
TKT-freight (millions)	6 164	6 221	6 603	7 115	7 176
TKT-total (millions)	13 469	13 911	15 377	16 722	16 562
EPKT (millions) (1)	92 927	97 212	109 264	119 071	116 452
Employees	34 009	34 246	36 343	38 094	39 272
TKT-total/employee (thousands)	396.0	406.2	423.1	439.0	421.7
<i>EPKT/employee (thousands)</i>	<i>2 732.42</i>	<i>2 838.62</i>	<i>3 006.46</i>	<i>3 125.72</i>	<i>2 965.27</i>

(1) EPKT = PKT + TKT- freight * 3.5

The perimeters used here are as follows:

Air France = Air France, not including regional subsidiaries;

British Airways = British Airways + Brymon Airways + Cityflyer Express, not including other subsidiaries;

KLM = KLM + KLM City Hopper;

Lufthansa = Lufthansa + Lufthansa Cityline + Lufthansa Cargo + Contact Air + Condor.

Source: DGAC, based on the IATA - World Air Transport Statistics database.

2.5.3. Load factors

An airline's load factor may be considered a measure of the productivity of its capital. It can be seen below that Air France recorded a higher than average load factor amongst carriers belonging to the Association of European Airlines between 1999 and 2002 (Table 6). However, the fact that a company records a high load factor does not mean that the situation is optimal from a competitive standpoint, for passengers in particular. It can also happen at the passengers' expense, insofar as a high load factor may also stem from a policy of heavy overbooking—although Air France's policy in this regard does not seem to be any more widespread than that of its main European competitors—or from the fact that passengers have no alternative but to resort to a given company for certain routes.

**Table 6. Load factors for 1st quarter 2003
(in % and % change 2003/2002)**

Company	Load factor (%)	% change (%)
KLM	76.8	-3.3
Air France	73.9	-2.2
Lufthansa	73.6	-1.5
Iberia	71.7	+2.0
British Airways	69.8	-2.6
Swiss	67.9	-1.9
Alitalia	66.2	-2.2
Austrian Airlines	64.8	-1.1
TAP	64.2	-3.3
SAS	63.4	0.3
LOT	61.8	3.0
Finnair	60.0	-3.4
Turkish Airlines	59.9	-5.6
British Midland	57.0	0.4
Olympic	56.8	-4.6
Malev	50.7	-4.9

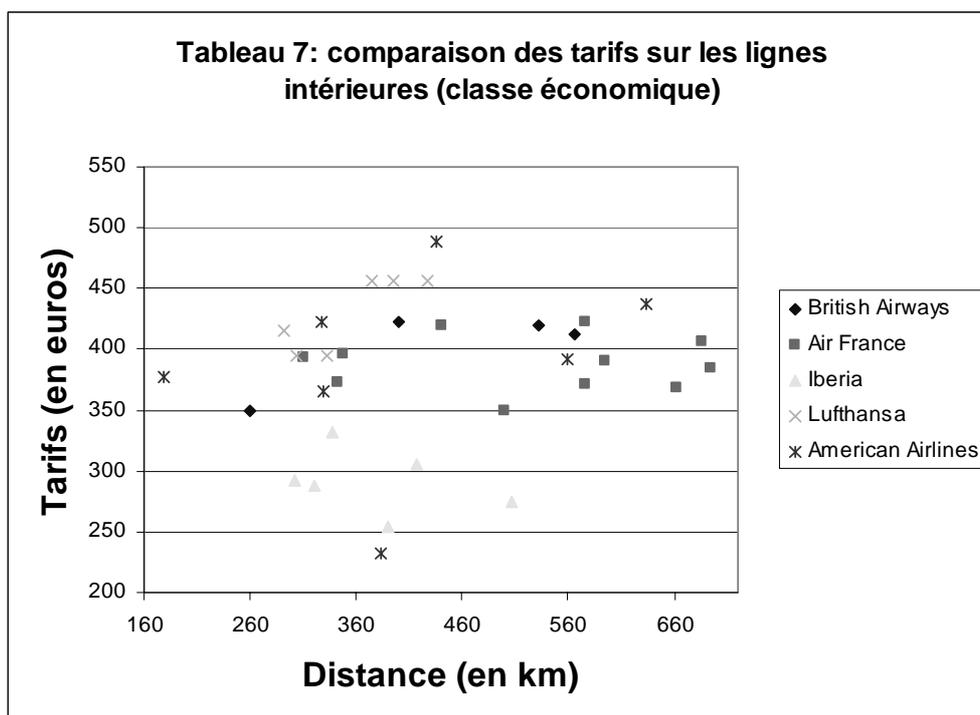
Source: *Le Temps*, 3 May 2003, p. 2, according to AEA data.

2.5.4. Flight quality/price ratio

Air France has restrained its pricing of international flights to and from France in response to keener competition from the major European and international airlines, and amidst the market entry of low-cost competitors on certain specific routes. While fare cuts have so far been less spectacular than those following deregulation outside Europe, the results of greater competition are more visible in France than in many other countries⁴⁰. For example, according to an OECD study, the business and economy class fares, as well as special fares (e.g. APEX), offered through Paris airports in the late 1990s compared relatively favourably with those observed in other major countries⁴¹. A comparison of 2003 fares shows that Air France tends to be about average, in respect both of domestic routes in economy class (Table 7) and in business class (Table 8), and of intra-Community routes in economy class (Table 9) and in business class (Table 10)⁴².

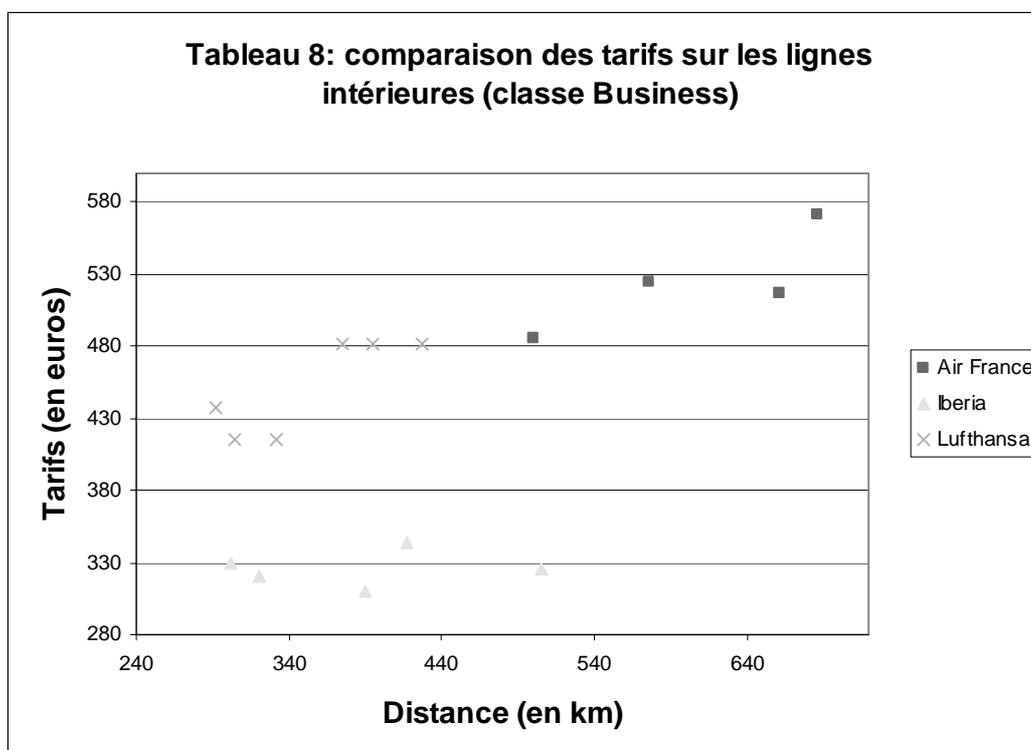
On the domestic market, which is relatively less open to competition, prices have as a rule remained high, primarily in business class, apart from a number of routes, in economy class, on which low-cost airlines compete⁴³. In addition, according to various reports, the flying public has noted a certain deterioration of the quality of service in general, all airlines combined.⁴⁴ Clearly, these criticisms need to be tempered by factoring in the most important aspect, safety—an area in which there are no indicators of any deterioration.

Table 7. Fare comparisons on domestic routes in 2003 (economy class)



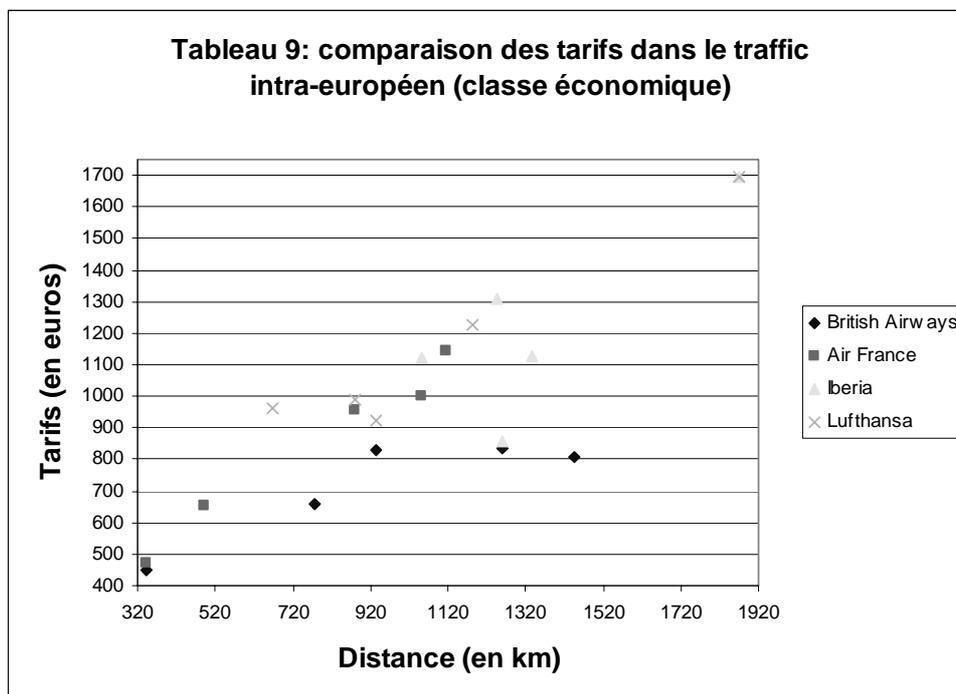
Note: The methodology is discussed in Annex 1.

Table 8. Fare comparisons on domestic routes in 2003 (business class)



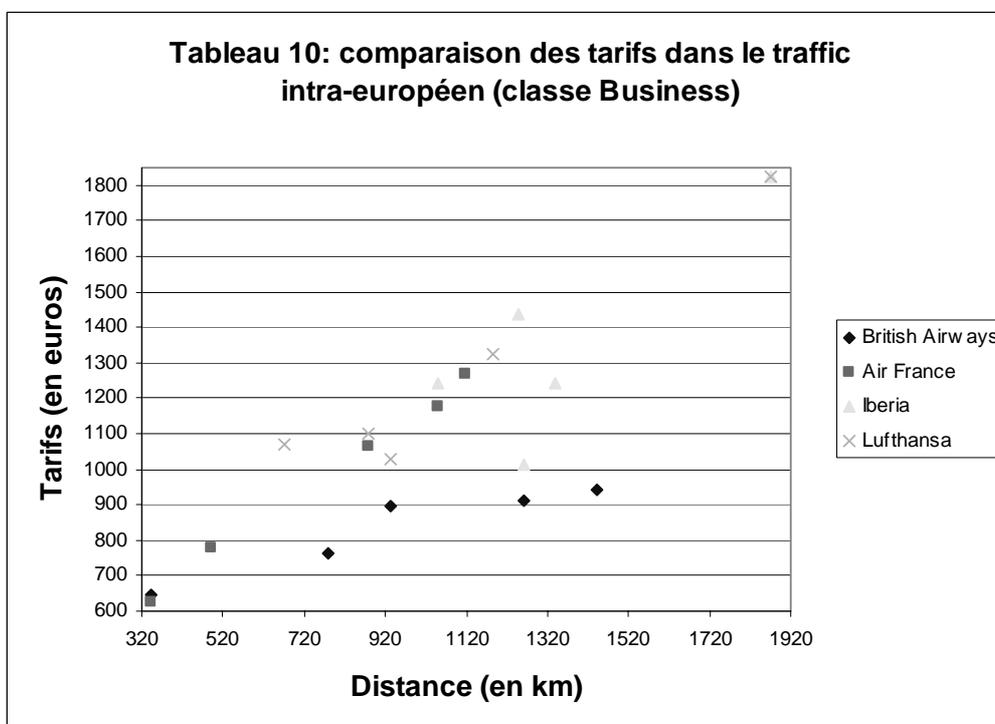
Note: The methodology is discussed in Annex 1.

Table 9. Fare comparisons on intra-European routes in 2003 (economy class)



Note: The methodology is discussed in Annex 1.

Table 10. Fare comparisons on intra-European routes in 2003 (business class)



Fares (in euros) / Distance (in km)

Note: The methodology is discussed in Annex 1.

3. Regulatory structures, reforms and performance in the realm of airport management

By their very nature, airports enjoy a local or regional monopoly. Consequently, users run the risk that access to this infrastructure may be discriminatory, and that facilities offered by the airport may be inferior, in quantity and in quality, and be higher in cost, than would be the case in a more competitive situation. Because of this situation, airports in most countries must be subject to specific regulation, whatever the status of the managing companies. In addition, if airports are public enterprises, their financing, organisation and missions may depart from market mechanisms and profitability objectives. There is a high risk of inefficient allocation of resources at the productive, distributive and trading levels—to the detriment of individuals and legal entities in their capacities as users and taxpayers.

3.1. Structure of the airport system

France is, in absolute terms, the leading European country in terms of airports receiving commercial traffic, a situation that is partly explained by its large size. There are more than a hundred airports in mainland France. The 12 main airports in mainland France—those of Paris (ADP, comprising CDG and Orly), Nice, Marseille, Lyon, Toulouse, Mulhouse, Bordeaux, Strasbourg, Nantes, Montpellier and Lille—account for more than 90% of passenger traffic. The national airport traffic system is highly centralised.⁴⁵ Throughout post-war France, the dominant pattern has been a convergence of routes towards Paris. ADP handles nearly 60% of domestic passenger traffic and almost 90% of freight. Roughly 130 carriers serve Paris airports, but the platform at Roissy/CDG is used primarily by Air France, which has set up its hub there.

ADP air traffic is even more concentrated in respect of international routes. Air France operates 75% of its international traffic there (Table 11). While provincial airports are tending to increase their share of international flights somewhat, this growth is primarily affecting the five largest airports and involves European services. Except in Marseille, Lyon and Nice, few if any major international trends are discernible. Moreover, international traffic to and from these three large cities is generally lower than at the airports of other European cities of comparable size. This problem was acknowledged by the Minister for the Environment and Regional Planning in 2001⁴⁶.

Table 11. Breakdown of Air France's international traffic by French airport

Airport	Share of international traffic (%)
Paris (ADP)	75
Strasbourg	1
Lyon	5
Marseille	8
Montpellier	4
Toulouse	3
Bordeaux	2
Nantes	1

Source: Air France (2002b), *Rapport annuel et de développement durable 2001-2002*, p. 15.

This concentration of flights is also aggravated by the hub strategy being pursued by Air France at ADP, and especially at Roissy/CDG. Some consider that the special relationships maintained between DGAC, ADP and Air France⁴⁷ are not foreign to this situation. The plans to introduce legislation decentralising airports of regional and local interest and to change the management system at airports of national interest might have a certain impact in this regard.

The concentration of air traffic at the Paris airports generates negative externalities (noise and air pollution) for nearby residents. Restrictions have been adopted to cope with the situation. A 1994 Ministerial decree limited the number of aircraft movements at Orly to 250 000 per year, which would correspond to a maximum of approximately 38 million passengers (for a current traffic of 23 million). At Roissy/CDG, a cap on total passengers had been considered, but is no longer on the agenda. Solving the problem of flight congestion in Paris through restrictions on aircraft movements has been the subject of debate for many years. Proposals to impose restrictions and fees based on relevant criteria associated with aircraft size and their sound levels are under discussion⁴⁸. The idea of building a third Paris airport is controversial and the French government has yet to take a final decision on this subject. Whatever happens, the general problems of how to manage airport capacity on a regional and nation-wide basis will remain just as acute, and they lie at the core of French regulatory reform in the realm of civil aviation.

The imbalanced structure of the French airport system is evident in the less-than-optimal utilisation of the capacities of many small and medium-sized airports⁴⁹. Whereas greater Paris is choked by a very high concentration of traffic, certain large provincial airports could be developed. Regional airports would be able to absorb some of the traffic, and particularly certain international routes, as well as freight traffic, which at present is heavily concentrated in Paris⁵⁰. This would help make the system more balanced and would be conducive to a better allocation of resources, while lessening the negative externalities generated by the concentration of traffic in the Paris area. However, this also assumes that air carriers as a whole would see this type of development as being in their interest and that the market would be amenable to these changes. Also, such a decentralisation would not suit the special interests of ADP and Air France, which so far have in fact been preserved.

While certain large regional airports offer a real potential for growth, the problems would appear more complex with regard to certain small, severely loss-making regional airports that sustain low traffic with scant prospects for development⁵¹. It is generally local authorities and chambers of commerce that have been behind their creation and/or preservation⁵². Because of the high density of regional airports, it would not seem possible to operate these platforms without subsidies. Reducing airport density would contribute to better resource allocation. While certain airports were justified in the past, developments in the realm of alternative transport infrastructure that have taken place since then have altered the situation. From this standpoint, a better balance between rail and air transport could provide solutions more economically effective than maintaining severely loss-making local airports for which there is in fact very little demand. However, the French government (the DGAC) says that it is unable to order the closure of airports when local authorities wish to keep them open and are willing to bear the financial burden of doing so. It can also be pointed out that low-cost companies have established themselves at these platforms in recent years and have developed them considerably. However, the platforms being targeted by some low-cost companies are of a certain size (large provincial airports), unlike many local airports.

Intermodal management of air and rail traffic has made progress in certain instances, in particular as concerns TGV services to Roissy/CDG and Lyon/Saint-Exupéry airports⁵³. Clearly, integration of the two modes of transport, as can be observed in other European countries, such as Germany (e.g., baggage check-in at train stations), is currently more limited in France. A certain potential for developing the possibilities for complementarity between air and rail traffic may still be exploited in the future in connection with an integrated approach to the various modes of transport⁵⁴.

3.2. *Airport ownership and operation*

The main French airports receiving commercial traffic currently belong to the State. They are operated either by special public establishments (such as Aéroports de Paris and Aéroport de Bâle-Mulhouse) or under public service concessions (Table 12). These concessions are currently held by public establishments: e.g., the chamber of commerce and industry (CCI) for the area in question or, more rarely,

a joint syndicate (groups of local authorities, in some cases with one or more CCI). The vast majority of French airports receiving commercial traffic (about 120) are managed by CCIs. CCIs are public establishments, with elected assemblies and financial autonomy.

Apart from small airports generally belonging to local authorities (e.g., Vatry and Angers) or private owners, and the special case of the State airports in French Polynesia, which are operated on a concession basis by a semi-public company, no airport operator currently has a partially or totally private status.

Table 12. List of the main French airport concessions
(Mainland France; traffic > 200 000 passengers in 2001)

Airport	Franchisor	Operator
NICE / COTE-D'AZUR	State	CCI
LYON / SAINT-EXUPERY	State	CCI
MARSEILLE / PROVENCE	State	CCI
TOULOUSE / BLAGNAC	State	CCI
BORDEAUX / MERIGNAC	State	CCI
STRASBOURG / ENTZHEIM	State	CCI
NANTES / ATLANTIQUE	State	CCI
MONTPELLIER	State	CCI
AJACCIO / CAMPO DELL'ORO	Terr. Community of Corsica	CCI
LILLE / LESQUIN	State	CCI
BASTIA / PORETA	Terr. Community of Corsica	CCI
CLERMONT-FERRAND	State	CCI
BIARRITZ-BAYONNE / ANGLET	State	Semi-public syndicate
BREST / GUIPAVAS	State	CCI
PAU / PYRENEES	State	CCI
HYERES / LE PALLYVESTRE	State	CCI
PERPIGNAN / RIVESALTES	State	CCI
TARBES-LOURDES / PYRENEES	State	CCI
RENNES / SAINT-JACQUES	State	CCI
METZ-NANCY-LORRAINE	Region	Group of CCIs
NIMES / GARONS	State	CCI
CALVI / SAINTE CATHERINE	Terr. Community of Corsica	CCI
FIGARI / SUD-CORSE	Terr. Community of Corsica	CCI
GRENOBLE / SAINT GEOIRS	Department	CCI
LORIENT / LANN BIHOUE	State	CCI
CARCASSONNE / SALVAZA	State	CCI

Source : DGAC

In ADP's case, conversion of the public establishment to a corporation *majority*-owned by the French Government is planned but has not yet been initiated. The Government is currently exploring converting the system of management of large provincial airports to a system in which concessions would be awarded to corporations whose capital might be opened to the private sector. The other airports should be decentralised (transferred from the State to local authorities).⁵⁵

The Government undertook to modernise the system for awarding concessions and managing airports by adopting a new standard set of specifications for the renewal of concessions (in 1997) to replace the old one (from 1955).⁵⁶ While the 1955 specifications governed “concessions of public airport facilities to chambers of commerce”, those drawn up in 1997 dropped the reference to the chambers. There would therefore seem to be no obstacle to opening concession renewals to competition through calls for tender. This would pit CCIs against other candidates, including private entities.⁵⁷ Trials conducted abroad, such as the administration of Heathrow, Gatwick and Stansted airports in the United Kingdom, have proven their worth. Introducing the private sector into airport administration ought to facilitate the modernisation of airport administration mechanisms that has been advocated, *inter alia*, by UCCEGA,⁵⁸ the Economic and Social Council⁵⁹ and even the Director-General of the DGAC.⁶⁰

3.3. Aviation charges

Because airports are local monopolies, it is essential to ensure that they deliver value for money, and that their fees are in line with the costs incurred in supplying infrastructure and providing services. The IACO has made recommendations to this effect⁶¹. In 1998, the European Commission presented a draft Council Directive on airport charges, although this was later withdrawn⁶².

Box 2. Types of airport charges

- Landing of aircraft weighing six tonnes or more (landing charges)
- Use of navigational assistance mechanisms by aircraft weighing six tonnes or more (lighting charges)
- Parking of aircraft weighing six tonnes or more (parking charges)
- Use of facilities for passengers (passenger charges)
- Aviation fuel distribution facilities (fuel charges)

Source: Martinand, Claude (2002), *La régulation économique des redevances aéronautiques*, Report by the working group chaired by Claude Martinand, Paris, p. 7.

Apart from property income, the revenue of French airports consists of charges for services rendered (and is thus subject to a general French legal regime that imposes certain principles). The Civil Aviation Code defines the types of charges, how users shall be consulted before charges are set, the bodies empowered to set the level of charges and the administrative authorities that approve the charges. As a rule, charges for services rendered may finance only such services as are rendered directly to users who contribute to that financing. Charges must be proportional to costs. Charges must conform to the principle of equal treatment. Exceptions to this third principle are possible, however, if there are appreciable differences between users’ circumstances, or if the general interest so warrants (e.g., when charges are modulated according to an aircraft’s acoustic group).

Charges for passengers, landing of aircraft weighing more than six tonnes, parking of aircraft weighing more than six tonnes, lighting and fuel (“airport charges”) are regulated: the framework for fee structures is laid down by decrees, and the amount of charges, which are set by the operator, are approved by the State. Practices in this area are consistent with International Civil Aviation Organization (ICAO) policy, in particular as concerns consultation with users and the tie-in with the cost of services rendered. Other charges are set by the operator, subject in practice to judicial review only.

The DGCCRF, together with the DGAC, jointly regulates the charges that airlines pay to airports. It ensures that the fees levied on carriers are justified. In particular, it makes sure that fees are set in compliance with European Union rules, and that they are in no way discriminatory: the DGCCRF checks that all airports comply with these principles, that fee trends remain moderate (airlines and passengers being captive users of such infrastructure), and that there are no pricing mechanisms that might benefit one company more than another.

The current system for collecting airport charges in France, as in other countries, fails to provide an optimal mechanism of incentives to manage resources efficiently, for either the use of existing infrastructure or capital investment decisions for new infrastructure (covering facilities and costs), or for access to infrastructure according to supply and demand-based pricing (slot pricing)⁶³. Judging from experiments carried out abroad, such as at London Heathrow⁶⁴ and the results of research on this subject⁶⁵, introduction of an incentive system of airport charges would result in more efficient infrastructure utilisation and access. Such a reform, combined with pricing-based slot allocation reform, would lead to better allocation of resources and thus greater effectiveness for the benefit of carriers and passengers alike. There are plans to study such a reform in France in conjunction with possible changes in the status of the Aéroports de Paris and that of the operators of large provincial airports.

3.4. Subsidies

Government aid can be justified to maintain a non-commercial service that is vital to the public good. In the realm of airports, while funding for safety, security and environmental monitoring missions⁶⁶ belong in this category, government aid for capital investment, and especially for airport operations, can in some instances fall very wide of the mark.

In most cases, it is local authorities that grant subsidies for airport investment and operations. The primary motivations for such aid are to pursue regional planning objectives and local economic development. The generalisation of local authority subsidies to regional airports is one reason for the continuing high density of airports open to commercial traffic in certain French regions. For example, within the perimeter made up by the Provence Alpes Côte d'Azur region and the Languedoc-Roussillon region, there are no fewer than 12 airports. According to the commonly accepted conception of public service obligations arising from regional planning and development imperatives, such public aid cannot be justified on such grounds in all cases⁶⁷. This situation, which reflects poor allocation of airport infrastructure resources, can generate substantial costs for local French taxpayers out of all proportion to the services they may receive in return.

3.5. Performance

According to the ICAO, the experience acquired world-wide shows that when airports are operated by autonomous entities, as has long been the case of virtually all French airports receiving commercial traffic, their overall financial position and management effectiveness generally tend to improve. The ICAO also points out that almost all such entities have been created by governments, even though the operation of many of the airports involved has since been transferred in whole or in part to the private sector⁶⁸.

Mainland France's 12 leading airports, which handle 90% of traffic in terms of number of passengers, generate their own resources, constituted by fees charged to users and by income from ancillary activities on airport premises, which are sufficient to finance their capital spending programmes, either directly or through borrowings (Table 13). The other airports in mainland France each handle fewer than a million passengers per year. Some twenty of these, essentially the busiest amongst them, break even on routine operations but need to be subsidised for capital investment. The others need subsidies for operations as well. For all of these airports, aggregate infrastructure subsidies account for nearly half of all investment resources, or nearly €260 million between 1990 and 2000.

With regard to the value for money offered by airports, a number of studies show that French airports are somewhat less expensive than their European counterparts, in particular for domestic flights and small aircraft. In comparison with the major European airports, ADP is significantly less expensive for small aircraft but generally more expensive for large aircraft flying international routes. As for the quality of service, a number of reports state that the Aéroports de Paris show potential for improvement. In this regard, the Court of Audit considers that “the value for money of Paris airports is not very good”⁶⁹.

Table 13. Financial position of the main airports

(2001 and projections for 2005)

	2001 Outcome			Projections for 2005	
	Traffic	SFC * (€ m)	Debt (€ m)	SFC * (€ m)	Debt (€ m)
ADP	71 025	318.5	1 714.9	434.8	2 990.5
Nice	8 973	32.2	166.4	38.8	194.5
Lyon	6 066	16.0	82.8	27.1	247.2
Marseille	5 842	13.1	56.6	14.5	55.5
Toulouse	5 187	17.6	41.1	16.5	142.7
Basel/Mulhouse	3 581	20.9	158.9	29.6	140.1
Bordeaux	3 039	7.5	29.2	9.9	39.2
Strasbourg	2 090	5.9	28.3	6.6	38.1
Nantes	1 932	3.7	11.9	5.6	8.9
Montpellier	1 542	2.1	11.7	3.0	14.8
Lille	963	1.4	10.7	2.1	9.9

€ m: millions of euros

SFC: self-financing capacity for the year

Source: DGAC

4. Regulatory structures, reforms and performance in the realm of ground services

Ground services⁷⁰ are vital to the success of air transport services and make an essential contribution to the efficient use of air transport infrastructure⁷¹. A carrier’s competitiveness depends on speed, quality and cost of ground services, as well as on non-discriminatory access to them. Only an open and competitive market can prevent carriers—and ultimately passengers—from being cheated by low-quality services provided at non-competitive prices.

4.1. Community Directive 96/67

Council Directive 96/67 of 15 October 1996 on the liberalisation of the ground handling market at Community airports (hereinafter “Directive 96/67”) was enacted to liberalise access to the ground handling market, and to enable carriers to engage in self-handling⁷². The Directive lays down minimal standards for the liberalisation of this market. For certain ground services, Member States may limit the number of carriers authorised to engage in self-handling. By virtue of this Directive, the Member States may impose quantitative restrictions. Accordingly, quantitative limitations in the realm of ground handling in respect of services to third parties and self-handling are provided for under French regulations⁷³, which go beyond the Directive by adding that these limitations must be justified by constraints involving security, safety, capacity and available space. It should be pointed out that the Commission has initiated a process of revising this Directive and should make proposals in this regard by the end of 2003.

4.2. *Third party ground handling services*

4.2.1. *Procedure for limiting the number of suppliers of third party ground handling services at an airport*

In France, under Article 216-4 of the Civil Aviation Code, any natural or legal person established within the territory of a Member State of the European Community or the European Economic Area that holds a licence granted in accordance with a further provision of this code, may supply one or more ground handling services to an air carrier at any airport with an annual traffic of no less than two million passenger movements or 50 million tonnes of air freight (Table 14). However, the number of suppliers of ground handling services may be limited by ministerial decision at the request of the airport manager.⁷⁴ This limitation of the number of suppliers must be justified either by the space available or the capacity of the airport's facilities, or by considerations relating to the safety and security of persons, aircraft, facilities and equipment (Art. R.216-5 II). Under this kind of system, it is impossible to avoid the risk that decisions to impose quantitative restrictions at a given airport may be made in a biased manner. Firstly, it may be in the interest of any airport manager that is itself a provider of ground handling services (which is the case of the Aéroports de Paris) to ask that the number of its competitors be limited. Next, this request from a public enterprise is handled by its supervisory authority, which is therefore placed in a situation of conflict of interest. Lastly, the criteria on which the quantitative restriction is based leave the decision-maker relatively broad discretion. Only an entirely independent authority could ensure that decisions regarding the restriction of market access could be made in a transparent and non-discriminatory manner. Furthermore, a system that only excluded service providers whose market entry did not meet the specified conditions (reversal of the burden of proof) would have made it possible to avoid setting quantitative restrictions at the airports concerned.

Currently, three main airports are limited, i.e. Roissy, Orly and Nice. Following the adoption of this directive, the number of service providers in the various terminals of ADP has risen on average from two to three. Given the magnitude of the air activities at the main terminals of these airports, it is doubtful that an increase in the number of ground handling services would jeopardise safety and security requirements. By comparison, some smaller airports, such as that of Bordeaux, have four third-party ground handling service providers.

Table 14. Access to the market of third party ground handling services*: quantitative restrictions specified by Decree 98-7 of 5 January 1998

	Baggage handling Ramp handling Fuel and oil handling Freight and mail handling	Other ground handling services
Airports with: Annual traffic \geq than 2 million de passenger movements or 50 000 tonnes of freight	Free provision of service, but: Possible quantitative limitation (but \geq than 2 carriers) Possible temporary limitation to only 1 supplier	Free provision of services, but: Possible temporary quantitative limitation
Airports with: Annual traffic < than 2 million passenger movements or 50 000 tonnes of freight	No free provision of services	No free provision of services

* For any natural or legal person established within the territory of a Member State of the European Community or the EEA that holds a licence as specified in Article R.216-14.

4.2.2. Procedures for selecting suppliers of third party ground handling services at a “limited” airport

Where the number of suppliers of ground handling services is limited at an airport, its manager is selected automatically and need not undergo a selection procedure (this situation is permitted under Article 6 of Directive 96/67)⁷⁵. For example, at the Aéroports de Paris, ADP is automatically included among the service suppliers.

With regard to the choice of the other service suppliers, the Airport Users’ Committee (a body provided for by Article 5 of Directive 96/67) must be consulted. This Committee is made up of the air carriers using the airport. All users have the right to be on this committee or to be represented on it. The Airport Users’ Committee selects suppliers by voting on applicants. However, Article D.216-1 1° of Decree 98-211 specifies that “*when the committee holds a vote, the number of votes of each air carrier shall be equal to the number of traffic units handled at the airport by this air carrier during the last calendar year for which the airport’s traffic is known*”. This gives Air France considerable power and at times even an absolute majority in voting procedures.

Under Article 11 of Directive 96/67, suppliers of ground handling services are chosen, following consultation with the Airport Users’ Committee, by the airport’s managing entity, provided that it does not provide similar ground handling services and has no direct or indirect control over any enterprise which provides such services and has no shareholding interest in any such enterprise. In all other cases, suppliers shall be chosen by the competent authorities of the Member States, which shall be independent of the managing entities concerned, following consultation with the Airport Users’ Committee and the managing entities. These provisions have been incorporated into the reform of French regulation. The relevant decision-making body is the Prefect, except for the airports of Paris-Orly and Paris CDG, for which the decision-making body is the DGAC (Art. R.216 of the Civil Aviation Code). Although this provision complies with Directive 98/67, it allows the choice of suppliers of ground handling services at limited French airports to be decided by an entity that has a conflict of interest.

At the terminals of Paris airports, both ADP and Air France are included among the providers of third party ground handling services. Consequently, out of an average of three ground handling service providers per terminal, only one opening is available for a third enterprise. This third opening has sometimes been allocated to an affiliated enterprise or subcontractor of ADP or Air France (the selection procedure used at CDG is summarised in Box 3). A market that is shared between ADP, Air France and a third enterprise with ties of dependency to ADP or Air France cannot be described as competitive. This being the case, one may doubt whether the quality/price ratio is as high as it might be for carriers and ultimately for users.

In summary, it is clear that the market is not competitive at the French airports that generate the greatest traffic, i.e. Roissy, Orly and Nice. The procedures in force do not ensure effective and non-discriminatory market access. The main regulatory shortcomings are due to the following factors:

- The request to restrict the number of providers is made by the airport manager, which, in the case of ADP, is itself active in the ground handling services market;
- the decision to set quantitative limitations at an airport is taken by an entity that has a conflict of interest;
- the criteria for limiting providers leave the decision-maker a degree of discretion;
- the airport manager automatically receives an authorisation;

- the dominant carrier—which itself may be active in the ground handling market—can strongly influence or even determine the vote of the Users' Committee;
- the choice of the provider(s) is made by an entity that has a conflict of interest.

The establishment of a totally independent authority would make it possible to ensure effective and non-discriminatory access while taking into account the space constraints of the available infrastructure and safety and security requirements.

Box 3. Selection procedure at CDG Terminals 1 and 2

The selection procedure at CDG Airport was organised in two separate phases. The number of suppliers was set at three at Terminal 1 and Terminal 2, with ADP designated *de facto* as one of the suppliers.

At Terminal 1 (Air France does not operate out of this terminal, and Star Alliance has over 25% of voting rights on the Airport Users' Committee), an initial selection was organised for granting a licence (ADP's application was selected *de facto*). Air France was selected by DGAC despite the fact that Air France was not ranked first in the vote by the Airport Users' Committee. In a second phase, a selection procedure was conducted for an additional licence. This licence was granted to GlobeGround, which had been selected by the Airport Users' Committee because of Star Alliance's strong representation on this Committee. In this case, DGAC approved the Committee's choice (SH&E, 2002, p. 63).

At Terminal 2, a selection procedure in two phases was also organised. Air France, which has a total of 75% of votes within the Airport Users' Committee, was granted the first licence. In the second phase, the firm chosen was Europe Handling, which is in fact the principal sub-contractor of Air France.

Source: (SH&E (2002), Annex p. 20)

4.3. *Self-handling*

4.3.1. *Procedure for limiting the number of self-handling carriers at an airport*

The transposition of Directive 96/67 provides for the possibility of self-handling freely at airports where the annual traffic exceeds one million passenger movements or 25 000 tonnes of freight. However, as in the case of third-party suppliers of ground handling services, the minister responsible for civil aviation may, on the proposal of the airport manager, limit the number of air carriers authorised to self-handle for baggage handling, ramp handling, fuel and oil handling and freight and mail handling services⁷⁶. The decision to limit services must be justified either by the space available or the capacity of the airport's facilities, or by considerations relating to the safety and security of persons, aircraft, facilities and equipment. Temporary quantitative limitations are also allowed for other ground handling services (Table 15). As was the case with third-party ground handling services, the provisions for limiting self-handling do not ensure that decisions are made with complete impartiality by an entity that does not have any conflict of interest.

Table 15. Self-handling: quantitative restrictions specified by Decree 98-7 of 5 January 1998

	Baggage handling Ramp handling Fuel and oil handling Freight and mail handling	Other ground handling services
Airports with: Annual traffic \geq than 2 million de passenger movements or 50 000 tonnes of freight	Free self-handling allowed, but: Possible quantitative limitation (but \geq than 2 carriers) Temporary prohibition or limitation to 1 carrier possible	Free self-handling allowed, but: Possible temporary quantitative limitation
Airports with: Annual traffic < than 2 million passenger movements or 50 000 tonnes of freight	No self-handling allowed	Free self-handling, but: Possible temporary quantitative limitation.

4.3.2. *Procedures for selecting self-handling carriers at a “limited” airport*

The criterion for choosing the carriers authorised to self-handle is based on the number of commercial movements of air carriers at the airport in question (Art. R.216-3 III). This criterion is valid if one considers that self-handling is only justified if a carrier has a sufficient number of commercial movements. However, to ensure the optimum allocation of a scarce resource to a limited number of users, an auction system would be better adapted and would avoid giving an advantage to the dominant national and/or regional carrier, such as Air France. Under the current system, Air France enjoys a two-fold advantage. Firstly, the regulatory provisions virtually automatically ensure that it will be able to self-handle, which is not the case for other companies. Secondly, since Air France is active in the third-party handling market, it has a certain freedom to determine the quality and cost of the services it provides to some of its competitors. The Competition Council in fact recommended establishing up an auction system in order to avoid any distortion of competition, although its opinion was not followed⁷⁷. However, it should be pointed out that at Paris airports, the number of companies wishing to self-handle has not reached the authorised maximum.

The same regulatory shortcomings mentioned above for third-party ground handling services are also found in the field of self-handling, with the main problems being the lack of a totally independent decision-making authority and selection criteria that automatically favour the dominant carrier, i.e. Air France.

4.4. *Performance*

Over 150 French and EU companies are providing ground services in French airports. A significant share of these companies entered this market after the liberalisation established by the European directive. The market share of the companies that have newly entered the market differs across airports depending on the nature of the services provided; it is larger for services inside terminals than for airside services, for which the number of qualified service providers is necessarily more limited. The DGCCRF does not have accurate statistics in this field. However, the opening up of the market has primarily taken place at regional airports, which are not limited by quantitative restrictions. On the other hand, in the main French airports, i.e. Roissy, Orly and Nice, competition in the ground handling market remains weak. The airlines serving ADP and Nice are faced with a limited choice of service suppliers – which in some cases includes their competitor, Air France. This does not ensure that these services are as effective in terms of quality and cost as they would be in a competitive market. This in turn affects users, who do not benefit from an optimum quality/price ratio in the field of ground services.

With regard to the prices of ground services, the initial objective was to obtain an average price reduction of 20% lower than the prices charged before implementation of the directive. According to the government, some prices have unquestionably fallen at some airports, but it does not have overall statistics on this subject. According to the Airport Users' Committee, the level of prices at ADP has dropped slightly since the entry into force of Directive 96/67, although the price of some services, such as the bus transport of passengers, has risen⁷⁸. Prices seem to have gone down slightly in Nice and to have fallen substantially in Lyon and Toulouse⁷⁹.

With regard to the quality of ground services, on the basis of a study limited to five French airports (Orly, Roissy, Nice, Lyon and Toulouse), the Airport Users' Committee considered that the level of quality of services at ADP had been stable since the entry into force of Directive 96/67, although some carriers criticised the quality of some services, in particular those connected with baggage handling. In Nice, Lyon and Toulouse, the Users' Committees of these airports considered that the quality of services was stable⁸⁰.

5. Regulatory structures, reforms and performance in the realm of air navigation⁸¹

Since 1987, the number of flights controlled in France has doubled. In 2000, the bodies responsible for this mission controlled over 2.5 million flights (aircraft movements at French airports for domestic and international flights and overflights of airspace), or 5.2% more than in 1999⁸². France is the first-ranking European country in terms of the amount of traffic controlled after Germany. In the long term, forecasts predict that the traffic controlled by France will double again by 2015⁸³.

5.1. *The "Single European Sky" Community Agreement*

On 5 December 2002, the European Council of Ministers of Transport reached a political agreement on the "*Single European Sky Package*". This agreement contains a framework regulation and three other specific regulations: one on the organisation and use of airspace, another on air navigation service provision and a third one on interoperability between systems. Some provisions of this common position are more limited than what was initially anticipated. In particular, it only provides for a functional separation between service providers and the national supervisory authorities. The non-competitive nature of air traffic control services was reaffirmed. In particular, the designation of service providers will remain the exclusive responsibility of States, which will continue to have a discretionary choice in the field of air traffic control services, including their own means of communication, navigation and monitoring, and meteorological services.

The competencies of Eurocontrol—to which 31 European States belong—will be used whenever possible to prepare the implementation measures. The European Commission will also ensure, in co-operation with Eurocontrol, that these measures are fully compatible with the need for continuity with neighbouring non-EU Members States.

5.2. *Supervision and provision of air navigation services*

In France, air navigation control is a public administrative service managed as a monopoly by the State. French law considers air traffic control and the management of air navigation as an administrative police activity. The legal framework is laid down by decrees and orders. Consequently, these activities are considered as being the responsibility of government.

Air navigation control operates in the framework of an integrated organisation. The DGAC acts as the regulatory authority and service provider for air navigation⁸⁴. Under this organisation, there is no clearly identified budget for air navigation. The expenditures and revenues of air navigation control are lumped together with other items in the annex to the civil aviation budget, which also includes the financing provided to State sectors⁸⁵. However, air carriers are provided with an account showing the basis for each

of the air navigation charges levied that uses the same standards as those applied by Eurocontrol for route charges, and the French Parliament is annually sent a specific breakdown of the DGAC's expenditure by mission, including that of air navigation. Nevertheless, in the past there have been disputes with airlines regarding the inclusion of certain expenses (such as lighting or firefighting) in approach/departure charges. These disputes have now been settled.

This integrated method of management of French air traffic control is unique in Europe (Table 16). Although it is true that the function of regulating air navigation is carried out by a government department in all countries, the operational services are most often entrusted to specific, independent entities. These may be government agencies or State-owned or private companies. Although the French system might be compared to the Swedish model, the status and functioning of the Swedish central administration is based on strong managerial independence and performance requirements, and the entities responsible for air traffic control are themselves independent.

Table 16. Status of air traffic control bodies in Europe

Country	Status of operational body
France	Administration
Germany	Private limited liability company with State-owned capital
Italy	Public institution
Portugal	Government-owned enterprise
Spain	Agency – status of government-owned enterprise
Sweden	Administration
Switzerland	Business corporation with majority control by Confederation
United Kingdom	Subsidiary of an agency – partly private capital

Source : Court of Audit (2002), p. 19.

Since 1991, the Court of Audit has favoured an overall reorganisation of the DGAC, consisting of establishing a clear distinction between activities that are prerogatives of the State and service provision activities such as air traffic control. The Court recommended in this regard that the mission of air traffic control be entrusted to a separate body with a clearly recognisable identity⁸⁶.

If there were a structural separation, air traffic control services could be entrusted either to a government-owned or private enterprise. In fact, air navigation services do not have the characteristics of a public good that must be provided by the State, since the principles of rivalry between users and excludability prevail in this field. These services are therefore a private traded good that need not be provided by government⁸⁷. The option of privatisation has been chosen by some countries, such as Canada and, in Europe, the United Kingdom. Other countries, such as Germany, have chosen to restructure their traffic control body as a public body with its own annual budget. This body is directly responsible for managing its budget and assumes full responsibility for any funds that it borrows. These changes have been made with a view to improving efficiency⁸⁸.

5.3. Management and control of civil and military airspace

The strong growth of air traffic makes it necessary to optimise the use of airspace by establishing adequate air traffic control capacities but also by ensuring an efficient organisation of airspace. This raises the issue of the apportionment of airspace between civil and military air traffic, the latter of which is traditionally large in the North and East of France, although these regions also have heavy civil air traffic⁸⁹. At present, the control of civil and military air traffic is not unified in France, which might result in delays for civil air traffic. However, France has adopted a series of co-ordination processes between civil and military bodies that are in line with the principles of airspace management adopted by Eurocontrol (FUA: Flexible Use of Airspace).

The organisation of airspace in France is different from the situation in many countries, such as the United States, the United Kingdom and Germany, which have opted for a unified management of civil and military air traffic. In a report on air transport in Europe published in 1998, the National Assembly's Delegation for the European Union tended to favour this kind of solution for France⁹⁰.

Admittedly, since the beginning of the 1990s, there has been undeniable progress in establishing close co-ordination between both types of air traffic. Nevertheless, a unified management of both types of control would lead to a considerable improvement of the situation, chiefly by reducing the delays generated by the current separation.⁹¹

5.4. Investment policy

The volume of investment in air traffic control managed by the DGAC's Air Navigation Directorate (DNA) is considerable (between 180 and 200 million euros per year). Investment policy in the field of air traffic control relies on national suppliers and only rarely on foreign suppliers⁹². With regard to contracting, there are many negotiated contracts, which have accounted for approximately 50% of all contracts signed in recent years⁹³. This type of contracting is only authorised if the company selected is the only one providing this type of equipment or service. Nevertheless, in many cases, the reports on these contracts did not show conclusively that the companies involved were really the only ones able to provide the goods or services in question. A significant share of contracts (34%) were also concluded through closed bidding procedures, but very few contracts were awarded through open bidding procedures (1%)⁹⁴. However, negotiated contracts without competitive procedures, which accounted for one-quarter of the contracts concluded in 2001, have since become the exception, and open bidding procedures are now used for approximately 30 % of the contracts signed and account for over 40 % of their total value.

5.5. Performance

The main indicators on the efficiency of the air navigation control activity are the results recorded in the fields of safety, punctuality, productivity and costs.

5.5.1. Safety

With regard to air safety, no accidents that have occurred in recent years can be attributed to the French air traffic control services. Although safety measurement indicators, which are not limited to "crashes" but also include "near misses" of aircraft recorded as "airprox"⁹⁵ and "safety nets"⁹⁶, are difficult to compare for different years and different countries, they do not show that safety conditions have deteriorated -- or improved -- in France. According to a study made during the 1994-1998 period, there was a significant decrease in the number of airprox for Germany and the United Kingdom after they had established an agency, i.e. after 1993 and 1996 respectively⁹⁷. Contrary to the fears of the opponents to these changes, they do not seem to have had a negative impact on safety. Admittedly, these results do not warrant concluding that there is a direct connection between these changes and the number of airprox, but neither do they show that there is a link between these changes and a deterioration of safety.

5.5.2. Punctuality

Two indicators on the punctuality of traffic can be considered. Firstly, there is the average delay due to air traffic control per flight ("ATC"⁹⁸ delay) and the percentage of ATC delays at the European level compared to the percentage such delays for traffic controlled by French services.

The average ATC delay generated by French air traffic control bodies in 1998, 1999 and 2000 was respectively 2.97 (minutes and hundredths), 4.04 and 2.50. These figures later fell to 2.02 minutes in 2001 and to 0.98 in 2002. The results for 1999 might be partly explained by the opening of new European air

routes and the conflict in the Balkans. These results led to a deterioration of performance in 1999 in relation to the preceding year, but international comparisons show that the air traffic control systems in neighbouring countries (Switzerland, Italy and Germany) experienced similar problems.

A number of measures were adopted in France in the beginning of 2000 to improve control capacities. A “*programme for improving air traffic*” presented to the Council of Ministers on 26 January 2000 included plans to increase the number of control sectors, increase the number of controllers, modernise control equipment and improve co-ordination of civil and military air traffic. A forward-looking strategic plan of the DGAC completes the range of new measures that have been adopted in order to improve the performance of air traffic control services in France.

The results obtained in 2000, 2001 and 2002 suggest that progress has been made in reducing ATC delays and the delays attributable to French air traffic control in Europe. These ATC delays fell, with an average delay of 0.98 minutes in 2002, to a level that was far lower than in 1998 (Table 17).

Table 17. Delays in France (1997-2000) in half-minutes

	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1997	2	2	2	2	3.5	4	4	4	3	2.5	2	1.5
1998	1	1	2	2.5	4	5	5.5	5	5	4	2	2.5
1999	2.5	4	6.5	6.5	8.5	8	7	5	5	4	3	3
2000	2.5	2.5	3.5	4	4.5	5.5	5.5	3.5	4.5	3.5	2.5	3

Source: Court of Audit (2002), p. 74.

In 1999, French services controlled 30.5% of European air traffic and generated 27% of ATC delays. The figures were 26.3% of traffic and 27% of delays in 1997 and 28% of traffic and 21% of delays in 1998⁹⁹. Consequently, the share of delays attributable to French air traffic control seems to be significantly lower than its percentage of traffic. However, in 1999 Germany and the United Kingdom had a delay rate that was relatively lower than for France¹⁰⁰, but in 2002, with the opening of the new London control centre, the United Kingdom generated 38 % of delays in the CFMU area, i.e. more than France (15 %), Italy (9%) and Germany (8 %). In order to reduce delays, France has increased the number of controllers, while Germany and the United Kingdom have opted for solutions aimed at achieving greater flexibility of controllers’ working time so that there will be a sufficient number of them during peak periods and fewer of them during off-peak hours. Consequently, there is potential for improving air traffic control performance by diminishing delays. This potential for improvement is also shown by the differences in performance between the various regional air navigation centres.

5.5.3. Productivity

A comparison of France and Germany would tend to show that productivity in Germany improved following the structural change (while the productivity of French controllers stagnated during the period considered); it would also show that “on average there are economies in the French air control sector, i.e. costs are rising less rapidly than output”¹⁰¹. This difference in assessment stems from the fact that Germany has fewer controllers, but who control a similar level of traffic, while France controls Europe’s largest airspace, in which flights pass through a larger number of control sectors and involve more staff and resources. The German model seems to lead to better cost management. Although the State owns 100% of the body responsible for the air traffic control service, it is no longer directly responsible for its management. This body operates more flexibly than is the case for the French model¹⁰². As it is responsible for its own management, it is no longer considered as a public service, but as a provider of market services that is striving to improve its productivity and reduce costs, although it should be borne in mind that the German constitution considers air traffic control to be a police mission that can only be carried out by an entity placed under the responsibility and supervision of the State.

Table 18-A. Comparison of the number of IFR* flights controlled and of staff numbers between France, Germany and the United Kingdom in 2000

Country	Number IFR flights (a)	Total staff (b)	(a) / (b)
France	2 615 000	8 453	309.4
Germany	2 639 000	5 214	506.1
United Kingdom	1 943 000	5 414	358.9

*Instruments Flight Regulations

Source: Eurocontrol (2002), Performance Review Report, Brussels.

Table 18-B. Comparison of the number of Service Units controlled and of staff numbers between France, Germany and the United Kingdom in 2000

Country	Total route Service Units (a)	Total staff (b)	(a) / (b)
France	14.59 million	8 453	1 726
Germany	9.39 million	5 214	1 801
United Kingdom	8.97 million	5 414	1 657

5.5.4 Costs

Although the method of calculating approach charges varies across countries, route charges, which are set uniformly by Eurocontrol on the basis of actual costs, are a good indicator of the cost of the service. The comparison of unit costs across EU countries shows that the French air traffic control system performs well in comparison with other European countries (Table 19).

Table 19. Unit cost of route charges of EU countries at 1 January 2003

Country	Overall unit cost (euros)
Belgium – Luxembourg	95.23
Germany	92.51
United Kingdom	84.08
Austria	72.49
Continental Spain	71.59
Italy	68.24
Spain (Canaries)	67.01
Netherlands	65.99
Denmark	63.73
France	62.19
Sweden	59.36
Portugal (Lisbon)	52.29
Greece	44.30
Finland	39.27
Ireland	28.60
Portugal (Santa Maria)	21.07

Source: Order of 24 December 2002 amending the Order of 18 July 1990 amending publishing the unit costs of route charges, Official Gazette of the French Republic, 31 December 2002, pp. 2247-2248.

6. Conclusions and recommendations

6.1. General assessment of current strengths and weaknesses

The French regulatory system has some major strengths that should enable France to face the growing international competition in the civil aviation sector and the increasing problems related to safety, security and environmental protection (Box 4). These strengths are derived from a methodical, on-going approach

to the development of competition and recognition of the fact that it is crucial for this sector to adapt to competition, while maintaining a spirit of dialogue not only with enterprises but also with employees. Major reforms are under way, in particular concerning the privatisation of Air France, the modernisation of airport management arrangements and the competitive awarding of airport concessions.

In a context that is difficult for all airlines, Air France has been provided – admittedly by means of public recapitalisation, approved by the European Commission in exchange for certain concessions - with the necessary tools to enable it to face international competition successfully and perform well. France has a well-developed airport network, and its main airports have high-quality infrastructure.

Box 4. Strengths

- Government favourable to regulatory reforms in the field of civil aviation
- High-quality airport infrastructure
- Major reforms initiated providing for the privatisation of Air France and other enterprises, such as airports
- Initial steps being taken to modernise airport management arrangements

Nevertheless, the effects of the reform of French regulatory system in the civil aviation field fall short of what might have been expected (Box 5). Although the State provides substantial budgetary resources to local authorities, the lack of competition on some markets means that supply does not have an optimum quality/price ratio for users. This outcome may reflect deficient mechanisms of market access and competition. The predominance of the public sector, which does not confine itself to providing public goods but occupies a privileged position on markets for traded -- i.e. private -- goods and services, leads to distortions of competition in the absence of a regulatory authority that is structurally separated from market operators. This results in non-optimum resource allocation in production, distribution and trade.

Because of the lack of clarity between the State's roles as regulator, shareholder and service provider, it is unable to avoid conflicts of interest when it must decide between the public interest and the interests of State-owned operators such as Air France and ADP. The regulatory system implemented thus far cannot ensure non-discriminatory and transparent decision-making that will make it possible to establish healthy competition on markets. This is particularly flagrant regarding slot allocation in co-ordinated airports and the granting of ground handling licences at limited airports. The main reasons for this situation have been mentioned in the chapters of this report. Firstly, decisions regarding market access are not made by a totally independent authority, and, secondly, the procedures for allocating access rights are not based on purely competitive principles (automatic granting of licences, "grandfather" clauses, etc.).

The Competition Council's scope for action is somewhat limited. At the Community level, the European Commission is responsible for enforcing Community law aimed at combating anticompetitive practices in the civil aviation sector, and it took action against ADP in this regard.¹⁰³ However, the Competition Council's responsibility with respect to this public institution is limited, for it can only intervene if the case does not involve administrative decisions made in the course of public service missions that entail the use of public power prerogatives. For example, airport management, which is governed by the special public sector regime, lies outside the Council's jurisdiction. However, other decisions or practices, even if they are the responsibility of public entities, may be examined by the Council – this is the case, for example, of ground handling services. To what extent is the Competition Council, which is the national competition authority under Community law, competent to enforce Community competition law in the civil aviation field? This also raises the question of whether, under these conditions, operators that were victims of anti-competitive practices were not dissuaded from filing complaints, unless they chose to do so directly with the European Commission.

Lastly, paradoxically, French regulatory reform procedures do little to involve final users, i.e. consumers, in debates and decision-making. Regular and systematic consultation with consumer protection bodies, such as COMUTA, should make it possible to find solutions that take consumers' interests better into account.

Box 5. Weaknesses

- A regulatory authority that is not structurally separated from shareholding and service-providing entities, which leads to conflicts of interest that may cause it to give preference to special interests at the expense of the public interest
- The lack of an independent authority for allocating access rights (slots, ground handling licences) so as to ensure a transparent and non-discriminatory decision-making process
- A highly concentrated domestic air traffic market because of the dominance of Air France
- Non-optimum resource allocation in the management of airport capacities at the national and regional level (unused excess capacity in some regional airports, concentration of traffic in the Paris region, a policy of keeping open local airports that do not meet market and public service needs)
- Rules for allocating market access rights that allow discriminatory procedures ("grandfather" right in slots allocation, automatic granting of ground handling licences to the airport manager, etc.)
- A relatively broad subsidy policy that creates distortions to competition to the detriment of the current and potential competitors of the subsidy recipients
- The insufficient role given to the Competition Council regarding consultation on regulatory reform and opinions on concentration transactions, which excludes the only completely independent authority from the debate on the protection of competition
- Insufficient consultation with consumers during regulatory reform procedures, leading to decisions that favour the interests of other the actors on the market

6.2. Potential benefits and costs of further regulatory reform

Further regulatory reform could have positive effects in terms of better resource allocation in production, distribution and trade, higher productivity of operators on the various civil aviation markets and, lastly, lowers costs that would benefit users and taxpayers.

This development should lead to improvement in the quality/price ratio of air transport services. As the price elasticity of demand is relatively strong for air services, the lowering of prices might lead to increased traffic, especially domestic traffic, depending on the magnitude of this decrease in prices.¹⁰⁴

Admittedly, given the considerable possibilities for improving the productivity of enterprises active in the air transport sector (airlines, airports, ground handling service providers, etc.), further reform might lead to some job losses in the short term. However, in the long term, the development of activities due to the greater competitiveness of these enterprises in relation to foreign competition, combined with the expansion anticipated in this sector, should make it possible to offset these losses.

The success of regulatory reform will be highly dependent on the ability to contain external effects in the fields of security, safety and environmental protection. With regard to environmental protection, regulatory reform to ensure better use of airport infrastructure at the national level, combined with further development of intermodality with rail transport, might help to reduce the problems of noise and pollution, particularly in the Paris region.

6.3. Policy recommendations

The following recommendations are based on the assessment presented above and on the strategic recommendations on regulatory reform presented in the OECD Report on Regulatory Reform (OECD, June 1997).

1. Ensure that regulations and regulatory processes are transparent, non-discriminatory and efficiently applied.

- Clarify the role of the State by separating structurally the functions of regulator from those of shareholder and service provider.

The lack of clarity between the roles played by the State as regulator, shareholder and service provider is a source of distortions of competition and does not ensure optimum resource allocation in production, distribution and trade.

- Give decision-making power regarding the granting of market access rights (slots, ground handling licences, etc.) to an authority that is completely independent.

Current practice shows that the fact that decisions are either made by entities that have a conflict of interest (ground handling services) or by authorities that have functional or institutional ties with government and market operators (Cohor) does not ensure complete independence of decision-making.

- Restrict the assignment of public service obligations to regional routes in a process justified by very strict criteria. When certain routes are so designated, ensure that the procedures for assigning public service obligations to a carrier and any related financial compensation are transparent.

In some cases, the designation of certain routes as a public service obligation goes beyond the generally accepted concept of what is understood by public service. Furthermore, the procedures used in this regard, in particular with respect to financial compensation, do not seem to meet the criteria of transparency, equal treatment and efficiency in all cases.

- Pursue measures designed to ensure better allocation of airport resources at the national, inter-regional and regional level.

The French airport network faces problems of capacity management. The Aéroports de Paris suffer from congestion, while other secondary airports have capacities that are underused. In addition, some small airports are kept open even though they do not meet vital economic needs. There should be an in-depth reassessment aimed at achieving a better allocation of resources at the national, inter-regional and regional levels, in a perspective of intermodal transport.

2. Reform regulations to stimulate competition and eliminate them except where clear evidence demonstrates that they are the best way to serve broad public interests.

- Systematically reassess all public subsidies granted to air carriers and airports. If subsidies are granted, for example for regional reasons, they should be transparent and for a strictly limited time

An accurate study of the current system of subsidies granted to airports and air carriers should be carried out in order to determine needs and the impact in terms of costs and distortions of competition. A narrow concept of public service should be applied so as to keep public subsidies to a minimum. When government subsidies are necessary, a transparent procedure should be used and they should be granted for strictly limited time.

- *Finalise the privatisation of Air France*

Under its current status, Air France has limited operational, strategic and financial scope for action in comparison with its main privatised competitors. The privatisation of the company should enable it to become more efficient and to eliminate the conflicts of interest that currently favour the flag carrier.

- *Consider eliminating restrictions on owning and controlling French airlines in the light of the developments set to take place in the ICAO*

At the ICAO's international conference on air transport held in March 2003, it was recommended that restrictions on owning and controlling of airlines by foreign interests should be eliminated progressively and flexibly, while ensuring effective monitoring of security. The adoption of this recommendation would allow a substantial opening up that would be beneficial to French airlines, in particular through equity investments and even concentrations with non-EU foreign airlines.

- *Consider adopting new mechanisms for allocating, monitoring the use and redistributing slots so as to ensure effective and non-discriminatory market access.*

The current method of slot allocation based on the historic rights clause does not allow for real market contestability. Steps should therefore be taken to envisage a system of pricing slots on the basis of supply and demand and to base slot allocation on an auction system.

- *Systematically use a competitive system whenever airport concessions are renewed and open up the market to all public and private enterprises.*

Regarding airports managed as concessions, the adoption of new operating guidelines in 1997 has opened that way for greater diversity in the designation of managers. As a result, in the future a competitive system should be used for all concessions up for renewal. The designation of the concession operator should also be open to private enterprises. The privatisation of the operation of certain airports, and especially the Aéroports de Paris, would enable them to become more efficient and flexible at a time of greater competition between major European airports. Privatisation of airport management should be accompanied by an appropriate reform of the relevant regulations. As part of this process, the government should also continue its efforts to modernise the management procedures required of airport concession operators.

- *Increase the number of ground handling service providers in "limited" airports, while continuing to monitor service quality.*

There has been greater competition on the ground handling services market since the implementation of Directive 96/67. However, in "limited" airports, and in particular those of ADP, competition might be opened up to more enterprises, but without jeopardising safety and security requirements.

3. Review and strengthen where necessary the scope, effectiveness and enforcement of competition policy and the means to ensure compliance with the resulting obligations.

- *Strengthen the role of the Competition Council and systematically consult it in the course of reviews of concentration transactions and regulatory reforms. Make sure that, as in the other sectors of the economy, the Competition Council is systematically consulted about all concentration transactions and all draft texts at national level concerning the organisation and functioning of the sector, which could affect competition.*
- *Give the Competition Council national responsibility equivalent to the European Commission's responsibilities in the field of civil aviation.*

Since the major actors in the French civil aviation sector are entities that perform public service missions using public power prerogatives, the Competition Council, which is an independent body, is not competent to rule on competition issues when these pertain to administrative decisions made in the course of public service missions involving the use of public power prerogatives, which are the responsibility of the Council of State (*Conseil d'Etat*). Furthermore, the Competition Council's opinion is rarely sought in cases of concentration transactions and regulatory reform procedures in the field of civil aviation. Regarding concentration transactions, how is it possible to ensure that they are handled impartially on the basis of strict criteria of competition by a ministry when these transactions directly or indirectly affect State-owned enterprises and when the ministry in question must protect other interests beside those of competition (such as employment)? Only the opinion of the Competition Council, a completely independent authority, would make it possible to handle such cases in the interest of competition on the market in question. Steps should also be taken to enact the necessary provisions so that the Competition Council will have the same responsibility at the national level that the European Commission has at the Community level.

ABBREVIATIONS

ADP	Aéroports de Paris
AEA	Association of European Airlines
ATC	Air Traffic Control
CCI	Chamber of Commerce and Industry (<i>Chambre de commerce et d'industrie</i>)
CDG	Roissy – Charles de Gaulle Airport
CNGE	Airspace Management Unit (<i>Cellule de gestion de l'espace aérien</i>)
COHOR	Association for Slot Co-ordination (<i>Association pour la coordination des horaires</i>)
COMUTA	Committee of Air Transport Users (<i>Comité des usagers du transport aérien</i>)
DGAC	Directorate-General for Civil Aviation (<i>Direction générale de l'aviation civile</i>)
DGCCRF	Directorate-General for Competition, Consumer Affairs and Fraud Prevention (<i>Direction générale de la concurrence, de la consommation et de la répression des fraudes</i>)
DNA	Air Navigation Directorate (<i>Direction de la navigation aérienne</i>)
EPKT	Equivalent Passenger Kilometres Transported
EU	European Union
FIATA	Airport and Air Transport Intervention Fund (<i>Fonds d'intervention pour les aéroports et le transport aérien</i>)
FPTA	Air Transport Equalisation Fund (<i>Fonds de péréquation des transports aériens</i>)
GATS	General Agreement on Trade in Services
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IFR	Instruments Flight Regulations
€ m	Million euros

PKT	Passenger Kilometres Transported
RSTCA	Approach/Departure Charges (<i>Redevances pour services terminaux de la circulation aérienne</i>)
SSLIA	Aircraft Rescue and Firefighting Service (<i>Service de sauvetage et de lutte contre les incendies d'aéronefs</i>)
STNA	Technical Service of Air Navigation (<i>Service technique de la navigation aérienne</i>)
TGV	<i>Train à grande vitesse</i> (high-speed train)
TKT	Tonne Kilometres Transported
UCCEGA	Union of Chambers of Commerce and Airport Managers (<i>Union des chambres de commerce et des établissements gestionnaires d'aéroports</i>)
WTO	World Trade Organisation

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ANNEX 1

EXPLANATIONS OF AIR FARE COMPARISONS (TABLES 7-10)

1. Domestic routes in “economy class” (Table 7):

a) List of flights considered:

	Distance (km)	Return fare (euros)	Airline
London – Edinburgh	532	420	British Airways
London – Manchester	260	349	British Airways
London – Newcastle	400	422	British Airways
London – Glasgow	566	413	British Airways
Paris – Nantes	343	373	Air France
Paris – Bordeaux	500	349	Air France
Paris – Toulouse	576	372	Air France
Paris – Toulon	694	384	Air France
Paris – Rennes	310	394	Air France
Paris – Lorient	441	420	Air France
Paris – Montpellier	594	390	Air France
Paris – Limoges	347	396	Air France
Paris – Marseille	662	368	Air France
Paris – Nice	687	406	Air France
Paris – Avignon	577	423	Air France
Madrid – Barcelona	506	274	Iberia
Madrid –Bilbao	320	288	Iberia
Madrid – Malaga	417	306	Iberia
Madrid – Santander	337	332	Iberia
Madrid – Sevilla	390	254	Iberia
Madrid – Valencia	302	292	Iberia
Frankfurt – Hamburg	395	457	Lufthansa
Frankfurt – Munich	304	395	Lufthansa
Frankfurt – Berlin	427	457	Lufthansa
Frankfurt – Bremen	332	395	Lufthansa
Frankfurt – Leipzig	292	415	Lufthansa
Frankfurt – Dresden	375	457	Lufthansa
Washington – Boston	633	437	American Airlines
San Francisco - Los Angeles	560	392	American Airlines
Philadelphia – Boston	435	489	American Airlines
Chicago – Detroit	383	232	American Airlines
Washington – New York	330	365	American Airlines
Los Angeles - San Diego	179	377	American Airlines
Orlando – Miami	328	422	American Airlines

b) Calculation of distance: distance was calculated as the crow flies (source: www.ephemeride.com/distancevilles.jsp).

- c) Departure and return dates: departure on 14 April 2003 (between 8 and 10 a.m. approximately) and return on Tuesday 15 April 2003 (between 6 and 8 p.m. approximately); for the United States, Monday 1 September 2003 and Tuesday 2 September 2003.
- d) Date of data collection: The data were collected on Monday 31 March 2003 for European airlines and Thursday 17 July 2003 for American Airlines on the airlines' Internet sites.
- e) Conditions of flights:
1. Air France: price for one adult in economy class at unrestricted fare (full fare with no restrictions regarding changes or refund), not including tax
 2. British Airways: price for one adult in economy class (Economy traveller) with an "open ticket" at the lowest fare, not including tax (exchange rate: 1.45)
 3. Lufthansa: price for one adult in economy class (Economy Class) with an "open ticket", not including tax
 4. Iberia: price for one adult in economy class at unrestricted fare, not including tax
 5. American Airlines: price for one adult in economy class at unrestricted fare, not including tax (exchange rate: 0.88).
 6. United Airlines: price for one adult in economy class at unrestricted fare, including tax (exchange rate: 0.88).

2. Domestic routes in "business class" (Table 8)

- a) List of flights:

	Distance (km)	Return fare (euros)	Airline
London – Edinburgh	532	Not available (NA)	British Airways
London – Manchester	260	NA	British Airways
London – Newcastle	400	NA	British Airways
London – Glasgow	566	NA	British Airways
Paris – Nantes	343	NA	Air France
Paris – Bordeaux	500	486	Air France
Paris – Toulouse	576	524	Air France
Paris – Toulon	694	NA	Air France
Paris – Rennes	310	NA	Air France
Paris – Lorient	441	NA	Air France
Paris – Montpellier	594	NA	Air France
Paris – Limoges	347	NA	Air France
Paris – Marseille	662	517	Air France
Paris – Nice	687	572	Air France
Paris – Avignon	577	NA	Air France
Madrid – Barcelona	506	326	Iberia
Madrid – Bilbao	320	320	Iberia
Madrid – Malaga	417	344	Iberia

	Distance (km)	Return fare (euros)	Airline
Madrid – Santander	337	NA	Iberia
Madrid – Sevilla	390	310	Iberia
Madrid – Valencia	302	330	Iberia
Frankfurt – Hamburg	395	481	Lufthansa
Frankfurt – Munich	304	415	Lufthansa
Frankfurt – Berlin	427	481	Lufthansa
Frankfurt – Bremen	332	415	Lufthansa
Frankfurt – Leipzig	292	438	Lufthansa
Frankfurt – Dresden	375	481	Lufthansa
Washington – Boston	633	NA	American Airlines
San Francisco – Los Angeles	560	NA	American Airlines
Philadelphia – Boston	435	NA	American Airlines
Chicago – Detroit	383	NA	American Airlines
Washington - New York	330	NA	American Airlines
Los Angeles - San Diego	179	NA	American Airlines
Orlando – Miami	328	NA	American Airlines

- b) Calculation of distance: See 1
- c) Departure and return dates: Monday 1 September 2003 (between 8 and 10 a.m. approximately) et Tuesday 2 September 2003 (between 6 and 8 p.m. approximately).
- d) Date of data collection: Tuesday 15 July 2003 (for European airlines) and Thursday 17 July 2003 (for American Airlines)
- e) Conditions of flights:
1. Air France: price for one adult in business class at unrestricted fare (full fare with no restrictions regarding changes or refund), not including tax
 2. British Airways: price for one adult in business class (Business Club) with an “open ticket” at the lowest fare, not including tax (exchange rate: 1.45)
 3. Lufthansa: price for one adult in business class (Business Class) with an “open ticket”, not including tax
 4. Iberia: price for one adult in business class at unrestricted fare, not including tax
 5. American Airlines: price for one adult in business class at unrestricted fare, not including tax (exchange rate: 0.88).

3. Intra-European routes in “economy class” (Table 9)

a) List of flights:

	Distance (km)	Return fare (euros)	Airline
London – Berlin	934	831	British Airways
London - Madrid	1261	837	British Airways
London - Paris	343	448	British Airways
London - Rome	1444	806	British Airways
London - Zurich	778	658	British Airways
Paris - Berlin	881	959	Air France
Paris - London	343	474	Air France
Paris - Madrid	1050	1002	Air France
Paris - Rome	1117	1142	Air France
Paris - Zurich	491	654	Air France
Madrid - Berlin	1870	1694	Iberia
Madrid - London	1261	857	Iberia
Madrid - Paris	1050	1121	Iberia
Madrid - Rome	1337	1130	Iberia
Madrid - Zurich	1247	1308	Iberia
Berlin - London	934	925	Lufthansa
Berlin - Madrid	1870	1694	Lufthansa
Berlin - Paris	881	992	Lufthansa
Berlin - Rome	1185	1226	Lufthansa
Berlin - Zurich	670	961	Lufthansa

b) Calculation of distance: See 1

c) Departure and return dates: Monday 1 September 2003 (between 8 and 10 a.m. approximately) et Tuesday 2 September 2003 (between 6 and 8 p.m. approximately)

d) Date of data collection: Tuesday 8 July 2003

e) Conditions of flight: See 1

4. Intra-European routes in “business class” (Table 10)

a) List of flights:

	Distance (km)	Return fare (euros)	Airline
London - Berlin	934	896	British Airways
London - Madrid	1261	912	British Airways
London - Paris	343	647	British Airways
London - Rome	1444	944	British Airways
London - Zurich	778	764	British Airways
Paris - Berlin	881	1065	Air France
Paris - London	343	628	Air France
Paris - Madrid	1050	1174	Air France
Paris - Rome	1117	1266	Air France
Paris - Zurich	491	779	Air France
Madrid - Berlin	1870	1822	Iberia
Madrid - London	1261	1014	Iberia
Madrid - Paris	1050	1244	Iberia
Madrid - Rome	1337	1242	Iberia
Madrid - Zurich	1247	1435	Iberia
Berlin - London	934	1027	Lufthansa
Berlin - Madrid	1870	1822	Lufthansa
Berlin - Paris	881	1102	Lufthansa
Berlin - Rome	1185	1323	Lufthansa
Berlin - Zurich	670	1067	Lufthansa

b) Calculation of distance: See 1

c) Departure and return dates: Monday 1 September 2003 (between 8 and 10 a.m. approximately) et Tuesday 2 September 2003 (between 6 and 8 p.m. approximately).

d) Date of data collection: Tuesday 15 July 2003

e) Conditions of flight: See 2

NOTES

1. Conseil économique et social (2002a), *Aéroports de proximité et aménagement du territoire*, Paris, p. II-38.
2. Air France (2002a), Document de référence 2001-2002, Paris, p. 11.
3. Aéroports de Paris (2002), *Rapport annuel 2001*, Paris, p. 70.
4. It should be noted that non-EU States of the European Economic Area (Iceland, Liechtenstein and Norway) are treated in the same way as Member States, pursuant to Regulation 2407/92; the Community *acquis* in the realm of air transport is applicable there by virtue of an agreement amended on 21 March 1994. This is also the case for Switzerland, following the entry into force on 1 June 2002 of the Agreement between the European Community and the Swiss Confederation on Air Transport.
5. Grard, Loïc (1998), *Les obligations de service public dans le transport aérien français, Les nouvelles conditions de la desserte aérienne du territoire*, Université de Reims Champagne-Ardenne. Jacques Naveau (1998), *La place réservée au service public et à l'aménagement du territoire dans la législation aérienne communautaire, Les nouvelles conditions de la desserte aérienne du territoire*, Université de Reims Champagne-Ardenne.
6. The review of French regulatory reform in the air transport sector is limited to the passenger transport segment, insofar as the OECD has already dealt with freight transport in other work.
7. A fundamental principle of this multilateral treaty and its annexes is that civilian aircraft of the signatory countries shall be free to fly over those countries and to make technical stops in them (the 1st and 2nd air freedoms). It gives States the option of granting bilateral traffic rights, i.e., the rights to embark passengers, freight and mail between two countries (3rd and 4th freedoms) and the right to make additional stops to embark passengers, either as an intermediate stop or a stop beyond the country of destination (5th freedom).
8. France has signed bilateral air traffic agreements with some 120 countries. Moreover, in 2002 France signed an "Open Skies" agreement (liberalising traffic rights) with the United States, thus crossing another threshold in the liberalisation of transatlantic traffic. The European Court of Justice (ECJ) having declared unlawful the bilateral agreements with the United States signed individually by eight Member States, it is the European Commission that is empowered to conclude such agreements.
9. The selling and marketing of air services, aircraft maintenance and computerised reservation services are the only services covered by the GATS annex on air transport.
10. Commission of the European Communities, Council Regulation (EEC) No. 2408/92 of 23 July 1992 on access for Community air carriers to intra-Community air routes, *Official Journal* No. L 240 of 24 August 1992, pp. 0008-0014.
11. Clearly, competition from rail is obvious for distances of less than 500 km and journeys of under two hours. Between 500 km and 1000 km, and for journeys of between two and four hours, the rivalry between the two modes of transport hinges to a large extent on their respective marketing policies. Conseil économique et social (2002a), op. cit., p. I-6.
12. Encaoua, David (1996), "Ouverture à la concurrence des activités en réseau: le cas du transport aérien", in *Revue économique*, No.6, November 1996, p. 1278.

13. “While the theoretical monopoly has in fact been broken, the historical monopoly has reclaimed its position”, Conseil économique et social (2002a), op. cit., p. II-10.
14. “French regional air transport, under the Air France group, has reverted to a virtual monopoly”, Sénat (2001a), *Rapport d’information fait au nom de la Commission des Affaires économiques et du Plan par le groupe de travail sur l’avenir des dessertes aériennes régionales, ainsi que sur le fonctionnement du fonds d’investissement des aéroports et du transport aérien (FIATA)*, by Jean François-Poncet and Jean-François Le Grand, No. 237, Paris, p. 53.
15. Council Regulation (EEC) No. 95/93 of 18 January 1993 on common rules for the allocation of slots at Community airports, *Official Journal* No. L 014 of 22 January 1993, pp. 0001-0006.
16. Slot allocations are made twice a year in conjunction with conferences organised by the International Air Transport Association (IATA).
17. Under Regulation 95/93, a co-ordinated airport is “an airport where a co-ordinator has been appointed to facilitate the operations of air carriers operating or intending to operate at that airport”, whilst a fully co-ordinated airport is “a co-ordinated airport where, in order to land or take off, during the periods for which it is fully co-ordinated, it is necessary for an air carrier to have a slot allocated by a co-ordinator”.
18. Slot allocation conferences have been granted a block exemption under Community competition law—an exemption that has been extended until 30 June 2005. Commission Regulation (EC) No. 1105/2002 of 25 June 2002 amending Regulation (EEC) No. 1617/93 as regards consultations on passenger tariffs and slot allocation at airports.
19. Dupéron, Olivier (1998), “L’organisation de la desserte aérienne du territoire: un cadre pour le maintien d’une forme de service public de transport aérien”, *Les nouvelles conditions de la desserte aérienne du territoire*, Université de Reims Champagne-Ardenne, p. 11.
20. The situation for the 2002 summer season was as follows: At Roissy/CDG, the main slot-holders were Air France (with nearly 50%), Lufthansa (4.5%), British Airways (3.5%), Alitalia (3%) and Europe Airpost (2%); At Paris/Orly, the main slot-holders were Air France (with nearly 50%), Air Lib (just under 20%), and Iberia (5%), followed by seven carriers each operating between 2% and 3½% of the airport’s capacity; At Lyon/Saint-Exupéry, the main slot-holders were Air France (with nearly a third of total capacity), Britair (nearly 15%), Régional CAE (10%) and Lufthansa (5%).
21. Indeed, a 30-seat regional flight with a “historic” slot helps prevent the operation by a wide-bodied aircraft of a route without a slot, but whose effects in terms of economic income and social desirability would be more significant. See Bonnafous, Alain and Crozet, Yves (2002), *La détermination des redevances aéroportuaires: repères théoriques et études de cas*, Research report for Aéroport de Paris (ADP), Lyon, p. 61.
22. Martinand, Claude (2002), *La régulation économique des redevances aéronautiques*, Report by the working group headed by Claude Martinand, Paris, p. 28.
23. Bonnet, Dominique (1998), “L’ouverture du ciel français à la concurrence: enjeux, modalités et blocages” in *Les nouvelles conditions de la desserte aérienne du territoire*, Université de Reims Champagne-Ardenne, p. 6.
24. *Le Monde*, “The redeployment of Air Lib’s 3 200 employees has begun”, 19 February 2003; *Le Figaro*, “The Government sets out to find jobs for former Air Lib workers”, 19 February 2003.
25. *Le Monde*, “Virgin Express gives up on launching a platform in Paris”, 15 July 2003.

26. In a Decree of 20 December 1935 exempting the airline Air Union from turnover tax, the Council of State considered that the company “was not merely a subsidised operator of a private enterprise, but the concessionaire of a public service”, basing its opinion, *inter alia*, on the “series of specific obligations closely supervised by the Air Navigation Service” contained in the agreements that had been signed with the State. Cited in Lecat, Jean-Jacques (2002), “La propriété et le contrôle des compagnies aériennes: Le cas d’Air France” in *Revue internationale de droit comparé*, No. 2, p. 20.
27. European Commission (1994), *Application of Articles 92 and 93 of the EC Treaty and Article 61 of the EEA Agreement to State aid in the aviation sector*, 94/C350/07, Brussels.
28. Commission of the European Communities (1994), Commission Decision of 27 July 1994 concerning the notified capital increase of Air France, C(94)2193 final, Brussels.
29. [Under the direction of] Gaudry, Marc and Mayes, Robert R. (2002), *La libéralisation du transport aérien: bilan et perspectives*, Les presses de l’Institut du transport aérien, Paris, p. 231.
30. European Commission, Directorate-General for Competition (2003), *Competition Policy in the European Union 2002*, Brussels. *Le Figaro*, “Brussels grills Paris over airline subsidies”, 6 June 2002, p. 6.
31. An Air Transport Equalisation Fund was instituted by Acts of 29 December 1994 and 4 February 1995 to compensate the operating deficits of airlines selected through a bidding process to operate “regional-planning routes”. The Fund is constituted by an equalisation tax levied on airlines and based on the number of passengers embarking at airports located in continental France. The 1999 Budget Act extended the missions of the special allocation account of the Air Transport Equalisation Fund [(FIATA), Article 75, Decree No. 98-1266 of 30 December 1998].
32. At 1 January 2003, these comprised 20 routes between Paris and provincial cities (15 of which are in service); 25 routes between provincial cities (14 in service); 7 routes to or within French overseas departments; 11 international routes (9 in service); and 14 routes serving Corsica. DGAC (2000), *Bilan 2000*, Paris.
33. Dupéron, Olivier (1998), *op. cit.*, p. 10.
34. “Assessment of the financing requirements corresponding to its realm of intervention being characterised by a considerable lack of clarity”: Sénat (2001b), General report undertaken for the Commission for Finance, Budgetary Control and National Economic Accounts on the 2002 Budget bill, adopted by the National Assembly, Annex 24.III, Transport and Road Safety: Air Transport and Civil Aviation, Paris, p. 14.
35. The Court of Audit concluded from this that “the amount of the levy imposed on passengers via air transport operators would therefore appear disproportionate and excessive”. Cited in Sénat (2001b), *op. cit.*, p. 15. The Court’s observation concerned FIATA’s operations covering certain routes and those covering airports.
36. Sénat (2002), *Projet de loi relatif aux entreprises de transport aérien et notamment à la société Air France*, No. 108, Paris.
37. Attention should be drawn to the difficulty of making objective comparisons between groups, because of differences in their perimeters of activity and subcontracting options; furthermore, each group operates in a different accounting and tax environment.
38. Tonne-kilometres transported.

39. The physical productivity figures thus obtained should be used with caution, however, since the ratios are contingent upon the groups' perimeters of activity, subcontracting policies (whether some activities, such as heavy aircraft maintenance, are performed in-house or not has no impact on EPKTs but makes a big difference in the number of employees), as well as the structure of the means of production (proprietary resources, franchises, leasing, etc.). In addition, the work force figures cited in group annual reports are not uniform, due to accounting differences: average employees, employees at year-end, or weighted average employees in full-time equivalent units.
40. OECD (2001), *op. cit.*, p. 96.
41. OECD (2001), *ibid.*, p. 96.
42. Annex 1 provides the methodology used for data comparison. With regard to domestic routes, comparisons are only partial because business class is not always available.
43. Conseil économique et social, *op. cit.*, p. II-12.
44. A Senate report, based on a vast survey conducted in connection with the operation of the FIATA, noted that a large majority of respondents felt that the quality of service had deteriorated over the past ten years. For example, the Union of Chambers of Commerce and Airport Managers (Union des Chambres de Commerce et des Établissements de Gestionnaires d'Aéroports, UCCEGA) found that the route restructuring at the end of 2000 had led to a deterioration of quality. Sénat (2001a), *op. cit.*, p. 33.
45. Conseil économique et social, *op. cit.*, p. II-23.
46. "In respect of regional planning, the French exception is that air transport patterns continue to reflect a hyper-concentration of international flights at the Paris airports, which handle nearly 80% of them. To a large extent, air transport has thus far escaped the efforts to shift the balance between Paris and the provinces that have been made in respect of land transport. This situation does not stem merely from the demographics of the capital region alone; it results from a combination of airline strategies and policy choices", Assemblée Nationale (2001a), "Activités aéroportuaires, aménagement du territoire et développement durable", colloquium, 7 February 2001, Paris, p. 55.
47. "The concentration of powers in the hands of the DGAC has at times had drawbacks for French provincial airports, with which it has been finicky and rather inflexible. Its special relationships with Aéroports de Paris and Air France have often introduced distortions. While the Directorate-General has worked effectively and diligently, a little less exclusivity in its support for the major airports might have enabled medium-sized airports to find their place and contributed to a more balanced geographical coverage." Conseil économique et social, *op. cit.*, p. II-17.
48. Ministère de l'Équipement, des Transports, du Logement, du Tourisme et de la Mer (2002), *Pour un développement durable des aéroports parisiens*, Paris.
49. "Many airports have capacities that are used poorly, with traffic concentrated on the Paris airports", Conseil économique et social (2000b), *Note de synthèse: Aéroports de proximité et aménagement du territoire*, Paris, p.1.
50. With regard to freight traffic, for example, some experts believe the Vatry airport is an alternative, because Vatry, located 150 km from Paris, is underused. Vatry has a 3 860-metre runway (the third-longest in France), a 45-metre-high control tower and 4 200 sq. metres of terminal space. This 1 800-hectare airport is in the heart of one of the busiest freight traffic areas in Europe. Located south of Châlons-en-Champagne, in one of France's most sparsely populated areas (7 persons per sq. km), Vatry would be able to develop substantial traffic while at the same time meeting environmental constraints, thus relieving areas such as Roissy that suffer from air traffic congestion. At present, about 70% of the freight unloaded at Orly and Roissy is re-dispatched to the provinces by truck. Insofar as the bulk of air freight traffic is combined with

passenger traffic, the Vatry alternative would clearly not deprive ADP, which would retain most of the market. It has been reported that some carriers wishing to route their freight traffic through Vatry have not received the necessary authorisations from the DGAC. *Le Monde*, “In Champagne, Vatry-David is playing against Roissy-Goliath”, 11 July 2002.

51. *Le Figaro*, “Decentralisation: Some 100 sites are running losses, and domestic traffic is down as the State transfers its powers to the regions: Should any airports in France be closed?” 14 February 2002, p. 11.
52. Sénat (2001a), *op. cit.*, p. 14.
53. Merlin, Pierre (2000), *Le transport aérien, les études de la documentation française*, Paris, p. 125.
54. Clearly, the success of this complementarity will entail meeting a number of conditions, including: perfect interconnections between networks, i.e. with a railway station within the airport itself, with co-ordinated schedules, the possibility of checking baggage from beginning to end, and marketing co-operation between airlines and railways (reservations, fares, etc.). Merlin, Pierre (2000), *ibid.*, p. 126.
55. At the beginning of 2002, two decentralisation provisions were adopted. The first piece of legislation transfers to the Territorial Community of Corsica the island’s four airports that previously belonged to the State. The second provides in principle for experimental transfers of State powers over airport design and operation to territorial authorities on a voluntary basis
56. Carré, André-Daniel (2000b), *Aéroports et stratégie d’entreprise*, Volume II, *La libération de la gestion des aéroports*, Les Presses de l’Institut du Transport Aérien, Paris, p. 76.
57. *Le Monde*, “Décentralisation et ouverture de capital en vue pour les aéroports”, 18 December 2002.
58. UCCEGA (2002), *Le Livre Blanc des grands aéroports régionaux français*, Paris.
59. “It is nonetheless imperative that French airports be managed in conformity with economic and financial realities, so they can generate enough cash to finance their own capital spending, while associating interested local economic agents” Conseil économique et social (2002a), *op. cit.*, p. I-10.
60. “The current status of the airports is no longer entirely suitable. First, because many more people need to play a role in their management, but also because there is a need for more reactive, more dynamic and more flexible economic management. The Chambers of Commerce are not to blame, but concessions are perhaps not the most modern or the most reactive system”, Assemblée nationale (2001a), *op. cit.*, p. 7.
61. IACO (2001), *op. cit.*
62. It proposed, *inter alia*: that airports ought to be managed like commercial enterprises, which should strive for efficiency; that an airport’s managing entity ought to retain control over the administration and financing of infrastructure; that the cost/quality ratio of airport services should be ensured; that the amount of fees should be related to the costs incurred; and that all airlines at the same airport should be guaranteed equal treatment. European Commission (1998a), “Amended proposal for a Council Directive on airport charges”, *Official Journal of the European Communities*, No. C 319, 16 October 1998, Brussels.
63. Martinand, Claude (2002), *op. cit.*, p. 28.
64. For example, since the 1970s London/Heathrow has modulated its charges to factor in peak hours.
65. Bonnafous, Alain and Yves Crozet (1998), *La gestion de la rareté des créneaux aéroportuaires, l’expérience américaine de “buy-sell-rule” et les enseignements que l’on peut en tirer de la tarification*

dans d'autres domaines, LET, Lyon. This study formulates proposals for a gradual overhaul of the current scheme—in order to introduce more incentive pricing and help to solve environmental problems.

66. Until 1998, safety and security missions—such as aircraft rescue and firefighting services (*services de sauvetage et de lutte contre les incendies d'aéronefs*, or SSLIAs)—were funded primarily by carriers' fee payments to airport operators. In a decree of 20 May 1998, the Council of State declared that SSLIAs were general interest missions that could not be charged to users by means of fees. Henceforth, the safety and security missions of airport operators are financed by airport tax revenue, which is allocated to them and supplemented by FIATA subsidies. In the end, no costs are borne by the operator (and none are invoiced by the operator to airport users via charges).
67. Carré, André-Daniel (2000a), *Aéroports et stratégie d'entreprise*, Volume I, *Les aéroports, des entreprises à part entière*, Les Presses de l'Institut du Transport Aérien, Paris, p. 460. Assemblée nationale (2001c), Délégation à l'aménagement et au développement durable du territoire, Minutes, 7, 13 November 2001, Paris.
68. ICAO (2001), *ICAO's Policies on Charges for Airport and Air Navigation Services*, p. 3.
69. Cour des Comptes (2002), Chapter IV: Aéroports de Paris, Paris.
70. There are two types of ground service provision: self-handling, when a carrier provides its own services, and third-party handling, when ground services are provided to an airline by another carrier, a specialised service provider or the airport manager.
71. Ground services comprise the full range of services necessary for an airliner from its arrival at an airport to its departure. A distinction is made between "airside" services (60% of services), such as maintenance, refuelling, supplying oil, aircraft guidance for arrival and departure, cabin cleaning, etc., and "landside" services (40% of services), including ticket controls and check-in of passengers and baggage.
72. Commission of the European Communities (1996), Council Directive 96/67/EC of 15 October 1996 on the liberalisation of the ground handling market at Community airports, *Official Journal* No. L 272 of 25 October 1996, pp. 0036-0045.
73. Work to transpose the provisions of Directive 96/67 into the Civil Aviation Code was carried out between 1996 and 1997 under the aegis of DGAC, after taking the advice of the Council of State and the Competition Council and in consultation with the competent government agencies, including the DGCCRF, and with representatives of airport managers and airlines. The Directive was implemented via decrees amending the Civil Aviation Code (Decrees No. 98-7 of 5 January 1998 and Decree No. 98-211 of 23 March 1998). Subsequently, these were supplemented by two Ministerial decrees (Decree of 18 March 1998 and Decree of 28 May 1998).
74. Article R.216-5 I) lays down that the minister responsible for civil aviation may, at the request of the airport manager, decide to limit the number of suppliers authorised to provide baggage handling, ramp handling, fuel and oil handling and freight and mail handling services. With regard to other services, the minister responsible for civil aviation may also decide to restrict the number of service suppliers for a limited time at the request of the airport manager (Art. R.216-7 I).
75. On the basis of the European Directive, Art. R.216-16–10 of Decree of 98-7 lays down that the selection procedure is not applicable to the airport manager or to any person that it controls directly or indirectly or that controls it directly or indirectly.
76. Art. R.216-3 of Decree No. 98-7 of 5 January 1998
77. Conseil de la Concurrence (1997), Opinion No. 97-A-24 of the Competition Council dated 12 November 1997 on two draft decrees amending the Civil Aviation Code and transposing into domestic law the

provisions of Council Directive 96/67 of 15 October 1996 on access to the groundhandling market at Community airports.

78. SH&E, op. cit., Annex p. 21.

79. SH&E, op. cit., Annex p. 21.

80. SH&E, op. cit., Annex p. 21.

81. Air navigation assistance services fall into two categories:

- Services provided in the approach and take-off area, consisting of the airspace near the airport, which is monitored by the control towers. In most cases, these services are paid for by adding a surcharge to the landing charges mentioned above, or by collecting a specific charge.
- Services provided in the upper and lower airspace. This is the airspace where overflight navigation or “*en-route air navigation*” takes place. Control of traffic in this airspace is the responsibility of the State concerned. However, the 15 EU Member States have transferred part of this control to “*Eurocontrol*”. This public agency also handles billing of the charges for the services provided, collects these charges on a centralised basis and redistributes the appropriate shares of these revenues (in particular route charges) to the Member States.

82. Cour des Comptes (2002), *Le contrôle de la navigation aérienne*, Report to the President of the Republic followed by the responses of the administrations concerned, Paris, p. 7.

83. Cour des Comptes, op. cit. p. 7.

84. The bulk of air navigation control is the responsibility of the DGAC’s Air Navigation Directorate (DNA), except for the specific responsibilities assigned to ADP for the airspace of Paris and the Air Force’s Directorate for Military Air Traffic for military traffic. The Air Navigation Directorate has direct authority over five en-route control centres (located in Athis-Mons, Brest, Reims, Bordeaux and Aix-en-Provence) and has functional authority over the Air Operations Department of the Aéroports de Paris and the operational departments located at other airports in metropolitan and overseas France attached to the DGAC’s regional directorates and its other overseas directorates.

85. Cour des Comptes, op. cit. p. 17.

86. Cour des Comptes, op. cit., p. 18.

87. Marianne Raffarin (2003), *L’Economie du transport aérien*, ENAC, Toulouse.

88. Rondé-Ousau Isabelle (2001) “*Coût et productivité de la navigation aérienne française*”, excerpt from original manuscript, *Laboratoire d’économie et d’économétrie de l’aérien*, Paris, p. 7.

89. Cour des Comptes, op. cit., p. 67.

90. The Delegation “*considers that, without ignoring the specific missions of the French air forces, we must move towards the integration of military air traffic – i.e. military transport – in the framework of a single airspace through a common management body, under the authority of a ministerial body*”. National Assembly, Information report on air transport in Europe filed by the Delegation of the National Assembly for the European Union, No. 737, 26 February 1998, p. 126.

91. In February 1999, co-operation between civil and military staff made it possible to create the “*National Airspace Management Unit*” (CNGE). This unit manages the activity of all temporary segregated military

areas and the opening of conditional air routes. This allows civil aircraft to fly through unused military training areas in order to shorten routes. A programme is under way that will lead to automated co-ordination between civil and military air controllers in 2003. However, although both kinds of traffic are being co-ordinated, they continue to be controlled by separate bodies, and civil controllers do not monitor military flights. Although “*co-ordination units*” have been created to ensure the compatibility of both types of traffic, this kind of organisation is less efficient than it would be if there were joint management of air traffic.

92. Cour des Comptes, op. cit., p. 78.
93. Cour des Comptes, op. cit., p. 83.
94. Cour des Comptes, op. cit., p. 85.
95. Airprox are reports filed by pilots when they observe that distance standards were not complied with during the flight.
96. The safety net is a function that warns the controller when the distance between two aircraft becomes dangerously close.
97. Isabelle Rondé-Oustau, op. cit., p. 22 and 75.
98. Air traffic control.
99. Cour des Comptes, op. cit., p. 73.
100. Isabelle Rondé-Oustau, op. cit., p. 26.
101. Isabelle Rondé-Oustau, op. cit., p. 23.
102. Isabelle Rondé-Oustau, op. cit., p. 23.
103. Commission of the European Communities (1998), Decision VI/35.613 – Alpha Flight Services/Aéroports de Paris, Official Journal L 230, p. 10.
104. The price elasticity of demand is estimated to be around 1.5: OECD (1997), The OECD Report on Regulatory Reform, Volume II: Thematic Studies, Paris, p. 42.