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**Any Turbulence on the Horizon?
A Competitive Assessment of the Airline Industry**

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1. SUMMARY

The last few years have not exactly be a walk in the park for airlines worldwide as several dramatic events occurred, inter alia, the Germanwings crash in the French Alps. These tragic events have an influence on passengers' behaviours and the way they perceive the industry. Consequently, airlines must be prepared to face such crisis, but also competition, and the recent appearance of low-cost carriers has changed the rules of the game. This thesis has therefore the ambition to describe, analyse and comment the way airlines compete within the internal market. This thesis will focus on three aspects of competition: the competitive strategy of a single airline, the way airlines cooperate between each other, and to finish the circumstances under which Member States are allowed to support airlines through state aid mechanisms.

2. PREFACE

This thesis marks a full stop to my studies at Lund University and in general. I enjoyed being part of the European Business Law program, and I hope this thesis depicts the skills I have acquired and expanded during these two years. I am now looking forward new experiences in the *real world* to deploy my skills.

I am grateful for the support and the advices of Professor Jörgen Hettne which helped me during the writing of my thesis.

Lund, May 2015

3. ABBREVIATIONS AND DEFINITIONS

ASA: Air Service Agreement

CC: Charter Carrier

EU: European Union

FSC: Full Service Carrier

IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

JV: Joint-venture

LCC: Low Cost Carrier

SGEI: Service of General Economic Interest

TFEU: Treaty on the Functioning of the European Union

Block-space agreement: an agreement under which a carrier (the marketing carrier) will reserve a certain amount of seats in a flight operated by another carrier (the operating carrier).

Code-share agreement: an agreement allowing a carrier (the marketing carrier) to market the flight of another carrier (the operating carrier).

Incremental costs: the extra costs associated with manufacturing one additional unit of production.

Interlining agreement: an agreement under which a carrier accepts/recognizes the travel documents issued by another carrier to carry on the service.

Predatory price: a price that is so low that competitors cannot compete and are driven from the market.

Slot: a permission given to use the full range of airport infrastructure necessary to operate an air service at a coordinated airport on a specific date and time for the purpose of landing or take-off.

Yield management: the application of information systems and pricing strategies to allocate the right capacity to the right customer at the right place at the right time.

4. INTRODUCTION

4.1. Overview of the study

Booking a flight and travelling around the world has become an affordable and accessible choice for many passengers-consumers, be it in a touristic, family or business context.

In the recent years and following the entry into force of new regulations, the airline industry has been subjected to a fierce competition between companies having different business models. But it also had to cope with several internal and external crises such as the 9/11 terrorist attack on the US or the SARS¹ epidemic in Asia, which have shaken its foundations and questioned its traditional structure². The network planning of airlines was affected and the crises had a huge impact on the world economy³.

One thing to understand is that the airline industry has unique features and its business assets consist on passenger transports, which are extremely perishable goods⁴. Therefore, one of the difficulties faced by airlines is to adapt themselves to the demand. But, when a crisis explodes somewhere in the world, it can be difficult to react and adjust quickly to limit losses.

Those crises have an influence on the airlines strategies (old and new players alike) and they consequently have an impact on the structure of the market. Therefore, the constraints imposed on the industry, which are partially linked to its object, its network and structure, may explain the way the industry has been regulated and gradually subjected to competition law in the EU. The present study will focus on the application of competition rules to airlines and the way these companies behave on the market, and more precisely enter it.

4.2. Aim of the study

The purpose of this thesis is to discuss the entry of airlines in the market from different angles while taking into account both internal and external elements which may affect the competition climate of the industry (such as passengers, airports and public entities).

When an airline decides to enter a new market, it must consider the following elements: to obtain access to the airports (slots), to organize the staff, to promote and advertise the route, to set launch

¹ The SARS (i.e. Severe Acute Respiratory Syndrome) epidemic happened in 2003 and caused 774 deaths.

² Rigas Doganis, *The Airline Business* (2nd Edition, Routledge, 2006) p. 1.

³ See Brian Pearce, *Avian Flu*, IATA Economic Briefing, May 2006.

⁴ Alessandro Cento, *The Airline Industry: Challenges in the 21st Century (Contributions to Economics)* (Physica-Verlag Heidelberg, 2009) p. 47.

price, to organize the logistic (aircraft and so on) etc. If the airline was already operating, there is adjustment costs linked to the modification of the network structure and the redeployment of the fleet for example. Additionally, if in the end the route does not yield benefits, limiting the frequency of the flights or closing the route will generate fruitless expenditure⁵.

Different issues appear here such as the access to airports, which are infrastructures having a limited capacity, or the way airlines use the infrastructure as part of their business strategy. This lead us to the type of relationship airlines develop between each other and how they compete against each other. To finish, the last issue is related to the deterrent effect the costs of opening a new route may have and it questions how far can a Member State go to help the creation of new routes through the state aid mechanism.

To conclude, the choice of this topic is justified by the structure of this particular industry, structure that permits some undesirable deviations from the competition rules by reason of its characteristics. But the airline industry is also interesting because of the nature of the service provided and the importance allocated to external elements. Its political implications and the impact it can have on the EU economy should also be recalled.

This topic is also recent from a competition law's perspective and will give us a clear comprehension of the competition rules' mechanisms while giving us a sharp understanding of the latest stances of the EU institutions as to competition law. To finish, this industry is quite unique and despite the liberalization process remains a highly regulated sector⁶.

Therefore, this thesis will aim at answering the following questions: How difficult it is for airlines to enter the market? Is the current state of law sufficient to maintain effective competition in the airline industry? If not, what kind of improvements could be provided to the actual system?

4.3. Research and approach

To answer these questions, the thesis will follow the legal dogmatic method which consists in researching the current state of law, but also case law and doctrines, in order to draw a clear picture of the situation. The latest developments in the industry and in the law will be included. Based on these researches, the thesis will then attempt to describe, analyse and criticize the situation to finally propose possible improvements.

⁵ Cento (4), p. 48.

⁶ James Peoples, "*The Economics of International Airline Transport*" in *Advances in Airline Economics*, Volume 4 (1st Edition, Emerald Group Publishing Limited, 2014) Chapter 2 p. 36.

The legal dogmatic method is well-adapted to the airline industry because, as previously stated, this industry is sensible to external elements and geopolitics. Regulating airlines is not only a matter of law. For this reason, a clear understanding of the liberalization process which started in the 1980's in Europe is important. It will help the reader to see the huge improvements made in the recent years but also the limit of the existing legal framework. Additionally, it is difficult to separate the EU airline industry from the worldwide market. Therefore, an explanation of how Air Service Agreements are concluded and what kind of provisions they may contain is inevitable. To finish, the identification of barriers to entry is only possible where a clear picture of the regulatory framework is drawn. It will allow us to identify where improvements should be made. These elements will be presented through the historical background (Part 5.).

Then, the thesis will analyse and criticize the different competition rules applied to airline, by making a distinction between the rules applied to a single airline, and the rules apply to airlines when they interact with other undertakings or entities. This approach will give a clear view on the margin of action airlines have and how difficult it can be to enter the market.

4.4. Limits of the thesis

This thesis will focus mainly on the EU civil airline industry (even though some comparison will be made with the US system where relevant) and more precisely on the passenger transport. Moreover, the thesis has only for ambition to cover competition issues, other elements of law will be ignored.

The thesis will in a first phase give an overview of the historical development of the airline industry (Part 5), then focus in a second phase on an explanation of the application of competition rules to airlines (Part 6), and in a third phase the thesis will consist on a detailed analysis of the barriers to entry identified previously (Part 7).

5. HISTORICAL BACKGROUND

To deepen our comprehension of this peculiar industry, it is necessary to begin with a complete analysis of its regulatory framework⁷, and that from its origin. Interestingly, airlines have been nationally regulated for many years even though running an airline involves working in an international context. This is what Rigas Doganis called a paradox: on one hand airlines were nationally

⁷ Doganis (2), p. 27.

controlled and owned when, on the other hand, they are meant to operate at an international level⁸. But the airline industry has been and remains an extremely dynamic industry which has known several developments. These developments are technical, but not only. There are also legal, institutional and cultural⁹.

5.1. The situation prior liberalization: a state-owned industry

The structure of the industry has drastically evolved. In the tradition, airlines were state-owned and had their own market. Competition rules were not applicable. But the situation has changed, the deregulation process in the US, followed by the EU liberalization, have introduced a *dynamic and free market industry*¹⁰. It was answering a need for more economic efficiency and competition, and state ownership is known to be problematic where it prevents companies from operating profitably¹¹.

Also, the Commission drawn up an interesting report of the situation in Europe before the liberalization took place in 1984¹². Its Memorandum highlighted the specific relationship existing between the Member States and their national airlines, which were not always following *sound commercial management principles*¹³. Indeed, airlines were not under commercial pressure, and therefore did not have to control their operations and costs¹⁴. Also, the Member States were not willing to apply competition rules to them and they only agreed on bringing some *evolutionary* changes to the system¹⁵. To summarise, there was a sort of *symbiosis*¹⁶ between airlines and Member States. From another side, the Commission campaigned for more flexibility and competition¹⁷ and to establish a better control towards state aid¹⁸.

If we come back to the origin of the airline industry, one particularity has to be emphasized to understand the industry future transformation. In Europe, almost all the countries had their own national airlines, also known as "flag carriers", in which they had a certain pride. They were usually state-owned and in a dominant position on the national market, if not monopolistic. It had the effect

⁸ Doganis (2), p. 27.

⁹ Cento (4), p.13.

¹⁰ Cento (4), p.13.

¹¹ Doganis (2), p.3.

¹² European Commission, Civil Aviation Memorandum No. 2 - Progress Towards the Development of a Community Air Transport Policy, COM(84) 72 final (Civil Aviation Memorandum No. 2).

¹³ Civil Aviation Memorandum No. 2, para. 42.i.

¹⁴ Civil Aviation Memorandum No. 2, Para. 42.iii.

¹⁵ Civil Aviation Memorandum No. 2, Para. 10.

¹⁶ Magnus Schmauch, *EU Law on State Aid to Airlines (Law, Economics and Policy)* (Lexxion Publisher - Berlin, 2012) p.37.

¹⁷ Civil Aviation Memorandum No. 2, Para. 39.

¹⁸ Civil Aviation Memorandum No. 2, Para.s 61 and al.

to restrict competition and to fragment the European market. The main competitors of flag carriers were in fact other transportation modes at a national level.

The first important convention on air transport that will be addressed here is the Chicago Convention from 1944¹⁹ which attempted to introduce some competition concerns within the civil air industry by regulating some of its features²⁰. This Convention organized technical and legal aspects of international air transport such as safety standard. And it established the International Aviation Organization ("ICAO") in charge of technical and operational standards²¹. Also, Article 1 of the Chicago Convention recalled²² that *"every state has complete and exclusive sovereignty over the airspace above its territory"*. But it failed to organize economic provisions related to cross border issues such as traffic rights, which were instead bilaterally regulated between countries under what we call Air Service Agreements ("ASA")²³. These agreements were, and remain, a barrier to competition as they restrict market access but also create an extremely fragmented international market for airlines. And, to conclude, even though the Chicago Convention constitutes the basis of air law it has not been very successful, the lack of economic dispositions being problematic.

5.2. The introduction of economic concerns

To face up with this situation, three pillars of regulations were introduced and remained relevant until the early 1980's: the ASA's, the inter-airline commercial or pooling agreements and the tariff-fixing system set by the International Air Transport Association ("IATA")²⁴.

Regarding the first pillar, ASA are trade agreements concluded between two countries' governments. They can organize, among other, traffic rights, routes, airlines designations, capacities and frequencies²⁵. Usually, the provisions are divided between so-called *soft rights* and *hard rights*. Soft rights organize operational details of the air transport where hard rights concern economic elements²⁶. Therefore, ASA can, depending on the way they are drafted, efficiently limit access and market entry.

¹⁹ International Civil Aviation Organization (ICAO), Convention on International Civil Aviation, signed at Chicago, on 7 December 1944, ICAO Doc 7300.

²⁰ Doganis (2), p.27.

²¹ Cento (4), p.14.

²² It has its origin within Article 1 of the Paris Convention (Convention Relating to the Regulation of Aerial Navigation, signed at Paris, on 13 October 1919).

²³ Schmauch (16), p.18.

²⁴ Doganis (2), p. 27-28.

²⁵ Doganis (2), p. 28 and Peoples (6), Chapter 2 p. 13-14.

²⁶ Doganis (2), p.28.

The traffic rights, referred to earlier, are also known as "the air freedoms" (See Annex I). They consist in privilege to enter and land in another country. They aim to standardize and simplify the air transport. Nine freedoms can be listed but not all of them are agreed upon in equal terms. For example, the Eighth and Ninth Freedoms related to *cabotage rights* are prohibited in the US²⁷. Cabotage rights allow an airline to carry passenger from one point to another within a foreign country. An hypothetical example would be Norwegian air shuttle²⁸ carrying a flight from Paris to Toulouse in France.

Therefore, it is important to understand that ASA vary from one to another, some are stricter than other, and they consist on a mix of economic and administrative provisions taken with political considerations.

In addition, an ASA can contain a nationality or ownership clause which requires airlines to be "*substantially owned or effectively controlled*"²⁹ by nationals of the country to which traffic rights have been granted. This type of provisions has the effect of preventing cross-border concentration and justifies the appearance of alliances, interesting tools used by airlines which will be analysed further within this thesis³⁰. Following a defined strategy, airlines agree to join or create an alliance for several reasons, but the main idea behind remains the access to *the connection system of the partners*³¹ and to obtain "*the benefits of large size and scope*"³².

Before the liberalization process in the EU, ASA were even negotiated on a bilateral basis between Member States and Third Parties. Around 60 to 70 agreements were concluded by each Member State³³! But, fortunately, the situation has changed. From a bilateral approach, we moved toward a community approach of air transport, and the nationality or ownership clause was exchanged for the notion of community ownership rights³⁴. To put it simply, ASA disappeared from the EU scenery. This was a positive step toward efficient competition within the European market, and it opened the door for a possible and necessary restructuring of the industry. It should be added that nowadays, in

²⁷ See 19 CFR 122.165 on air cabotage, and 49 U.S.C 41703 on navigation of foreign civil aircraft.

²⁸ Norwegian company whose headoffice is in Forneby, Norway.

²⁹ Doganis (2), p.28.

³⁰ Doganis (2), p.2.

³¹ Cento (4), p.38.

³² Doganis (2), p.2.

³³ Schmauch (16), p.27.

³⁴ Deutsches Zentrum für Luft- und Raumfahrt e.V. (DLR), Topical Report on Airline Business Models, 2008, pp.28-29 (DLR Report)

relation with third countries and taking account of Article 100 TFEU, the Commission is the one in charge of negotiating ASA on behalf of the EU Member States³⁵.

As to the second pillar, pooling agreements can be briefly described as a revenue sharing mechanism between airlines³⁶ but no further explanation is necessary here.

Concerning the third pillar, IATA is an International organization composed of airline companies, which has been established in 1945 in Havana. The main purpose behind its creation was to protect the interests of airlines and to counterweight ICAO³⁷ (the inter-governmental agency), which is a "public" organization and does not represent the private interests of airlines.

IATA established a tariff setting system. The tariffs were commonly used by governments³⁸, and included in bilateral ASA even though price fixing was already labelled as anti-competitive³⁹. Indeed, it was prohibited under anti-trust law⁴⁰ in the US, and, later on, under competition law⁴¹ in Europe. This depicts rather well how distinctive was the air transport industry at that time. Nonetheless, nowadays, the tariff setting has disappeared and airlines are usually free to set their own prices⁴².

In any event, the bilaterism (i.e. the recourse to ASA) which is characteristic of this period discouraged innovation and competition⁴³. But in the 1970s, the IATA tariff and conditions of service started to be questioned in the US and a movement influenced by the public, the press and consumers questioned the old pricing system. This led us gradually to deregulation and liberalization⁴⁴. The US opened the way for a more competitive airline industry.

5.3. The US deregulation's wave

In the US, the deregulation started in 1978 with the Airline Deregulation Act⁴⁵ which entirely revised the access to routes. At the beginning, it had the effect of increasing the number of merger between airlines. The goal pursued was to create economies of scale⁴⁶. Indeed, for fear of future competition,

³⁵ Schmauch (16), pp.23 and 29.

³⁶ Doganis (2), p.30.

³⁷ Cento (4), p.14 (see footnote No. 4).

³⁸ System of "double approval". See Schmauch (16), p.22.

³⁹ Doganis (2), p. 30.

⁴⁰ See the Sherman Act, 15 U.S.C.A. Para. 1-7, 26 Stat. 209 (1890); and the Clayton Act, 15 U.S.C.A Para. 12-27, 38 Stat. 730 (1914) which prohibited monopolies, cartels and practices such as price fixing.

⁴¹ See the Treaty Establishing the European Coal and Steel Community, Paris, 18 April 1951, Chapter 6.

⁴² Schmauch (16), p.25.

⁴³ Doganis (2), p.31.

⁴⁴ Doganis (2), p.31.

⁴⁵ Airline Deregulation Act of 1978, Pub. L. No. 95-504, 92 Stat. 1705 (codified as amended in scattered sections of 49 U.S.C.).

⁴⁶ Schmauch (16), p.26.

airlines tried to extend their network and strengthen their position through merger. But the deregulation had also the effect to permit the entrance of new players on the market, some of which set up an intriguing business model, the low cost carriers ("LCC")⁴⁷. Then, a consolidation of the market took place. And finally, bankruptcy and taking over happened and an oligopolistic market was observed. But, the market players also found a way to prevent new entry through marketing strategy and concentration. This situation led to a debate on a possible re-regulation. But in the same time, low prices resulted from the deregulation to the benefits of the consumers. And from a competition view, the improvement of social welfare is of importance when assessing competition in a market.

The conclusion to give on deregulation is that it does not necessary guarantee competition by itself. The countries which decide to deregulate must have recourse to parallel measures protecting competition⁴⁸. Companies on a specific market will always try to secure their position, and this can lead to extreme measures or decisions. Competition rules are there to draw a limit.

5.4. The following liberalization in Europe

In Europe, a gradual liberalization⁴⁹ movement started a few years later and was the result of three packages which "*led to increased competition, decreased average fares, increased frequency, improved load factor and airline efficiency and increased traffic volumes and new route services*"⁵⁰.

To summarise the situation in Europe before liberalization, the problems were the following: high prices, inefficient airlines (involved in diversified activities) in conjunction with an extremely fragmented market⁵¹.

As said before, the competition rules were not applied to air transport because, according to the commission, it could have "*cause serious disturbance in view of the special aspects*" of this type of transport⁵². But, inspired by the US, the Commission was in favour of changes within the European legal framework and proposed a set of new measures in a memorandum⁵³. Nonetheless, it is only in the early 1980s that concrete measures were adopted.

⁴⁷ Schmauch (16), p.26.

⁴⁸ Schmauch (16), p.27.

⁴⁹ Report from the Nordic Competition Authorities (2002), *Competitive Airlines - Towards a more Vigorous Competition Policy in Relation to the Air Travel Market*, Report No. 1/2002, pp.15-16: it took a decade and it has still to be completed (Report from the Nordic Competition Authorities).

⁵⁰ Peoples (6), Chapter 2 p.18.

⁵¹ Schmauch (16), p.27.

⁵² Schmauch (16), p.30.

⁵³ European Community (1979), 'Civil Aviation Memorandum No.1 - The Contribution of the European Communities to the Development of Air Transport Services', COM(79) 311 (Civil Aviation Memorandum No.1)

Directive 83/416/EEC⁵⁴ is the starting point of the European liberalization. It bypassed traditional ASA by allowing the development by airlines of new routes between very small airports. And, even if in the end the directive had a very limited scope of application, it was the first attempt to question the Chicago Convention. Then, in 1984, the Commission introduced a second memorandum, whose recommendations set the basis of what will be the first package adopted in 1989 by the Council.

5.4.1. The three packages

The first package⁵⁵ followed and confirmed an ECJ decision⁵⁶ according to which competition rules applied to air transport. The Commission was nonetheless allowed to grant exemptions to these rules, and as a result the first package had a limited impact. Additionally, no mention to state aid was made even though this had, in an industry such as air transport, a special and contestable place.

The second package⁵⁷ was adopted by the Council in 1990 and focused on tariffs and market access. Also, it prohibited pooling agreement between airlines, measure in line with a free competition ideal. In the same time, the situation of the industry was unsteady, and many airlines were having financial troubles as a result of the invasion of Kuwait by Iraq which led to an increase of the price of oil. States intervened, but it also instigated a restructuring of the industry.

⁵⁴ See European Council, Directive 83/416/EEC of 25 July 1983 concerning the authorization of scheduled inter-regional air services for the transport of passengers, mail and cargo between Member States, OJ L 237, 26.08.1983, p.19-24.

⁵⁵ The 1st package includes: European Council, Regulation (EEC) No 3975/87 of 14 December 1987 laying down the procedure for the application of the rules on competition to undertakings in the air transport sector, OJ L 374, 31.12.1987, p.1; European Council, Regulation (EEC) No 3976/87 of 14 December 1987 on the application of Article 85 (3) of the Treaty to certain categories of agreements and concerted practices in the air transport sector, OJ L 374, 31.12.1987, p.9; European Council, Directive 87/601/EEC of 14 December 1987 on fares for scheduled air services between Member States, OJ L 374, 31.12.1987, p.12; and European Council, Decision 87/602/EEC of 14 December 1987 on the sharing of passenger capacity between air carriers on scheduled air services between Member States and on access for air carriers to scheduled air-service routes between Member States, OJ L 374, 31.12.1987, p.19.

⁵⁶ See joint cases 209/84 to 213/84, *Ministère Public v Asjes*, 14 July 1998, EU:C:1998:357; and Schmauch (16), p. 34.

⁵⁷ The second package includes: European Council, Regulation (EEC) No 2342/90 of 24 July 1990 on fares for scheduled air services, OJ L 217, 11.8.1990, p.1; European Council, Regulation (EEC) No 2343 /90 of 24 July 1990 on access for air carriers to scheduled intra-Community air service routes and on the sharing of passenger capacity between air carriers on scheduled air services between Member States, OJ L 217, 11.8.1990, p.8; and European Council, Regulation (EEC) No 2344/90 of 24 July 1990 amending Regulation (EEC) No 3976 / 87 on the application of Article 85 (3) of the Treaty to certain categories of agreements and concerted practices in the air transport sector, OJ L 217, 11.8.1990, p.15.

The third package⁵⁸ made its apparition in 1993 and created an "*open skies regime for air services in the EU*"⁵⁹. The package focused on airlines operating licenses, access to intra-community routes and fair and rates for air services⁶⁰. The control on airlines' prices disappeared⁶¹. Also, we have to wait until 1997 to recognize full cabotage rights in the EU. the third package was repealed and modernized by Regulation 1008/2008 on 24 September 2008.

5.4.2. The limits of the three packages

The summarize, the third package has created a Single Aviation Market in the EU, but agreements with third country were and remain necessary to organize air transport at a global level. This situation has two essential implications for airlines businesses: one regarding the routes concerned and the second as to the negotiation of nationality or ownership clauses⁶².

Indeed, the opening of the European market to airlines had a limit. Member States had to conclude individual bilateral agreements with Third Parties, and therefore they could only establish a route with a third country starting from they own territory. For example, it was not possible for an airline owned and controlled by a Member State other than Spain, to connect Madrid to LA, even though the airline had complete access to the Spanish market following 1992.

And additionally, nationality or ownership clauses (included in ASA with third countries) were in a sense conflicting with the idea behind the creation of the internal market, and the possibility airlines have to establish themselves freely where they want within the Community⁶³. The Commission opined that the Community was responsible for negotiating ASA with third countries⁶⁴.

5.4.3. A European response to traffic rights

⁵⁸ The third package includes: European Council, Regulation (EEC) No 2407/92 of 23 July 1992 on licensing of air carriers, OJ L 240, 24.8.1992, p.1; European Council, Regulation (EEC) No 2408 / 92 of 23 July 1992 on access for Community air carriers to intra-Community air routes, OJ L 240, 24.8.1992, p.8; European Council, Regulation (EEC) No 2409 / 92 of 23 July 1992 on fares and rates for air services, OJ L 240, 24.8.1992, p.15; Council Regulation (EEC) No 2410 / 92 of 23 July 1992 amending Regulation (EEC) No 3975 / 87 laying down the procedure for the application of the rules on competition to undertakings in the air transport sector, OJ L 240, 24.8.1992, p.18; Council Regulation (EEC) No 2411 / 92 of 23 July 1992 amending Regulation (EEC) No 3976/ 87 on the application of Article 85 (3) of the Treaty to certain categories of agreements and concerted practices in the air transport sector, OJ L 240, 24.8.1992, p.19.

⁵⁹ Doganis (2), p.46.

⁶⁰ Schmauch (16), p.39.

⁶¹ Doganis (2), p.46.

⁶² Schmauch (16), p.53. See also Doganis (2), p.46.

⁶³ European Commission, Communication from the Commission to the Council on Air Transport Relation with Third Countries, COM(92) 434 final, Para. 5.

⁶⁴ Ibid., para.. 50 and following.

This is in this context that intervened the open skies judgments in 2002. Indeed, several EU Member States had concluded an "open skies" agreement with the US, such as the Netherland, one of the pioneers in 1992 but also Austria, Belgium, Denmark, Finland, Germany, Luxembourg and Sweden.

And the Commission was unsatisfied with this situation because, according to its view, traffic rights were not at the discretion of Member States as they could affect trade. But the situation was also undermining the Commission power⁶⁵. In the same way, it was rendering the air industry complex and this was not in favour of a competitive framework. It led to *an "asymmetry and an imbalance of opportunities"*⁶⁶ between the US and the EU due to the nature of both territories. To illustrate the situation, the fifth freedom on beyond rights was available only for the US but not for the EU members⁶⁷. This right allows an airlines to take passengers from its own country (A), to fly them to a destination (Country B) where it will pick new passengers to carry them to another country (C). In practice, an US airline could flight NY-Lisbon-Madrid, but the other way around was not possible for a Spanish airline. There were no equivalence of rights.

During the proceedings before the ECJ, the Commission argued, firstly, that it had exclusive competence to negotiate air transport agreements with third countries such as the US. Indeed, following Article 84(2) EC Treaty⁶⁸, and its application in the AETR judgment⁶⁹, once the Community has legislated in a specific field such as air transport, it has automatic competence to negotiate with third countries (recourse to the doctrine of implied powers⁷⁰). Also, those agreements have affected the internal market and they allowed for discrimination between community airlines, but they also undermined the right of establishment within the Community. They were not in line with EU law.

The Court recalled the AETR rule regarding the doctrine of implied powers and ruled that if the Member States could freely "*enter into international commitments affecting the common rules adopted on the basis of Article 84(2) of the Treaty, that would jeopardise the attainment of the objective pursued by those rules and would thus prevent the Community from fulfilling its task in the defence of the common interest*"⁷¹. The concern of the Court was therefore to observe whether the

⁶⁵ Doganis (2), p.53.

⁶⁶ Doganis (2), p.52.

⁶⁷ European Commission, 'Open skies agreements : Commission welcomes European Court of Justice ruling', IP/02/1609, 5 November 2002, Para. 11 p.2.

⁶⁸ Then, Article 80 TEC and now Article 100 TFEU.

⁶⁹ C-468/98, *Commission of the European Communities v Kingdom of Sweden*, 5 November 2002, EU:C:2002:626, para. 73 (Commission v Sweden).

⁷⁰ Doctrine according to which, once the EU has internal competence to establish rules, it has automatically external negotiating competence.

⁷¹ *Commission v Sweden* (69), para. 75.

bilateral agreements concluded with the US could have an impact on the common rules⁷². Therefore, Member States can negotiate and conclude bilateral agreement with third countries as long as the matter has not fallen within the Commission's competences yet⁷³.

Also, as to the concerns of discrimination between airlines, distortion of competition in the internal market and the right of establishment, the Court confirmed the view of the Commission by stating that traditional nationality or ownership clauses were contrary to EU law⁷⁴.

Nonetheless, following the 2002 judgements, the Commission was given mandate to negotiate agreements with third parties on the behalf of the Member States. And, in 2004 followed a Regulation on air service agreement negotiation and implementation between the EU and third countries⁷⁵ to clarify the situation and avoid further issues. (*The matter is currently organized under Articles 100, 207(5) and 218 TFEU*).

The 2002 judgment gave rise to several open-skies agreements such as the US-EU agreement from 2007. This agreement was a step forward, it has opened the two territories to airlines competition by allowing, without discrimination, access to the US sky to any "community air carriers"⁷⁶ with no restriction on origin and destination. Additionally, community airlines are now allowed to realize "stop over" in the US, that is to make a stop but to continue after to the final destination situated in another country. This has to be differentiate nonetheless with cabotage rights and domestic transport was not part of the deal⁷⁷.

But the open skies agreement also allows US investors to be minority shareholders in EU airlines (49%) and EU investors can detain 25% of the voting share in a US carriers. This is a huge step toward a limitation of the nationality or ownership clauses, even if the US remain protectionist to some extent⁷⁸ and maintain a certain *contradictory* position⁷⁹. For example, the US did not react when Virgin Atlantic, a British airline which is operating routes to the US, sold 49% of its stake to Singapore Airlines in 1999⁸⁰. But, otherwise, Singapore Airlines would not be allowed to purchase 49% of an US airline. The road is

⁷² *Commission v Sweden* (69), para. 83.

⁷³ Doganis (2), p.63.

⁷⁴ Linked to Article 52 TEU (now Article 59 TFEU) on liberalization.

⁷⁵ European Parliament and European Council, Regulation (EC) No 847/2004 of 29 April 2004 on the negotiation and implementation of air service agreements between Member States and third countries, OJ L 157, 30.4.2004.

⁷⁶ Cento (4), p.17.

⁷⁷ Cento (4), p.17.

⁷⁸ See the Fly America Act, 49 U.S.C. 40118.

⁷⁹ Doganis (2), p.56.

⁸⁰ Changes in 2012, the Singapore airlines' shares were bought by Delta Air Lines (US).

long before countries agree on dropping out nationality or ownership clauses, the same provisions that in the past helped them to *support and sustain* their airlines⁸¹. Thereafter, the open skies agreement was completed in 2010 regarding environmental issues⁸².

5.5. The importance of competition in the airline industry

In the end, there is only a few of regional open-skies⁸³ such as the Single European sky or more recently the open skies created by the ASEAN (2015). But the trend is changing even if we are far from a global competitive market for airlines. For example, in 2005, a European Common Aviation Area was agreed upon between the EU and some of its neighbours, including new partners such as Albania, Iceland and Norway⁸⁴ creating an enlarged open-skies area in Europe.

Also, to understand why fair competition is important in the airline industry, it should be noted that airlines are key actors in the economic development of regions and cities. Transport services and infrastructures in the EU have to be seen as a support to other industries, they form an essential link and promote economic growth in the internal market in general⁸⁵. This also explains why the construction or the extension of an airport can be highly political⁸⁶. Additionally, the fact that the strategic development of an airline has an impact and even stimulates other industries such as tourism and trade⁸⁷ justifies the interest Member States have shown with regard to their flag carriers in the past. For example, when an airline decides to open a new route, the cities concerned will consequently receive more travellers-visitors and will have to adapt their infrastructures. Also, the shutting down of a route has economic consequences⁸⁸.

5.6. The difficulties faced by airlines

One of the problem of the airline industry is its tendency to be oligopolistic, and airlines can be tempted to behave in an anti-competitive manner⁸⁹.

⁸¹ Doganis (2), p.57.

⁸² Peoples (6), Chapter 2, p.17.

⁸³ Peoples (6), Chapter 2 p.12.

⁸⁴ Peoples (6), Chapter 2 p.17.

⁸⁵ European Commission, Network Industries - Transport
http://ec.europa.eu/europe2020/pdf/themes/15_transport_02.pdf.

⁸⁶ Current example of Notre Dame des Landes's Airport in Nantes, France.

⁸⁷ Peoples (6), Chapter 2 pp.3-6.

⁸⁸ See for example the case of Tiger Airlines Australia in 2012 (disrupted route): Bruce Prideaux Randall Whyte, "*Implications for Destinations when Low-Cost Carrier Operations are Disrupted: The Case of Tiger Airlines Australia*" In *Advances in Hospitality and Leisure*, Volume 9, 99-118 (Emerald Group Publishing Limited, 2013) (Prideaux and Whyte).

⁸⁹ Pat Hanlon, *Global Airlines Competition in a Transnational Industry* (3rd Edition, Routledge, 2007), Chapter 3 pp.67 and 70.

This is linked to its complexity and special feature. Indeed, this industry is highly dependent on infrastructure and countries relationships. Obtaining the right to fly over another territory is significant for political but also economic reasons. When one want to analyse the airline industry, one must understand that airlines are in a way dependant from external elements such as airports, passengers and states regulations. Moreover, the airline industry is inherently unstable⁹⁰.

Additionally, it takes time and money for an airline to set a new route. Airlines are not footloose⁹¹, they cannot easily switch from one airport to another. In a way, airports are the one having market power, they have limited facilities and slots which render them strategic from a competition perspective. And therefore when an airline decides to set a new route from a specific airport it will not be in the best position to negotiate a vertical agreement with the airport. The access to the facilities is essential and will be discussed further.

5.7. A new structure of competition influenced by the appearance LCC

Nonetheless, if we come back to the liberalization process in the EU, other than a oligopolistic reaction, the single aviation market has witnessed the apparition and development of Low Cost Carriers ("LCC")⁹², a new form of airline business model, in Europe. The phenomenon was the same than during the US deregulation process. It had the effect to increase competition and consumer choice, and lower prices⁹³.

But, to fully understand the impact of LCC on the industry structure, it is important to define what it is, and how different it is from the other business models. It is sufficient to say here that three carrier models are usually compared. The LCC model, the Charter Carrier (CC) model and the Full-Service Carrier ("FSC") model. The LCC model is based on a cost cutting strategy and the airlines, also called "no frills" or "low cost" airlines, will compete on prices⁹⁴. On the other hand, FSC⁹⁵ are the former "flag carriers" which have a more complex organization and provide a larger range of services. To finish, CC (or "holiday carriers"⁹⁶) provide flights outside normal schedules⁹⁷ for the tourism industry. By outside schedule, it must be understood that the flights, even if they may be arranged on a regular basis, are more seasonal and flexible. The tickets are also sold in bulk.

⁹⁰ Doganis (2), p.1.

⁹¹ James Wiltshire, Airport Competition [2013] IATA Economics Briefing No. 11, p.16.

⁹² DLR Report (34), p.27.

⁹³ Peoples (6), Chapter 2 pp.19-20.

⁹⁴ DLR Report (34), p.8.

⁹⁵ Cento (4), p.18.

⁹⁶ DLR Report (34), p.11.

⁹⁷ Cento (2), p.21-22.

The appearance of LCC is interesting but also brought its share of problems, especially when it comes to labour conditions. A more complete description and discussion will be held later on within the thesis.

The different business models have something in common, every time an airline plans to enter a new route, it must consider several elements, among other: airport rights (slots), staff, marketing issues, prices...⁹⁸etc. And any posterior modifications will involve costs. The network is the cornerstone of an airline's business. Therefore, the network is at the heart of the competition concerns, and having a proper network strategy and planning is crucial. Depending on the business models, airlines choose most of the time to have recourse to a Hub-and-Spoke ("HS") system or a Point-to-Point ("PP") system (See diagram, Annex II) where airports have more or less importance and a strategic value.

This is in this context that airlines may encounter difficulties to enter the market and that will intervene and be applied the competition rules. The main piece of legislation is contained within Title IV, Chapter 1 of the Treaty on the Functioning of the European Union ("TFEU") and particularly within Articles 101, 102 and 107 TFEU. These Articles prevent cartel and abuse of dominant position but also control structural changes, and the recourse to state aid within the internal market. Also, certain sectors such as transport, may be subjected to additional rules⁹⁹.

6. THE FUNCTIONING OF THE INDUSTRY

The functioning of the airline industry is interesting in many ways, and so is the application of competition law. When it comes to airlines and competition, three elements must be highlighted, the business model adopted by airlines (6.1.), their behaviour on the market (6.2.), and, to finish, the difficulties they may encounter (6.3.).

6.1. The airline industry

The airline industry is characterized by a multiplicity of actors playing on different markets (6.1.1.), and using different business models (6.1.2.).

6.1.1. A complex market definition

⁹⁸ Cento (4), p.48.

⁹⁹ See for example: Article 100 TFEU and European Council, Regulation (EC) No 487/2009 of 25 May 2009 on the application of Article 81(3) of the Treaty to certain categories of agreements and concerted practices in the air transport sector (Codified version) (Text with EEA relevance), OJ L 148, 11.6.2009, p.1-4.

6.1.1.1. A brief reminder on competition law

The first competition rules can be found in 1951 within the Treaty of Paris, but, since then, the rules have evolved and have been adapted to fulfil the changing objectives of the EU¹⁰⁰.

The goals pursued by competition law are not clearly defined and may slightly vary depending on the approach taken and the institutions or entities concerned. Nonetheless, it is commonly admitted that competition law tries to maintain an effective competition and to prevent partitioning and foreclosure on the market.

In other words, it aims at promoting efficiencies and market integration, but also in certain cases, it pursues secondary objectives such as environment and job creation¹⁰¹. Competition law is a necessary tool to maintain an operative and integrated internal market¹⁰². Indeed, the logic behind the creation of the internal market is to pursue economic integration within the EU by creating "*an area without internal frontiers in which the free movement of goods, persons, services and capital is ensured*" (Article 26.2 TFEU). But the internal market is not only about business and commercial activities, it also covers *social, environment and consumer policies*¹⁰³.

Nonetheless, the purpose of the internal market would be jeopardized if a firm could simply exclude competitors, divide the market or increase prices to the detriment of the consumers and competitors. Therefore the competition rules are there to allow market integration but also to promote consumer welfare and an efficient allocation of resources¹⁰⁴. Also, in the last 30 years, a liberalization wave has passed the EU. There was a risk that the former markets dominated by state owned companies would fall under private monopoly¹⁰⁵, therefore the adoption of new competition rules was crucial. This was particularly true within the transport industry.

The maintenance of competition within the internal market relies on a collaborative system¹⁰⁶ between the EU and its Member States. Articles 101 and 102 TFEU and the implementing Regulations

¹⁰⁰ Alison Jones and Brenda Sufrin, *EU Competition Law (Text, Cases, and Materials)* (5th Edition, Oxford University Press, 2014), p.35.

¹⁰¹ Hans Henrik Lidgard, *Part I Competition Classics (Material & Cases on European Competition Law and Practice)* (Maria Magle Publishing, 2011), p.16.

¹⁰² Jones and Sufrin (100), p.39.

¹⁰³ Paul Craig and Grainne de Burca, *EU Law (Text, Cases, and Materials)* (5th Edition, Oxford University Press, 2011), p.609.

¹⁰⁴ Jones and Sufrin (100), p.40.

¹⁰⁵ Jones and Sufrin (100), p.52.

¹⁰⁶ See C-234/89, *Stergios Delimitis v Henninger Bräu AG*, 28 February 1991, EU:C:1991:91; European Council, Regulation 1/2003/EC of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty, OJ L 1, 4.1.2003, p. 1–25; and Lidgard (101), p.38.

have direct effect, and national courts are competent to apply them. Also, EU competition law is effect-based¹⁰⁷, that is to say that it is not based on the form of the anti-competitive behaviour but on the impact an agreement, decision, concerted practice or behaviour may have or has within the internal market. Additionally, EU competition law may apply to a firm whose head office is located outside the EU as long as competition within the market is affected. This is referred as the extraterritorial application of EU competition law¹⁰⁸.

Regarding the assessment developed by the Commission under competition law, a few concepts call for explanations: the market power held by a firm, the definition of the relevant market, and to finish the existence of barriers to entry¹⁰⁹.

6.1.1.2. The notion of market power

During a competition analysis, the first element to define is the market power of the firm(s) under scrutiny. It is at the core of any competition law analysis¹¹⁰. The concept of market power refers to the influence a firm may have on the market conditions¹¹¹. This includes, on one hand, the possibility to exclude competitors (*exclusionary power*), but also, on the other hand, the ability to price over short-run marginal cost¹¹² i.e. over the "competitive price" (*pricing power*)¹¹³.

Nonetheless, competition is not limited to pricing practices, it is more subtle and it requires a dynamic assessment. For instance, competition is intertwined with issues such as innovation and intellectual properties. Innovation is considered as "the main avenue for achieving economic growth and competitiveness"¹¹⁴, and it will have an impact on consumer welfare.

Back to the concept, market power must last for a significant period to be taken into account¹¹⁵, and there are two available methods to assess it. One consists on using economics data, but the most common approach is the structural approach, which consists on defining the relevant market, then

¹⁰⁷ Jones and Sufrin (100), p.56-57.

¹⁰⁸ Lidgard (101), p.44. See also Decision 97/816/EC: Commission Decision of 30 July 1997 declaring a concentration compatible with the common market and the functioning of the EEA Agreement (Case No IV/M.877 - *Boeing/McDonnell Douglas*) (Text with EEA relevance), OJ L 336, 8.12.1997, p.16-47.

¹⁰⁹ Jones and Sufrin (100), p.1.

¹¹⁰ Lidgard (101), p.14.

¹¹¹ Lidgard (101), p.12.

¹¹² This is the cost of producing one additional unit of the product/service.

¹¹³ Jones and Sufrin (100), p.58-59.

¹¹⁴ M. Granieri and A. Renda, *Innovation Law and Policy in the European Union - Towards Horizon 2020* (Springer, 2012) 1.1.

¹¹⁵ Jones and Sufrin (100), p.58-59.

assessing the market power by defining the market share of the firms and the barriers to entry (*see hereunder, 6.3.1*).

6.1.1.3. The particularities of the market definition in the airline industry

The definition of the relevant market will be described through the airline industry filter and its distinctive features. To resume, a market definition involves a product market, a geographical market, but also a time factor¹¹⁶.

The market definition aims at identifying "*those actual competitors of the undertakings involved that are capable of constraining their behaviour and of preventing them from behaving independently of an effective competition pressure*"¹¹⁷, and consequently revealing possible infringements of EU law¹¹⁸. This market definition is used both under Articles 101 and 102 TFEU and for structural changes, but the Commission will have recourse to different types of evidence or sources of information¹¹⁹ depending on the issue raised.

The relevant product market will be delimited in function of the interchangeability or substitutability of the product from the buyer-consumer's position and in the present case, from the passenger's perspective as we are focusing on "air passenger services"¹²⁰ (but airlines may also carry out other types of activities such as air cargo services or ground handling etc.).

First, it should be noted that airlines compete on routes. Therefore the starting point of the analysis consists in defining the origin and destination city pair¹²¹. The airline industry competes on body of routes on which the level of competition varies depending on many factors, such as the existence of transportation alternatives.

The Commission will realise a case-by-case analysis where it will assess airport or inter-modal transportation (train, ferry...) substitution but also travel time, frequency and schedule of service, or

¹¹⁶ Lidgard (101), p.199.

¹¹⁷ European Commission, Commission Notice on the definition of the relevant market for the purposes of Community competition law, OJ C 372, 9.12.1997, p.5-13.

¹¹⁸ Jarub Kociubinski, Relevant Market in Commercial Aviation of the European Union, *Wroclaw Review of Law, Administration & Economics*, Vol 1, No. 1 (2011) Issue 1, p.9.

¹¹⁹ OECD Directorate for Financial and Enterprise Affairs - Competition Committee, Roundtable on Market Definition, DAF/COMP/WD(2012)28, 31 May 2012, p.6.

¹²⁰ European Commission, decision in relation to a notified concentration, Case M.7333 - *Alitalia/Etihad*, C(2014) 8708 final (Case M.7333 - *Alitalia/Etihad*)

¹²¹ European Commission DG Competition, Competition Impact of Airline Code-Share Agreements, Final Report, January 2007, p.72.

the price and the quality of the service¹²². Those elements are influencing the decisions process of passengers. Also, the Commission will have recourse to the *bundling evidence test* to assess substitutable airports¹²³.

Additionally, the Commission traditionally distinguishes two groups of passengers: the time-sensitive, flexibility-focused passengers, and the non time-sensitive but price-focused passengers¹²⁴. This distinction is only relevant for intra-European routes, where it can lead to a separate market definition¹²⁵. There is also a difference as to the market definition whether the ticket is or not restricted¹²⁶.

Moreover, the Commission considers that passengers and connecting passengers are not part of the same market¹²⁷. For example, a passenger reserving an indirect flight from Toulouse to Copenhagen, with a stop in Brussels, will not be on the same market as a passenger flying only from Toulouse to Brussels.

But, a direct flight and an indirect flight (sharing the same origin and destination) may be part of the same relevant market. Indeed, the level of substitution between the two routes will vary in function of the duration of the flights¹²⁸. According to the Commission, "*as a general rule, the longer the flight, the higher the likelihood that indirect flights exert a competitive constraint on direct flights*"¹²⁹. Nonetheless, at an intra-European level, it is unlikely that an indirect flight will be substitutable to a direct short-haul route, as the indirect flight will not exert a sufficient competitive restraint (but it may be different on a medium-haul route)¹³⁰.

Once the relevant product market has been defined, the geographic market must be identified. This must comprise the internal market or a substantial part of it for the competition rules to apply. Also, the market must contain homogeneous conditions of competition¹³¹, distinct from those existing within neighbouring areas. In practice, it means that you can individualise the market because of its

¹²² See Michael Gremminger, The Commission's approach towards global airline alliance - some evolving assessment principles, 2003, Competition Policy Newsletter, Number 1, Spring 2003 p.75, and Case M.7333 - *Alitalia/Etihad* (120).

¹²³ Case M.7333 - *Alitalia/Etihad* (120), para. 84.

¹²⁴ See Case M.7333 - *Alitalia/Etihad* (120), para. 70. And, European Commission DG Competition, Competition Impact of Airline Code-Share Agreements, Final Report, January 2007, pp. 71-72.

¹²⁵ Michael Gremminger (122), p.75.

¹²⁶ Michael Gremminger (122), p.75.

¹²⁷ Case M.7333 - *Alitalia/Etihad* (120), para.. 64.

¹²⁸ Case M.7333 - *Alitalia/Etihad* (120), para.. 75-76.

¹²⁹ Case M.7333 - *Alitalia/Etihad* (120), para. 76.

¹³⁰ Michael Gremminger (122), p.75.

¹³¹ C-27/76, *United Brands Company and United Brands Continentaal BV v Commission of the European Communities*, 14 February 1978, EU:C:1978:22, Para. 39.

characteristics. Also, potential substitution is not enough to define a market, and the Commission must take into consideration the time factor¹³².

It is apparent through the description of the relevant market definition that airports are one of the key element within route competitions, they are the origin or the destination of a flight. But, depending on their business model, airlines will develop different approaches towards airports and the structure of their network.

6.1.2. A competition between business models?

As previously stated, three different models can be described¹³³: the Low Cost Carrier (LCC) model, the Charter Carrier (CC) model and the Full-Service Carrier (FSC) model.

6.1.2.1. The FSC model

FSC have a diversified business tradition (passenger, cargo, maintenance) and have developed a hub-and-spoke system where one airport, the hub, is selected to be at the core of the airline network and all flights will be directed towards it. Its playground will consist on domestic, international and intercontinental markets. But the FSC also have recourse to alliances to extend their network. They give special attention to their customer, and have recourse to frequent flyer program and customer relationship management. But the FSC model is also characterised by its sophisticated yield management (*see explanation 6.2.2.1*). And tickets can be bought either online or outline through travel agencies or the airline itself. Typical examples of FSC would be Lufthansa or Air France-KLM. Nonetheless, this traditional model has been challenged by a simpler and cost-reducing model: the LCC model.

6.1.2.2. The LCC model

The LCC is a simplified model that aims at reducing costs, and therefore lower prices to attract customers. Three lines of conduct can be listed: unbundled services, reduction of operating costs and maximizing revenue¹³⁴.

To resume some of the features of this specific model, LCC focus on passenger service, and have recourse to a point-to-point system. Such a system implies that a passenger will only fly from A to B, and no connecting flights will be arranged by the airline. Besides, LCC only serve continental routes (short and medium haul flights) and usually the airports included within their network are secondary

¹³² Lidgard (101), p.208.

¹³³ For a deeper understanding of the three models, read Chapter 2.4 of the following book: Cento (4), p.17.

¹³⁴ Prideaux and Whyte (88), p.102-104.

airports (example: Malmö airport) where access is easier and cheaper (reduced airport charges, possibility to obtain state aid to open new routes under certain conditions etc.).

Also, LCC usually have a fleet composed of a single type of aircrafts which will spend more time in the air per day than an FSC aircraft would. There is an optimization of the use of aircrafts. It should be noted that part of the strategy may also consist on leasing recent aircrafts to avoid maintenance costs¹³⁵. As to the choice of routes, two trends are visible, the LCC will focus either on busy routes or on niches (i.e. routes not served by FSC).

The beneficiaries of FSC are the public and mainly for a leisure market¹³⁶. Contrary to FSC, LCC do not provide differentiated services for passengers. There is no lounge, no possibility to choose a seat or to refund a ticket for example. To increase their revenue, LCC rely on optional services such as hotel and car renting (commission system), excess luggage charges, in-flight catering. Nonetheless the LCC model is not uniformly applied. Indeed, the LCC have unbundled the traditional range of services provided by FSC¹³⁷. Additionally, the distribution is organized online: Internet has played a role in the development of the LCC¹³⁸.

Furthermore, part of the strategy of LCC is related to their labour force: lower wages for less generous working conditions¹³⁹. Labour costs are reduced. LCC crew will avoid overnight stay and the companies will also have recourse to casual employment. There are positive and negative aspects stemming from the implementation of the LCC model. The difference between FSC and LCC appears at different levels, it is *multifaceted*¹⁴⁰. Typical examples of LLC would be Ryanair and Easyjet.

6.1.2.3. The CC model

The main business activity of CC consists on transporting holiday-makers to tourist destinations. Tickets are sold by tour operators, and usually are part of a package holiday. Such airlines are usually vertically integrated and all the links are connected: airlines, tour operators, hotels and ground transportations among others. The CC model focuses on economy of density, all the seats must be reserved. Typical examples of CC would be Condor or Thomson Airways. Nonetheless, this distinction

¹³⁵ Prideaux and Whyte (88), p.104.

¹³⁶ Prideaux and Whyte (88), p.101.

¹³⁷ Prideaux and Whyte (88), p.103.

¹³⁸ Prideaux and Whyte (88), p.103.

¹³⁹ Prideaux and Whyte (88), p.103.

¹⁴⁰ Cento (4), p.20.

between airlines' business model is too rigid. The airline industry has witnessed the development of hybrid models¹⁴¹.

6.2. Airlines' behaviour on the market

When we look at airline demand from a passenger perspective two elements are important, the cities served (the origin and destination city pair) and the airline "reputation" (e.g. quality of the service)¹⁴².

How do airlines compete on both sides?

6.2.1. How do airlines compete?

To compete and to face internal or external situations, airlines have recourse to a plurality of methods.

6.2.1.1. Cost limitation and pricing method

Airlines compete on cost reductions, especially following the entry on the market of LCC. But cost reduction has a limit and the market has gained a certain level of maturity¹⁴³. As regards cost reduction, airlines' strategies are driven by concepts such as economies of scale, scope and density which can be studied both on the supply side and the demand side¹⁴⁴. The key factor to take into consideration when assessing these concepts is the price per unit borne by airlines.

In the airline industry the concept of *economies of scale* means that the bigger the plane is, the cheaper a seat costs for the airline (if a demand for such an aircraft exists, i.e. all seats reserved)¹⁴⁵. From a passenger perspective, it would be translated as the bigger the plane is, the safer and more comfortable it would appear¹⁴⁶.

On an other hand, the idea of *economies of density* implies that increasing the number of seats available in an aircraft or increasing the flights' frequency on a route (where there is a demand) will decrease the unit cost¹⁴⁷.

To finish, the idea behind the *economies of scope* is to maximize the network and to offer a large panel of services. It will reduce the cost per unit and attract passengers. Into practice, the airlines will set up

¹⁴¹ DLR Report (34), p. 13.

¹⁴² Cento (4), p.18, footnote 6.

¹⁴³ Cento (4), p.23.

¹⁴⁴ Report from the Nordic Competition Authorities (49), p.109.

¹⁴⁵ DLR Report (34), p.7.

¹⁴⁶ Report from the Nordic Competition Authorities (49), p. 109.

¹⁴⁷ Report from the Nordic Competition Authorities (49), p.109.

more interconnected destinations (e.g. recourse to connecting flights), where aircrafts and crew will be "re-used"¹⁴⁸.

Nonetheless, in the following years, airlines may have to address several challenges such as a possible increase of fuel price, labour costs but also costs of aircraft leasing. Those increases will have a particular impact on LCC whose main business strategy consists on reducing costs to the minimum. Fuel, among other, is an unavoidable expenditure. Airlines already try to minimize the impact of fuel price variation by having recourse to *fuel hedging* (i.e. purchase of a stock of fuel at a fixed price) which permits to anticipate increase in price¹⁴⁹. In this regard, FSC have an advantage over LCC stemming from a higher seat density (i.e. the price of fuel per seat is less important). But competition is not only a question of prices, but also of products and services.

6.2.1.2. Network use

Each airline has a different approach to the way it should compete. The first aspect of competition depends on the choice of routes. For example, Ryanair tries to avoid certain competitors by running routes between regional airports, on smaller markets¹⁵⁰. By consequence, its network is not intertwined with a lot of competitors.

The second aspect of competition stems from the business model of the airlines, and a new trend has appeared within the FSC¹⁵¹: they have developed a multi-brand strategy consisting in diversifying their products by including LCC to their business model (*it gives rise to concentration issues which will be scrutinized under competition law hereafter, 7.1.*). They will also have recourse to advertisement to attract new consumers¹⁵².

But the FSC also try to rationalize their network by focussing on profitable routes. Some FSC even have transformed themselves in LCC to be competitive and survive. To summarize, the key feature of FSC competition lies on a constant adjustment of their business model to remain competitive and viable. And in the end the main focus of the different business models is to reduce unit cost to compete on the market.

6.2.1.3. Marketing tools

¹⁴⁸ Report from the Nordic Competition Authorities (49), p.109.

¹⁴⁹ Cento (4), p.27.

¹⁵⁰ Cento (4), p.23.

¹⁵¹ Cento (4), p.25.

¹⁵² Hanlon (89), Chapter 3 p.70.

Airlines also compete through marketing strategy¹⁵³. By marketing should be understood advertising but also loyalty schemes. Loyalty schemes can consist on frequent flyer programs, corporate discounts and travel agency commission overrides¹⁵⁴. They aim at reducing prices but also demand elasticity, by guaranteeing that consumers remain loyal to one company. In this regard, such schemes will render switching cost between airlines prohibitive for consumers¹⁵⁵.

6.2.1.3.1. Frequent flyer programs

Frequent flyer programs permit passengers to accumulate mileage points for each ticket bought from a specific airline (e.g. "Flying Blue" of Air France/KLM). The points thus earned can be exchanged for free or discounted tickets or for other form of benefits made available by the airline (lounge, free gift etc.)¹⁵⁶, but in practice only 15 to 30 % of these points are redeemed¹⁵⁷! This kind of loyalty scheme is principally addressed to business men and passengers who are not price-focussed. Such programs raise a question, how much a consumer choice is influenced by the loyalty scheme to which he is member. Indeed, from a consumer perspective, the possibility of obtaining points may convince a passenger to select a specific flight even though another flight with another company would have been more convenient or economic. Therefore, frequent flyer programs have been seen as constituting barriers to entry on the market¹⁵⁸.

6.2.1.3.2. Corporate discounts

Corporate discounts are *"agreements by which large airline customers are able to negotiate lower (net) fares on all or certain parts of an airline's network"*¹⁵⁹. These agreements may vary depending on the airline and the company concerned. It may provide for upfront discount and/or rebates and may cover different territories (global, regional, city-pair scheme) and different types of tickets (business, economy class etc.)¹⁶⁰.

6.2.1.3.3. Travel agency overrides

¹⁵³ Hanlon (89), Chapter 3 p.85.

¹⁵⁴ Hanlon (89), Chapter 3 p.86.

¹⁵⁵ Hanlon (89), Chapter 3, p.86 and 100.

¹⁵⁶ Hanlon (89), Chapter 3, p.86.

¹⁵⁷ Hanlon (89), Chapter 3, p.90.

¹⁵⁸ Hanlon (89), Chapter 3, p. 92-94.

¹⁵⁹ European Competition Authorities, Loyalty programmes in civil aviation - an overview of the competition issues concerning frequent flyer programmes, corporate discount schemes and travel agent commissions, 1 Eur. Competition J. 375 (2005), p.376 (Overview on loyalty programmes in civil aviation)

¹⁶⁰ Hanlon (89), Chapter 3, p.95.

Travel agency commission overrides are addressed to travel agency company and aim at rewarding them for using the airline aircrafts. Their rest upon a system of targets and commission¹⁶¹.

6.2.1.3.4. Loyalty schemes v. Competition rules

As seen above, loyalty schemes are incentives used by airlines (mainly FSC) to retain customers and to draw new ones. Also, the impact of a loyalty scheme is linked to the dimension of the network maintained by an airline. To be efficient, a scheme must be implemented in a large network. In a small network, the passenger will have no other choice but to pick competitors to fly on certain routes, consequently the benefits of the scheme will be limited and the switching costs will be minimal; therefore the passenger will not know any deterrent effect from the scheme to change airline¹⁶². But those schemes may have anticompetitive effects¹⁶³.

There is no specific rule on loyalty programmes within the EU, and it is therefore necessary to assess, case-by-case, these schemes under Articles 101 and 102 TFEU¹⁶⁴. What is the current situation in Europe?

Frequent flyer programs are said to induce loyalty but also price-raising effects¹⁶⁵. If we look at the *SAS/Lufthansa decision*¹⁶⁶ regarding an alliance between SAS and Lufthansa, a pooling of the frequent flyer program was planned. The Commission took the view that it was likely to constitute a barrier to entry¹⁶⁷. The Commission assessed the alliance as a whole under Article 101 TFEU, and considered that the passengers would benefit from such a structure¹⁶⁸. Therefore, the Commission allowed the alliance (as an exemption under Article 101.3 TFEU) for a 10 year duration¹⁶⁹ and under certain conditions¹⁷⁰. One of the conditions consisted in giving the possibility for competitors to participate in the frequent flyer program developed by Lufthansa and SAS¹⁷¹.

The approach taken by the Commission consists in widening the access to frequent flyer program to competitors. Currently, within the EU, only Sweden has intervened against such schemes, SAS's

¹⁶¹ Hanlon (89), Chapter 3, p.97-98.

¹⁶² Hanlon (89), Chapter 3, p.98; and, Overview on loyalty programmes in civil aviation (159), p.378.

¹⁶³ Hanlon (89), Chapter 3, p.100.

¹⁶⁴ Overview on loyalty programmes in civil aviation (159), p.392.

¹⁶⁵ Overview on loyalty programmes in civil aviation (159), p.390-391.

¹⁶⁶ European Commission, decision of 16 January 1996 relating to a proceeding under Article 85 of the EC Treaty and Article 53 of the EEA Agreement (IV/35.545 - *LH/SAS*), OJ L 54, 5.3.1996, p. 28–42, (the *SAS/Lufthansa decision*)

¹⁶⁷ The *SAS/Lufthansa decision* (166), para. 53.

¹⁶⁸ The *SAS/Lufthansa decision* (166), para. 74.

¹⁶⁹ The *SAS/Lufthansa decision* (166), para. 88.

¹⁷⁰ The *SAS/Lufthansa decision* (166), para. 75.

¹⁷¹ The *SAS/Lufthansa decision* (166), para.96 and Article 3.3 of the decision.

frequent flyer program was prohibited on domestic routes served by several airlines (competitors)¹⁷². The ECJ did not have the opportunity to decide on frequent flyer programs for now.

One of the possible path to obtain the prohibition a frequent flyer program would entail the drawing of a parallel between frequent flyer programs and the rebate system prohibited in the *Michelin I*¹⁷³ case under Article 102 TFEU¹⁷⁴.

Several types of rebates can be identify: quantity rebates, loyalty rebates, target rebates, loyalty-inducing rebates, bundled rebates and/or targeted rebates¹⁷⁵. According to the CJEU, rebates must derived from economic considerations¹⁷⁶. And where quantity rebates are allowed, loyalty rebates are prohibited¹⁷⁷ under Article 102 TFEU. One important element is that a rebate must not prevent a passenger from seeking a flight from a competitor. A passenger must not be deprived of his choice¹⁷⁸.

Loyalty rebates are problematic for two reasons, they discriminate between consumers, and exclude competitors. They can amount to an abuse of dominant position under Article 102 TFEU¹⁷⁹.

To come back to the *Michelin I* case, the system in place was a target rebate system promoting the sale of car tyres between Michelin and its dealers. The rebate was conditional on the dealers' ability to purchase more tyres than the previous year. It should be noted that no exclusive agreement or percentage of supplies from Michelin were required from the dealers¹⁸⁰. Nonetheless, the problem of the scheme was its loyalty-inducing effect¹⁸¹ (it is sufficient for the scheme to be capable of having this effect, it does not need to be an actual effect¹⁸²) and it had an exclusionary effect towards competitors. In the end, the scheme was abusive because "*too vague, too individual and too selective*"¹⁸³. The case was confirmed in 2002¹⁸⁴. Target rebates are not per se prohibited, but a

¹⁷² Market Court, MD 2001:4, *Konsortiet Scandinavian Airlines System v. Konkurrentverket*, February 27, 2001

¹⁷³ C-322/81, *NV Nederlandsche Banden Industrie Michelin v Commission of the European Communities*, 9 November 1983, EU:C:1983:313 (*Michelin I*)

¹⁷⁴ Report from the Nordic Competition Authorities (49), p.115.

¹⁷⁵ Jones and Sufrin (100), p.455.

¹⁷⁶ *Michelin I* (173), para. 85.

¹⁷⁷ *Michelin I* (173), para.71.

¹⁷⁸ Lidgard (101), p.128.

¹⁷⁹ Jones and Sufrin (100), p. 458.

¹⁸⁰ *Michelin I* (173), para. 72.

¹⁸¹ *Michelin I* (173), para. 73, 85 and 86.

¹⁸² Jones and Sufrin (100), p. 469.

¹⁸³ Lidgard (101), p. 237.

¹⁸⁴ See European Commission, decision 2002/405/EC of 20 June 2001 relating to a proceeding pursuant to Article 82 of the EC Treaty (COMP/E-2/36.041/PO — *Michelin*), OJ L 143, 31.5.2002, p. 1–53, para. 263 and 264 (*Michelin II*)

dominant undertaking is under a special responsibility "*not to allow its conduct to impair genuine undistorted competition on the common market*"¹⁸⁵.

The later jurisprudence developments must also be analysed through the Tomra¹⁸⁶ and Intel¹⁸⁷ cases, which were given after the 2009 Guidance of the Commission in relation to exclusionary abuses¹⁸⁸.

To summarize, Tomra (a reverse vending machine supplier) had set an individualised retroactive rebate scheme to supermarkets. According to the Commission the company deliberately used the rebate system to exclude competitors¹⁸⁹, and such a scheme had equivalent effect to a loyalty rebate¹⁹⁰ and constituted an infringement of 102 TFEU.

The Court recalled that an abuse of dominant position is an objective concept, no intent is required even though all the relevant facts surrounding the case must be considered¹⁹¹.

In regard to the absence of proof that prices were lower than costs, the Court confirmed that it was not necessary to conduct an economic assessment of Tomra's prices¹⁹². But it was the effects of the rebates on competition, and more precisely whether it was capable of excluding competitors that mattered¹⁹³. Also, in the present case, the scheme was not objectively justified¹⁹⁴.

In Intel, the firm granted rebates to four manufacturers provided that they would purchase "*all or almost all*" of their central processing units from it¹⁹⁵. It was a conditional rebate scheme. The Commission's contested decision set that it was a fidelity rebate scheme, and following an as-efficient-competitor test, it would foreclose such a competitor from the market¹⁹⁶ and competitors could not compete on the merits¹⁹⁷.

This case draw a line between three kinds of rebates¹⁹⁸: quantity rebates, which are allowed; exclusivity rebates, which are prohibited because of their loyalty effect; and, the others which must

¹⁸⁵ *Michelin I* (173), para. 57.

¹⁸⁶ C-549/10 P, *Tomra System ASA and Others v European Commission*, 19 April 2012, EU:C:2010:221 (Tomra)

¹⁸⁷ T-286/09, *Intel Corp. v European Commission*, 12 June 2014, EU:T:2014:547 (Intel)

¹⁸⁸ See European Commission, Communication — Guidance on the Commission's enforcement priorities in applying Article 82 of the EC Treaty to abusive exclusionary conduct by dominant undertakings (Text with EEA relevance), OJ C 45, 24.2.2009, p. 7–20

¹⁸⁹ *Tomra* (186), para. 12 and 17.

¹⁹⁰ *Tomra* (186), para. 14.

¹⁹¹ *Tomra* (186), para. 17-18.

¹⁹² *Tomra* (186), para. 74.

¹⁹³ *Tomra* (186), para. 79-80.

¹⁹⁴ *Tomra* (186), para. 75.

¹⁹⁵ *Intel* (187), para. 28.

¹⁹⁶ *Intel* (187), para. 30.

¹⁹⁷ *Intel* (187), para. 30-31.

¹⁹⁸ *Intel* (187), para. 74-78.

be assessed to determine if they provide an advantage not based on any economic service (all the circumstances must be assessed). And following this distinction, the Court stated that the rebate scheme was an exclusivity rebate, and only an objective justification¹⁹⁹ or deriving efficiencies benefiting consumers²⁰⁰ would prevent the scheme to be abusive under competition law. Additionally, the Court held that it is no necessary to realise an as-efficient-competitor test in a rebate case²⁰¹. What matter is the foreclosure effect i.e. whether the it has been impossible or made more difficult for competitors to enter the market. In the end, the Court concluded that the scheme under scrutiny was capable of restricting competition²⁰².

Frequent flyer programs may also be compared to these controversial rebate schemes, as they may be loyalty-inducing even though passengers are not bound to purchase ticket solely from one airline or alliance. Advantages are conditional on a certain amount of miles. A frequent flyer program could perfectly constitute an abuse of dominant position under 102 TFEU.

To continue on the discussion, travel agency commission overrides have been addressed in a similar manner and are compared to loyalty rebates²⁰³. An example of travel agency commission overrides was examined in the *Virgin/British Airways* decision²⁰⁴. British Airways established a retroactive target rebate scheme with its travel agents to encourage them selling their tickets to passengers. When the travel agents reached the objectives they were also receiving an increased commission on tickets sold before. The Commission concluded that the scheme had an exclusionary/loyalty effect such as the scheme in *Michelin*²⁰⁵ and was applied in a discriminatory way to travel agents. Additionally, the exclusionary effect was not justified by any economic argument and efficiencies in the interest of consumers²⁰⁶. It was therefore abusive under Article 102 TFEU. The decision was upheld by the General Court and the ECJ²⁰⁷. Nonetheless, the recourse to travel agency commission overrides tends to diminish in the airline industry.

¹⁹⁹ *Intel* (187), para. 79-81.

²⁰⁰ *Intel* (187), para. 94.

²⁰¹ *Intel* (187), para. 142-146.

²⁰² *Intel* (187), para. 197.

²⁰³ Overview on loyalty programmes in civil aviation (159), p. 384.

²⁰⁴ European Commission, decision 2000/74/EC of 14 July 1999 relating to a proceeding under Article 82 of the EC Treaty (IV/D-2/34.780 - *Virgin/British Airways*), OJ L 30, 4.2.2000, p. 1-24 (the *Virgin/British Airways* decision)

²⁰⁵ The *Virgin/British Airways* decision (204), para. 96.

²⁰⁶ The *Virgin/British Airways* decision (204), para. 101-103 and 106.

²⁰⁷ See for more detailed explanations: Jones and Sufrin (100), Chapter 7, 10.D on discount and rebate schemes, p.454.

To conclude, a loyalty scheme may be found abusive whenever it has "*tying effects, foreclosure effects, strong loyalty effects, strong exclusivity effects or if they are able to reduce or eliminate effective or potential competition*"²⁰⁸.

6.2.2. Yield management and pricing practices

6.2.2.1. The concept of yield management

Yield management has been defined by Kimes as "*the application of information systems and pricing strategies to allocate the right capacity to the right customer at the right place at the right time*"²⁰⁹.

The application of yield management to airlines is the consequence of a complex industry where on one hand the demand is uncertain and on the other hand the supply of seat is limited and highly perishable²¹⁰. It aims at maximising revenue.

Yield management is a dual concept, it can either be quantity-based (see FSC) or price-based (see LCC)²¹¹. Indeed, the application of yield management differs between FSC and LCC. FSC will set different prices for different classes and will have to allocate a number of seats for each class. Such an organization implies several elements that should be highlighted.

Yield management lead to market segmentation, product differentiation²¹² and to a system of price discrimination between passengers. Indeed, the airlines will have recourse to fences (i.e. the rule and condition of the tickets, such as a possible cancellation) which will justify the prices difference.

But, to be efficient the system must properly identify the demand and allocate the seats to each group of passengers, knowing that the business class would generate higher profit than the economy class. This is known as the *inventory control*.

To be certain to fully fill their aircrafts, airlines also tend to overbook their flights. They took into account possible passengers who will not show themselves at the airport (no-shows), and passengers with a ticket but no reservation for a specific flight (go-shows)²¹³. This is done to maximize revenue.

The yield management developed by LCC is more clear. It is based on a simple idea: the earlier a passenger will book a flight the cheaper it will be. But in the end all the passenger will have the same

²⁰⁸ Overview on loyalty programmes in civil aviation (159), p.392.

²⁰⁹ Demet Cetiner, *Fair Revenue Sharing Mechanisms for Strategic Passenger Airline Alliances* (Springer-Verlag Berlin Heidelberg, 2013), p.5.

²¹⁰ Cento (4), p.33.

²¹¹ Cetiner (209), p.5.

²¹² Cento (4), p.33-34.

²¹³ Cento (4), p.36.

ticket. The main difficulty for a LCC will be to define the optimal price (i.e. the minimum and maximum prices and how it should progress in function of the dates of booking to load the aircraft)²¹⁴. Additionally, price-based management may rely on the use of discount and promotions²¹⁵.

6.2.2.2. Pricing practices

As to pricing in general, some behaviours are caught within the net of competition law: predatory price, price agreements between airlines... etc.

6.2.2.2.1. Predatory prices

Indeed, prices may create a barrier to entry and predatory prices are the perfect example. A predatory pricing is defined as "*a practice whereby an undertaking prices its product so low that competitors cannot live with the price and are driven from the market*"²¹⁶.

The recourse to predatory prices on one route can be prolific as to the protection of the entire network of an airline. Indeed, it will also send a clear message to competitors interested in entering the same market, and it can be compared to a threat²¹⁷. Once the competitors will be excluded or prevented from entering, the airline will increase its prices (monopolistic prices) and recoup the losses stemming from the predatory behaviour²¹⁸.

A dominant airline setting predatory prices is abusing its position under Article 102 TFEU. The difficulty lies on the test used to distinguish a predatory price from a normal and competitive pricing practice. An error of assessment can be detrimental to the consumers.

Nonetheless a cost-based test, which can be observed in the Akzo case²¹⁹, is nowadays used as a standard by the courts. Akzo, a dominant company, had recourse to predatory prices to drive a competitor out of the market in the UK. According to the Akzo test:

- prices below average variable costs are presumed abusive²²⁰;
- prices below average total costs but above average variable costs are abusive if they are part of a plan for eliminating a competitor (i.e. intent)²²¹;

²¹⁴ Cento (4), p.37.

²¹⁵ Cetiner (209), p.6.

²¹⁶ Jones and Sufrin (100), p. 401.

²¹⁷ Daniel R. Zwick, "*Anti-Competitive Behaviour in the Airline Industry: the Case of Predatory Pricing*", presented at SiB Congress 2003, GARS-Workshop: Research in Aviation, June 27th, 2003, p. 3.

²¹⁸ Jones and Sufrin (100), p. 402.

²¹⁹ C-62/86, *AKZO Chemie BV v Commission of the European Communities*, 3 July 1991, EU:C:1991:286 (Akzo)

²²⁰ *Akzo* (219), para. 71.

²²¹ *Akzo* (219), para. 72.

- prices above average total cost are not abusive.

One issue stemming from the test is the definition of what is exactly a variable cost or a fixed cost. Additionally, the test was modified in 2012 by the Post Danmark case²²², and the average variable costs was replaced by the average incremental costs as a benchmark. Consequently, according to the new test:

- Prices below average incremental costs are anti-competitive;
- prices below average total costs but above average incremental costs are not automatically abusive, and no intent is required to prove a price to be abusive (focus on the anti-competitive effect only);
- prices above average total costs are not abusive.

Additionally, the cost-based test is combined with the as-efficient-competitor test (e.g. foreclosing a less efficient competitor cannot amount to an abuse) and the concept of competition on the merits²²³. This is also closely related to the special responsibility borne by dominant undertakings²²⁴. Nonetheless, low prices may be justified.

6.2.2.2.2. Case-law: airlines and predatory prices

To continue, due to the specific characteristics of the airline industry, two cases should be referred to: the Lufthansa/Germania case²²⁵ and the American case.

The Lufthansa/Germania case is an interesting decision issued by the German Competition Authority. This decision concerned the Frankfurt-Berlin route on which Lufthansa had a monopoly until the entry of Germania on the market. Germania (a LLC) set a 99 euros one-way ticket and Lufthansa (a FSC) counterattacked with a 100 euro one-way ticket.

The authority considered that Lufthansa 100 euros ticket was a cut-price predatory behaviour and imposed the company to charge a minimum of 35 euros more than its competitors on this route. This obligation would no longer be applicable if Germania would set a fare higher than 134 euros²²⁶. The reasons behind such a decision were the following: A) Lufthansa set such a tariff only on this specific

²²² C-209/10, *Post Danmark A/S v Konkurrencerådet*, 27 March 2012, EU:C:2012:172 (Post Danmark)

²²³ *Post Danmark* (222), para. 25.

²²⁴ *Post Danmark* (222), para. 23.

²²⁵ Bundeskartellamt (the German Competition Authority), Decision of 18 February 2002 in the administrative proceedings against Deutsche Lufthansa AG, 9th Decision Division B 9 – 144/01 (the *Lufthansa/Germania* decision)

²²⁶ The *Lufthansa/Germania* decision (225), para. 1.

route²²⁷, and the services provided were not only different than those provided by Germania but also more advantageous²²⁸. Also, the tariff was not sufficient to cover average costs per paying customers²²⁹. B) There was no objective justification put forward, and the tariff had the effect to foreclose Germania from the market.

This decision is controversial, as the authority did not apply the traditional cost-based test and has arbitrarily set a price ratio that had to be respected between the two undertakings for a 2 years period (the 35 euros difference)²³⁰. Nonetheless, we cannot deduce from this decision the reasoning the Commission or the CJEU may develop in similar circumstances. Proving a predatory behaviour is a complex matter.

In the US, for instance, it appears more difficult to prove the predatory pricing of an airline company. In the American case ²³¹, the FSC American matched the LCC prices, increased its capacity and had recourse to yield management²³². The US government held that the increased of capacity led to losses and made no economic sense unless American aimed at eliminating competitors²³³. For the Court, two elements were essential to prove the predatory prices: a below-cost pricing and the demonstration of a dangerous probability to recoup losses²³⁴. In the Court's opinion, the US government failed to establish that prices were below-cost, and, supposing that the prices would have been below-cost, American's prices "*only matched, and never undercut, the fares of the new entrant, low cost carriers on the four core routes*"²³⁵. The US approach towards predatory prices is stricter than in the EU where the finding of predatory pricing is not conditioned to the possibility of recoupment²³⁶.

6.3. What is important for airlines

To enter the market, airlines may encounter numerous barriers (6.3.1.) before being able to settle their own network (6.3.2.), the cornerstone of their business.

6.3.1. List of the main barriers to entry

²²⁷ The *Lufthansa/Germania* decision (225), reason A para. 4.

²²⁸ The *Lufthansa/Germania* decision (225), reason A para. 5 d.

²²⁹ The *Lufthansa/Germania* decision (225), reason A para. 6.

²³⁰ Daniel R. Zwick, "*Anti-Competitive Behaviour in the Airline Industry: the Case of Predatory Pricing*", presented at SiB Congress 2003, GARS-Workshop: Research in Aviation, June 27th, 2003, p.3-4.

²³¹ US Court of Appeals, Tenth Circuit, *United States of America v. AMR Corp.*, July 3, 2003, No. 01-3202, 335 F.3d 1109 (the American case)

²³² The *American* case (231), para. I, FN 3.

²³³ The *American* case (231), para. III, FN 4.

²³⁴ The *American* case (231), para. IV, FN 5.

²³⁵ The *American* case (231), para. IV, FN 15.

²³⁶ C-202/07 P, *France Télécom SA v Commission*, 2 April 2009, EU:C:2009:214, para. 110.

Several barriers to entry can be enumerated here and will be further discussed in Part 6²³⁷. Barriers may stem from the relationship existing between an airport and airlines (regarding airport charges and other services available) and the issue of capacity (slot allocation)²³⁸. The access to airports is strategic and it will greatly influence the network of an airline. This is especially true when an airline has developed a hub-and-spoke system (importance of the hub premium)²³⁹. But barriers may also result from the collaboration of airlines through merger and acquisition, alliances or certain types of agreement (e.g. code share agreement²⁴⁰). A single airline may also by its behaviour have a negative impact on competition and create a barrier to entry (pricing practices)²⁴¹. As described above, loyalty schemes may also form barriers, be it frequent flyer program or agreement concluded with travel agencies. The last elements which may have an impact on new players proceed from the regulatory framework, and an example would be the traffic rights or pricing restriction²⁴².

6.3.2. Importance of the network to compete

As previously stated in the introduction, airlines, depending on their strategy, will adopt either a hub-and-spoke system or a point-to-point system (*see annex II*). Both systems have their own advantages and drawbacks. Additionally a network can be extended through alliances with competitors.

6.3.2.1. Choice of network

The choice of the system is based on two factors: first, the location of the direct-flight demand, and then the potential of the market²⁴³. The network is usually organized following four steps: network strategy (i.e. to set the objectives of the network), network design (i.e. choice of the network structure and how the flight will be operated), alliances and to finish network planning (i.e. frequent adjustments of the network)²⁴⁴. Such a process will stretch over several years.

It should also be recalled that an airline does not switch the nodes of its network very easily (i.e. airports). This can be explained both by the complexity of organizing a new network and its cost, but also by the behaviour consumers have on the market. Passengers have most of the time a predetermined origin and destination²⁴⁵, to which airlines will try to stick to. Additionally, the airline

²³⁷ For a more complete list see: Report from the Nordic Competition Authorities (49), p.13.

²³⁸ Report from the Nordic Competition Authorities (49), p.13.

²³⁹ Peoples (6), Chapter 2, p.26.

²⁴⁰ European Commission DG Competition, Competition Impact of Airline Code-Share Agreements, Final Report, January 2007.

²⁴¹ Gremminger (122), p.78.

²⁴² Gremminger (122), p.78.

²⁴³ Cento (4), p.104.

²⁴⁴ Cento (4), p.30.

²⁴⁵ James Wiltshire, Airport Competition [2013] IATA Economics Briefing No. 11,p.15.

industry is highly competitive, and the players aim at maximizing their profits and have recourse to economy of scale, scope and density. Therefore, switching from one airport to another will only be considered where profitability will be on top²⁴⁶. So we can see that networks are complex and take time to be settled. Airlines will compete to obtain access to airports and their limited number of slots.

6.3.2.2. The hub-and-spoke model

An assessment of the hub-and-spoke structure is interesting. Indeed, such a system based on an hub airport permit to reach numerous destinations, which, if there were run through a point-to-point system, would not be viable²⁴⁷. Therefore hub-and-spoke systems increase the number of routes accessible to passengers. But on the other hand, an hub-and-spoke network is extremely complex to organize (e.g. connecting flight, capacity utilization and delay)²⁴⁸.

Also, hub-and-spoke networks tend to favour one airport, the hub, and to give market power to the airline at this precise airport²⁴⁹. It may be difficult for new players to access the hub airport and obtain slots and to operate flights (*see Part 7.2.2*). In these circumstances, most of the LCC prefer to pay attention to secondary airports and develop a point-to-point network.

This is problematic. Detaining market power is not in itself contrary to competition law, but it may raise a concern where it prevents competition. Market power held at the hub may induce a reduction of competition but also the possibility for the airline to charge higher fares to passengers having for flight whose origin is the hub (i.e. hub premiums)²⁵⁰. Moreover, hub-and-spoke networks have the tendency to divide the market between airlines²⁵¹.

From a competition perspective it is commonly accepted that market sharing is prohibited within the internal market. This is clearly stated within Article 101.1.c TFEU and it has been accepted without contention as an abuse of dominant position²⁵².

In the end, the negative effects of the hub-and-spoke configuration must be balanced. It appears, certainly, that the combination of both system is advantageous to the passengers benefiting from a broadened choice of routes. Some routes would be inexistent outside an hub-and-spoke system.

²⁴⁶ James Wiltshire, Airport Competition [2013] IATA Economics Briefing No. 11, p.17.

²⁴⁷ Report from the Nordic Competition Authorities (49), p.110.

²⁴⁸ DLR Report (34), p.7.

²⁴⁹ Report from the Nordic Competition Authorities (49), p.110.

²⁵⁰ DLR Report (34), p.7.

²⁵¹ Report from the Nordic Competition Authorities (49), p.110.

²⁵² Lidgard (101), p.251.

Additionally, one of the problem highlighted here was the allocation of slots at the airport and the issue of airport limited capacity. Those problematics will be assessed within Part 7. The following Part will help us to assess how abuses of dominant position, cartel-like situations and others breach of competition are comprehended, and whether an efficient competition framework promoting consumer welfare has been established in the airline industry.

7. THE ENTRY ON THE MARKET

7.1. Airlines' interactions

Airlines may decide to cooperate between each other to widen their market and improve their business. This can be translated into commercial (7.1.1.) or strategic alliances (7.1.2.).

7.1.1. Commercial alliances

7.1.1.1. Purposes

An alliance is an agreement concluded between independent airlines which have decided to "*integrate their networks and services and operate as if they were a single entity while retaining their corporate identities*"²⁵³.

Alliance is a generic word which embraces a diversity of agreements involving more or less integration (See Annex III). They can be global, regional or route-specific²⁵⁴. Alliances are concluded between either competitors (parallel alliances) or non-competitors (complementary alliances) and aim strategically at "*capturing the market*"²⁵⁵.

Airlines usually decide to be part of an alliance for financial (e.g. difficulty to satisfy the demand), commercial (e.g. marketing and sales purposes) and/or political reasons (new international policies)²⁵⁶. An alliance may allow airlines to broaden the range of products they offer but also the geographical spread of their network while improving their image and reputation²⁵⁷. Nonetheless the

²⁵³ European Competition Authorities, *Report of the ECA Air Traffic Working Group: Merger and alliances in civil aviation - an overview of the current enforcement practices of the ECA concerning market definition, competition assessment and remedies*, 2002, (overview on merger and alliance in civil aviation), available at: <http://ec.europa.eu/competition/publications/eca/report.pdf> , p.3.

²⁵⁴ Doganis (2), p. 82-86.

²⁵⁵ P. Malaval et al., *Aerospace Marketing Management - A Handbook for the Entire Value Chain* (Springer International Publishing Switzerland, 2014), p.554 (Malaval et al.)

²⁵⁶ Malaval et al. (255), p.546-549.

²⁵⁷ Malaval et al. (255), p.548.

airline identity will be preserved. Some alliances are well-known by passengers such as Star Alliance, SkyTeam or One World.

Being part of an alliance is challenging in the long term and airlines may face difficulties to secure their collaborations. Each member may pursue different goals through the alliance, some aim at surviving where other want to increase they market power for example. Alliances can also be used by small airlines to extend their network and to be able to compete on routes which were inaccessible before²⁵⁸.

To sum up, alliances are concluded between companies with different enterprise culture and strategies, and the difficulty resides in finding the proper balance between the interests of each party²⁵⁹.

The second issue is linked to the nature of the collaboration. How independent are the airlines from each other? Can an airline decide to be part of two alliances in the same time²⁶⁰? The competition authorities will have to take that into account when they will assess such agreements.

7.1.1.2 Types of commercial alliances

To continue, alliances may involve different types of agreements: for instance, the recourse to interlining is a common practice which consists for an airline to accept/recognized the travel documents issued by another one to carry on the service²⁶¹. This is when a passenger uses different airlines for a journey.

Interlining, and alliances in general²⁶², permit a certain rationalization of airlines' networks by allowing connecting flights between different airlines. Both airlines benefit from interlining which is a way to increase the demand and to fill an aircraft. Also, passengers will not have to check-in for the different flights, and the luggage will be forwarded to the final destination. Therefore passengers save time.

Interlining agreements are distinct from code-sharing agreements which are agreements allowing an airline to market the flights of another airline. This is the "*most common form of alliance in the airline industry*"²⁶³. The "operating carrier" and the "marketing carrier" will both have their own code for the

²⁵⁸ Doganis (2), p.88.

²⁵⁹ Doganis (2), p.104.

²⁶⁰ Doganis (2), p.86

²⁶¹ Doganis (2), Glossary, p.295.

²⁶² Malaval et al. (255), p.556.

²⁶³ Malaval et al. (255), p.556.

same flight or will share a code²⁶⁴. These agreements can also spread to airlines which are not members of the same alliance²⁶⁵. Code-sharing is particularly interesting as to loyalty schemes as passengers can accrue points while travelling with another airline. Nonetheless passengers may also be disappointed on the service where the marketing carrier's reputation is better than the operating carrier one (different plane and services' standards)²⁶⁶.

Airlines may also agree on a block-space agreement, the marketing carrier will reserve seats in a flight operated by another carrier. The marketing carrier will either agreed on a certain amount of seats for a certain price or will agreed to have the option to return unsold seats within a certain period²⁶⁷. The difference with a code-share agreement is that, in a block-space agreement, each airline manages its "own" seats (it is easier to supervise), when in an code-share agreement there is a pool of seats and both airlines must be coordinated so as to avoid selling (involuntary) twice the same seat, for instance.

Other types of collaboration which will not be developed in the present thesis may also be concluded (e.g. franchise²⁶⁸, joint pricing, joint loyalty schemes, travel agents coordination), but those agreements may constitute a commercial alliance between airlines and have an influence on the competitive climate of the airline industry.

First, they can reduce nay eliminate competition on a market and lead to a monopoly²⁶⁹. Two airlines can conclude a code-share agreement and agree that only one of them will undertake the flights.

The second risk is that such agreements will increase the airlines' dominance on the market²⁷⁰. Dominance, by itself, is not sanctioned by competition law, but an airline could abuse its dominant position to the detriment of the consumers. A firm's dominance may also discourage other companies to enter the market. Hub dominance can also be achieved through alliances and by pooling available slots (*See part 7.2.2 on slot allocation*).

Nonetheless the Commission does not stay idle and several tools are used to maintain efficient competition within the market. Such alliances may be analysed on a case-by-case basis under Article

²⁶⁴ European Commission DG Competition, Competition Impact of Airline Code-Share Agreements, Final Report, January 2007, 3.4 p.7.

²⁶⁵ Competition Impact of Airline Code-Share Agreements, Final Report (264), p.1.

²⁶⁶ Malaval et al. (255), p.557.

²⁶⁷ Competition Impact of Airline Code-Share Agreements, Final Report (264), 3.2.6 p.11.

²⁶⁸ Doganis (2), p.82.

²⁶⁹ Doganis (2), p.106.

²⁷⁰ Doganis (2), p.96.

101.1 TFEU which provides that the following shall be prohibited as incompatible with the internal market:

"All agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which: (a) directly or indirectly fix purchase or selling prices or any other trading conditions; (b) limit or control production, markets, technical development, or investment; (c) share markets or sources of supply; (d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage; (e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts."

Three criteria²⁷¹ must be fulfilled for Article 101.1 TFEU to apply: we must have an agreement, capable of affecting trade (i.e. it must be possible to foresee with a sufficient degree of probability on the basis of a set of objective factors of law or fact that the agreement or practice may have an influence, direct or indirect, actual or potential, on the pattern of trade between Member States²⁷²) and competition in the market.

When an agreement falls within the scope of Article 101.1 TFEU, it can either be block exempted under specific regulations (e.g. the Regulation on Technology Transfer Agreements²⁷³) or be subjected to an individual assessment under Article 101.3 TFEU²⁷⁴ to determine whether or not the restriction of competition can be compensated by any kind of efficiencies. The pro and anti-competitive effects of the agreement will be balanced.

²⁷¹ Lidgard (101), p.56.

²⁷² European Commission, Notice — Guidelines on the effect on trade concept contained in Articles 81 and 82 of the Treaty (Text with EEA relevance) OJ C 101, 27.4.2004, p. 81–96, para. 23.

²⁷³ European Commission, Regulation (EU) No 316/2014 of 21 March 2014 on the application of Article 101(3) of the Treaty on the Functioning of the European Union to categories of technology transfer agreements, OJ L 93, 28.3.2014, p. 17–23.

²⁷⁴ Article 101.3 TFEU: "The provisions of paragraph 1 may, however, be declared inapplicable in the case of: — any agreement or category of agreements between undertakings, — any decision or category of decisions by associations of undertakings, — any concerted practice or category of concerted practices, which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not: (a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives; (b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question".

Regarding the assessment, once the markets have been defined (*see hereinabove Part 6.1.3. on the definition of the relevant market*), the Commission will try to identify the position and relationships of the airlines on those markets. The Commission usually differentiates between two types of markets: overlap and non-overlap markets, depending on the existence of actual or potential competitors²⁷⁵. Then it will establish the market power of the different players on these markets, and identify the barriers to entry which are independent from the alliance members, but also the barriers created by the alliance. All the elements of an alliance are scrutinized.

Concerning the market power definition, in the airline industry, a market share can be calculated with different tools, one of them for instance consists in calculating the number of ticket sold, but it can also stem from the flights frequency²⁷⁶. Nonetheless a high market share is not enough to render an alliance anti-competitive. Also in this specific industry, the passengers/buyers have a limited "countervailing power" which will not have a decisive influence on an airline market power²⁷⁷.

If the agreement fall under Article 101.1 TFEU, airlines brought forward different kinds of efficiencies through Article 101.3 TFEU. For example the improvement of the quality and efficiency of the service, and of the network to the benefit of the consumers²⁷⁸.

7.1.2. Structural changes

7.1.2.1. Different forms of concentration

We can differentiate between commercial and strategic alliances, involving either agreements or structural changes. Strategic collaborations can take the form of joint-ventures, mergers or acquisitions. The approach taken by the Commission is similar to the one described previously (definition of market, market power and analyse of the market structure).

A joint venture (JV) is "*an arrangement by which two or more undertakings, in order to achieve a particular commercial goal, integrate part of their operations, and put them under joint control*"²⁷⁹ but two types of JV must be differentiated. Only a full function JV may fall within the scope of the Merger Regulation²⁸⁰ and will be considered as a concentration. Other JV fall under Article 101 TFEU.

²⁷⁵ Gremminger (122), p.77.

²⁷⁶ An overview on merger and alliances in civil aviation (253) para. 37-38 p.19.

²⁷⁷ An overview on Merger and alliances in civil aviation (253), para. 55 p.28.

²⁷⁸ An overview on Merger and alliances in civil aviation (253), para. 60 p.29.

²⁷⁹ Jones and Sufrin (100), p.733.

²⁸⁰ European Council, Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, OJ L 24, 29.01.2004, p. 1-22 (Merger Regulation).

According to Article 3.4 of the Merger Regulation: "*The creation of a joint venture performing on a lasting basis all the functions of an autonomous economic entity shall constitute a concentration within the meaning of paragraph 1(b)*". The paragraph 1(b) refers to the joint control of the JV either by way of purchasing securities or assets, by contract or any other means.

Therefore to be considered full function, a JV must fulfilled three conditions which have been clarified in 2008 by the Consolidated Jurisdictional Notice²⁸¹: i. existence of a joint control²⁸²; ii. the JV must detain, at least, operational autonomy²⁸³; and, iii. the JV "*must be intended to operate on a lasting basis*"²⁸⁴.

Nonetheless, where a JV aims at coordinating the competitive behaviour of independent undertakings, such JV will fall under the scope of Article 101 TFEU²⁸⁵.

A merger, on another hand, may consist on:

- the amalgamation of "*two or more independent undertakings into a new undertaking*" which will "*cease to exist as separate legal entities*"²⁸⁶;
- the absorption by one undertaking, which will retain its legal identity, of another undertaking which will cease to exist²⁸⁷;
- A "*de facto amalgamation*" of undertakings into a single economic unit²⁸⁸.

To finish, an acquisition occurs when an undertaking (or several undertakings) acquires direct or indirect control over another undertaking or part of it²⁸⁹. The notion of control is complex, and has been defined has the "*possibility to exercise decisive influence*" through Article 3.2 of the Merger Regulation.

²⁸¹ European Commission, Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings, OJ 2008 C 95/01, Chapter B, IV (Consolidated Jurisdictional Notice).

²⁸² Consolidated Jurisdictional Notice (281), para. (91).

²⁸³ Consolidated Jurisdictional Notice (281), para. (96).

²⁸⁴ Consolidated Jurisdictional Notice (281), para. (103).

²⁸⁵ Merger Regulation (280), Article 2(4).

²⁸⁶ Consolidated Jurisdictional Notice (281), para. (9).

²⁸⁷ Consolidated Jurisdictional Notice (281), para. (9).

²⁸⁸ Consolidated Jurisdictional Notice (281), para. (10).

²⁸⁹ Merger Regulation (280), Article 3.1(b).

In the airline industry, mergers and acquisitions have been difficult to implement on an inter-continental level because of the ownership and nationality clause which may be agreed upon between countries²⁹⁰. Nonetheless at an European level, many concentrations can be observed.

7.1.2.2 The competitive assessment of concentration

The EU has developed a notification system which requires undertakings to notify new concentration before their implementation²⁹¹. The implementation will only be possible once it has been declared compatible with the common market by the Commission²⁹². Undertakings which fail to notify a concentration will be fined by the Commission²⁹³. Not cooperating honestly with the Commission may amount to same result.

It should be noted that only concentrations having a *community dimension* are concerned²⁹⁴, and the Commission will assess whether the concentration under scrutiny may *significantly impede effective competition* or not²⁹⁵. Whether the undertakings are competitors and whether the competition can be eliminated must also be taken into consideration²⁹⁶.

If the Commission finds that the concentration may be in breach of the competition rules, it can initiate proceedings²⁹⁷, at the end of which it may allow the concentration subject to certain conditions or obligations²⁹⁸.

The competitive assessment can lead to a clearance or to the prohibition of the notified concentration. Two examples will be given to understand the way the Commission assess such cases:

a) The Air France/KLM case (2004)²⁹⁹: the first significant cross-border concentration³⁰⁰.

In 2003 was made a notification to the Commission according to which Air France was planning to acquire control over KLM. The plan was to have a three years transitional period during which Air France would have 100% economic interest but only 50% of the voting rights in KLM, then it would

²⁹⁰ Doganis (2), p.99.

²⁹¹ Merger Regulation (280), Article 4.

²⁹² Merger Regulation (280), Article 7.1.

²⁹³ Merger Regulation (280), Article 14.

²⁹⁴ Merger Regulation (280), Article 1. See also: *Ryanair/Aer Lingus* (309), para. 18.

²⁹⁵ Merger Regulation (280), Articles 2.2 and 2.3.

²⁹⁶ Merger Regulation (280), Article 2.5.

²⁹⁷ Merger Regulation (280), Article 6.1.c.

²⁹⁸ Merger Regulation (280), Article 6.2.

²⁹⁹ European Commission, decision in relation to a notified concentration, Case No COMP/M.3280 - *AIR FRANCE / KLM*, SG-Greffe(2004) D/200549 (Air France/KLM).

³⁰⁰ Doganis (2), p. 100.

have 100% of both economic interest and of the voting rights³⁰¹. The concentration was found compatible with the common market after the parties proposed some modifications to maintain competition. Both parties were FSC, using a hub-and-spoke network system and were partially controlled by France and the Netherlands respectively.

Three relevant markets were distinguished and defined³⁰² by using the origin and destination city-pair approach. During the competitive assessment, the Commission drew a picture of the existing alliances of both airlines (among others: Air France was a Skyteam member, Air France JV on Paris-Prague with CSA Czech Airlines or KLM JV with Northwest), and concluded Paragraph 62 that the proposed concentration would have an impact on competition between both Air France and KLM but also between them and their partners. This concentration would have world wide competition implications³⁰³.

Several interesting elements can be highlighted through the case. For instance, the Commission assessed the *network effect* of the concentration following a critic brought by competitors according to which this concentration would "*effectively reduce the number of worldwide alliances from 4 (...) to 3*"³⁰⁴. The Commission found that the network effect was not raising serious doubts as to competition³⁰⁵. Indeed, the Commission recalled that it was still possible for competitors to conclude interlining or code-share agreements with members of the alliances to enter the markets³⁰⁶. Additionally, potential competition could put pressure on the behaviour of the existing market players³⁰⁷. Moreover, the parties committed themselves to remove the competitive concerns stemming from the proposed concentration³⁰⁸ through several measures.

The proposed commitments were the following:

- To make available slots on short haul/European routes and on long-haul/intercontinental routes, at several airports, and for an unlimited period;
- Frequency freeze (i.e. not to add any flight between Paris-Amsterdam, Lyon-Amsterdam and with a certain flexibility between Amsterdam-New York for six IATA seasons);

³⁰¹ *Air France/KLM* (299), para. 6.

³⁰² *Air France/KLM* (299), para. 8.

³⁰³ *Air France/KLM* (299), para. 63.

³⁰⁴ *Air France/KLM* (299), para. 131.

³⁰⁵ *Air France/KLM* (299), para. 135.

³⁰⁶ *Air France/KLM* (299), para. 133.

³⁰⁷ *Air France/KLM* (299), para. 133.

³⁰⁸ *Air France/KLM* (299), para. 157-158.

- To allow new entrants to enter into interlining with Air France/KLM on the city pairs concerned;
- To allow new entrants to enter special prorated agreement;
- To open the frequent flyer program to new entrants under the same conditions granted to partners;
- To enter into inter-modal agreement if requested by a railway or surface transport companies;
- To enter into block-space agreement with potential new entrants on certain defined routes;
- To apply equivalent fare reduction between Paris-Amsterdam and Lyon-Amsterdam.

The Commission was satisfied with the commitments³⁰⁹ because, as to the slots, the measure was not limited in time, and allowed new entrants to obtain *grandfather rights* for slots (*will be clarify Part 7.2.2*). Also the slots, if not operated by a new entrant, would be given back to the slot coordinator. This means, to simplify, that Air France / KLM by this commitment give away slots, which are extremely essential to develop a network, to competitors without compensation and it will be difficult to get the slots back. The last commitment is also interesting as it prevents predatory prices: it will be more costly for Air France/KLM to implement such a strategy, in addition to the possibility to be fined for it under competition law.

The Air France/KLM concentration was a success but it is not always the case. The Ryanair / Aer Lingus³¹⁰ case was a failure, and it is interesting to compare the two cases to comprehend the reasoning and assessment of the Commission.

b) Ryanair / Aer Lingus case: a failure

To summarise, in 2006, a notification was sent to the Commission according to which Ryanair was planning to acquire the control of Aer Lingus. From the Commission's perspective such concentration was raising serious doubts as to its compatibility with the common market and the Commission launched an investigation.

Some diverging opinions were supported regarding the community dimension of the concentration. Indeed this case was specific for many reasons: at the difference of Air France and KLM, Ryanair and Aer Lingus were typical LCC operating on a point-to-point basis³¹¹. Moreover, the two airlines were

³⁰⁹ *Air France/KLM* (299), para. 168.

³¹⁰ European Commission, decision in relation to a notified concentration, Case No COMP/M.4439 – *Ryanair / Aer Lingus*, C(2007) 3104 (Ryanair/Aer Lingus).

³¹¹ *Ryanair/Aer Lingus* (310), para. 50.

leading airlines on the Irish market³¹² and held 80% of the scheduled flight traffic from and to Dublin³¹³! The particularity of the case was also stemming from the fact that all the affected routes were from or to Ireland³¹⁴. It should also be noted that the origin and destination approach was used to define the relevant markets, even though an alternative was proposed to define a bundle of flights as a market³¹⁵.

The Commission found that: the two airlines had a high market share on numerous routes (risk of monopoly on 22 out of 35 overlapping routes after the concentration)³¹⁶; they both had strong position in Ireland, and few competitors³¹⁷; Ryanair and Aer Lingus were each other closest competitors on routes from and to Ireland³¹⁸ and their services were substitutable.

Such a concentration would limit competition to the detriment of the passengers: price increases but also lower choice of service and quality. Additionally, there was a risk of decrease of the number of new route opening³¹⁹.

The concentration would also have for effect to increase the barriers to enter the market (experience and brand reputation advantage of Aer Lingus and Ryanair v. marketing and sunk costs to be borne by new entrants). Also, entering a new market is difficult by itself because the new entrant must acquire slots both at the origin airport and at the destination airport³²⁰.

The question was therefore to determine if any efficiencies could stem from the concentration to balance the previous conclusions. Ryanair invoked cost savings which would have been passed on to consumers by way of reduced fares, better quality of products and services among other³²¹. This was contested by Aer Lingus. Then, the Commission concluded that such efficiencies were not verifiable³²².

Ryanair proposed also several commitments³²³:

- To make slots available for Air France and British Airways at Heathrow (London);
- To make slots available, when necessary, at Dublin / Cork / Shannon airports;

³¹² *Ryanair/Aer Lingus* (310), para. 57.

³¹³ *Ryanair/Aer Lingus* (310), para. 59.

³¹⁴ *Ryanair/Aer Lingus* (310), para. 335.

³¹⁵ *Ryanair/Aer Lingus* (310), para. 62 and 66.

³¹⁶ *Ryanair/Aer Lingus* (310), para. 350.

³¹⁷ *Ryanair/Aer Lingus* (310), para. 361.

³¹⁸ *Ryanair/Aer Lingus* (310), para. 356.

³¹⁹ *Ryanair/Aer Lingus* (310), para. 492-493.

³²⁰ *Ryanair/Aer Lingus* (310), para. 670.

³²¹ *Ryanair/Aer Lingus* (310), para. 1113.

³²² *Ryanair/Aer Lingus* (310), para. 1142 and 1152.

³²³ *Ryanair/Aer Lingus* (310), para. 1164.

- To reduce Aer Lingus fares by at least 10%, to operate Aer Lingus (own retained brand) and Ryanair separately;
- It agreed on frequency freeze.

For the Commission, those commitments lacked clarity and were not sufficient to protect competition in the common market. The commitments were too muddled and did not even respect the model text proposed by the Commission. They would therefore be difficult to implement. To conclude, the concentration was declared incompatible with the common market³²⁴!

In 2009, a second notification for the same concentration was made but withdrawn. In 2012, a third notification was made and the Commission started again a new investigation but the outcome remained the same: the commitments were found insufficient to protect competition on the market. It should be noted that the final commitments of Ryanair were more technical and detailed than previously. They consisted in a divestment business plan to Flybe (a LLC), slot divestures and the opening of the frequent flyer programme. Nonetheless, commitments must be assessed on a case by case basis.

The Commission recalled that *"the commitments have to eliminate the competition concerns entirely and have to be comprehensive and effective in all respects. In assessing whether proposed commitments are likely to eliminate the competition concerns identified, the Commission will consider all relevant factors including inter alia the type, scale and scope of the proposed commitments, judged by reference to the structure and particular characteristics of the market in which the competition concerns arise, including the position of the parties and other participants on the market"*³²⁵³²⁶.

c) What can be concluded from both cases?

Airlines have to notify any concentration having a community dimension. When doing so, they should be prepared to justify it (existence of efficiencies) and to propose commitments.

The purpose of such commitments is to limit the possible anti-competitive effect of the alliance³²⁷. They may include obligations as to the frequency of the flights, the access to loyalty schemes, tariff,

³²⁴ *Ryanair/Aer Lingus* (310), para. 1240.

³²⁵ European Commission, decision in relation to a notified concentration, Case No COMP/M.6663 – *RYANAIR/AER LINGUS III*, C(2013) 1106 final, para. 1673 (Ryanair /Aer Lingus III)

³²⁶ See also: European Commission, Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004, OJ 2008/C 267/01, para. 5, 9 and 12.

³²⁷ Overview on Merger and alliances in civil aviation (253), p. 31-32.

the agreement concluded within the alliance (e.g. interlining) and even the sale of certain assets³²⁸. But the most common remedy consists in giving up a certain number of slots³²⁹ to competitors.

When drafting a commitment involving slots, an airline must be careful to respect a proper form. The commitment should be detailed and include the mechanism to be used, the number of slots which will be given away, the circumstances under which the slot will be usable by the competitor³³⁰. To finish, showing good intention is not enough, the Commission expects practical, functional details that will enable the commitments to be easily, and without uncertainty, implemented.

7.2. Vertical integration

Airlines, due to their network structure, have a close relationship to the airports part of their markets. This involves the conclusion of vertical agreements, the payment of specific charges (7.2.1.) and an issue of capacity (7.2.2.) which may be problematic from a competition's perspective.

7.2.1. Airport-Airline agreements and airports' charges

7.2.1.1. Vertical agreements

Vertical agreements are concluded between airports and airlines to organize the manner airlines will use the facilities and/or services but also participate in the airport development. This paragraph will be brief, but such agreements must not be disregarded as they play an important role in the network development of airlines.

When a passenger chooses a flight, he looks both at the airline concerned and at the airports available. Therefore, it is in the interests of airlines and airports to cooperate so as to attract more passengers. Besides, competition between airports has become a reality, and this has contributed to foster the relationships between airlines and airports. Where cooperation can be beneficial to consumers, it may also lead to anti-competitive behaviours.

Several types of vertical relationships have been identified³³¹:

- *Signatory airlines of airports* - i.e. an airline enters a master use-and-lease agreement by which it commits itself to utilizing the airport for an agreed period, and in exchange the airline will

³²⁸ Overview on Merger and alliances in civil aviation (253), p.31-32.

³²⁹ Doganis (2), p.111.

³³⁰ *Ryanair/Aer Lingus* (310), para. 1177 and 1180.

³³¹ Xiaowen Fu et al., *Airport- airline vertical relationships, their effects and regulatory policy implications*, Journal of Air Transport Management 17 (2011), p. 347-353

have a certain influence over it and will (usually) pay lower charges than other non-signatory airlines. This is a guarantee for the airport;

- *Airline ownership or control of airports facilities* - i.e. an airline will hold shares in an airport, from which will stem rights and obligations (e.g. right to profits);
- *Long-term use contracts* - i.e. agreement giving airlines a right to facilities and to sublease facilities (provide certainty to airlines, and secure traffic for airports);
- *Airport issuance of revenue bonds to airlines* - i.e. it aims at raising capital to finance airports' improvements. Airports may have recourse, for instance, to special facilities revenue bonds where the right to use the facility will be transferred to an airline (subject to national legislations);
- *Revenue sharing agreements* - i.e. airports have recourse to concessions with restaurants, shops, parking etc., and share the flowing revenues with airlines to motivate them to increase traffic (more passengers);
- *other agreements* - e.g. exclusive or non-exclusive agreements related to price discounts, financial or advertising support etc.

Such agreements can raise competitive concerns and be analysed under Article 101 TFEU, particularly when they are concluded at hub airports where operates a dominant airline, and where capacity is limited.

Vertical agreements present certain advantages as they allow airport development but also bring efficiencies to the benefit of the consumers and local economy³³². By sharing revenues, airlines have an incentive to improve their network coordination to increase the number of passengers using this airport. It can be translated into higher frequency of flight for example, which is something consumers appreciate. The possibility to own shares in an airport will also oblige the airline to be more thoughtful while taking decisions.

But, on the other hand, vertical agreements can permit an airline to secure certain facilities within an airports and enjoys exclusive or preferential rights. Such rights may constitute a barrier to entry and the airline, party to the agreement, will see its market power strengthened³³³. Moreover airports tend to privilege agreements with dominant airlines³³⁴.

³³² Xiaowen Fu et al. (331), p. 352.

³³³ Xiaowen Fu et al. (331), p. 352.

³³⁴ Xiaowen Fu et al. (331), p. 352.

Nevertheless, the influence of such agreements will depend on a plurality of factors such as the airports concerned, the market structure and also the specific terms agreed upon. Therefore, vertical agreements must be assessed on a case-by-case basis³³⁵.

To conclude, the issue of vertical agreements is not centre stage yet, but will probably be in the future as those agreements have an indisputable influence on airlines' competition. Some scholars are calling for more transparency and a necessary disclosure of vertical agreements³³⁶. Nonetheless, we have to wait to see how the Commission will approach such agreements.

7.2.1.2. Airports' charges

According to the Directive on airport charges³³⁷, airport charges are defined as "*a levy collected for the benefit of the airport managing body and paid by the airport users for the use of facilities and services, which are exclusively provided by the airport managing body and which are related to landing, take-off, lighting and parking of aircraft, and processing of passengers and freight*". Those charges have a direct impact on the price paid by passengers for tickets.

Airport charges are usually higher at hub airports than at secondary airports. This explain partly the reason why LCC, which aim at limiting costs, use secondary airports, which are more accessible at different levels. Also, airlines do not have a lot of influence over the charges imposed by airports³³⁸, except in a few exceptions (e.g. when they consent to be signatory airlines (see 7.2.1.1)). Airport charges are principally defined by Member States which decide what can be considered as such³³⁹ and the Directive on airport charges applies only to airports "above a minimum size"³⁴⁰.

The Directive on airport charges provides that charges must be applied in a non-discriminatory manner³⁴¹. Nonetheless, "*the level of airport charges may be differentiated according to the quality and scope of such services and their costs or any other objective and transparent justification*"³⁴². Depending on the level of service, the level of charges will vary.

³³⁵ Xiaowen Fu et al. (331), p. 352.

³³⁶ Xiaowen Fu et al. (331), p. 352.

³³⁷ European Parliament and European Council, Directive 2009/12/EC of 11 March 2009 on airport charges, OJ L 70, 14.3.2009, p. 11-16.

³³⁸ James Wiltshire, Airport Competition [2013] IATA Economics Briefing No. 11, p.25.

³³⁹ Directive on airport charges (337), point (2).

³⁴⁰ Directive on airport charges (337), point (3) and Article 1.2.

³⁴¹ Directive on airport charges (337), Article 3.

³⁴² Directive on airport charges (337), Article 10.1.

Additionally, the Directive on airport charges sets a system of compulsory consultations between airports and airports users regarding the charges³⁴³ and airports must be transparent in the way the level of charges is established³⁴⁴. They must provide the users with, for instance, "*forecasts of the situation at the airport as regards the charges, traffic growth and proposed investment*". The idea is to give users (e.g. airlines) a clear picture of how charges are calculated.

Nonetheless, this Directive on airport charges has not been uniformly applied and greater cooperation between airports and airlines is necessary³⁴⁵. Transparency is important to avoid excessive charges, which would have a deterrent effect on airlines and consequently on passengers. Discriminatory prices on another hand would hamper competition.

7.2.2. A complex and controversial slot allocation

Airlines rely on infrastructure to operate flight between a web of destinations, but airports have limited capacity. In Europe, the problem of congested airports is an obstacle to competition and such airports are subjected to Regulation 95/93³⁴⁶.

To operate a route, airlines must obtain slots at the origin and destination airports. A slot is defined as "*the permission given by a coordinator (...) to use the full range of airport infrastructure necessary to operate an air service at a coordinated airport on a specific date and time for the purpose of landing or take-off as allocated by a coordinator (...)*"³⁴⁷. To resume, a slot is a right to use and therefore access an airport. Nonetheless, the number of slots available is limited and the competition to obtain such rights is fierce.

7.2.2.1. The current system under the amended Council Regulation 95/93

This lead us to wonder how are slots allocated within the EU. Regulation 95/93 has been adopted in 1993, and further amended in 2002, 2003, 2004 and 2009, to set the common rules for the allocation of slots at community airports which are congested (referred as the coordinated airports through the Regulation). According to the Council, the slots allocation "*should be based on neutral, transparent and non-discriminatory rules*".

³⁴³ Directive on airport charges (337), Article 6.

³⁴⁴ Directive on airport charges (337), Article 7.

³⁴⁵ See IATA, Analysis, Airport charges: regulation with teeth, 19 February 2015, available at: <http://airlines.iata.org/analysis/airport-charges-regulation-with-teeth>

³⁴⁶ European Council, Regulation (EEC) No 95/93 of 18 January 1993 on common rules for the allocation of slots at Community airports, OJ L 14, 22.1.1993, p. 1, (Regulation 95/93 as amended). Consolidated version available at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:1993R0095:20090630:EN:PDF>

³⁴⁷ Regulation 95/93 as amended (346), Article 2.a.

Within coordinated airports knowing a "shortfall in capacity"³⁴⁸, slots are allocated by a slot coordinator for a limited period of time (i.e. the scheduling period) after which they must be returned to the slot pool. When an airline cannot obtain the slots it has requested, the coordinator must provide reasons and indicate the nearest alternative slots³⁴⁹. The coordinator must also act on a "*neutral, non-discriminatory and transparent way*"³⁵⁰, and be independent.

It is also important to note that slots can be transferred between different routes or services by an airline, but also within a company (parent-subsidary), or through an acquisition of control or take-over. They can also be exchange between airlines (one for one). The trading of slots must nonetheless be notified and confirmed by the coordinator prior to the implementation. No monetary compensations are allowed³⁵¹.

Nonetheless, one of the issue which is often considered as a barrier to entry is the existence of grandfather rights. Indeed, according to Article 8.2 of Regulation 95/93, an airline is not required to return the slots which were allocated to it for a determined scheduling period when the airline has operated the slots for at least 80% of the time during this period. If so, the airline can request to retain the slots for the next scheduling period. Besides, when an airline cannot prove the 80% requirement, it is still possible to justify the non-utilisation of the slots³⁵². An airline can invoke unforeseeable and unavoidable circumstances outside its control for example. This extend the range of situations under which an airline is entitled to grandfather rights.

The put it simply, the allocation of slots follows the "*use it or lose it*" rule. Similarly, if an airline does not use the slots within the first 20% of the scheduling period for which the slots were allocated, it will lose its rights, and the coordinator will return the slots to the pool³⁵³.

These grandfather rights are problematic in the sense that they lock the access to slots. This is especially true within hub airports, which are the cornerstone of any FSC network. Therefore, slots at hub airports will only be accessible with difficulty.

Nonetheless, some provisions aim at protecting competition and are targeting new entrants on the market. 50% of the slots gathered together in the pool must be allocated in priority to new entrants

³⁴⁸ Regulation 95/93 as amended (346), Article 3.3.

³⁴⁹ Regulation 95/93 as amended (346), Article 8.6.

³⁵⁰ Regulation 95/93 as amended (346), Article 4.2.b and c.

³⁵¹ Regulation 95/93 as amended (346), Article 8.a.

³⁵² Regulation 95/93 as amended (346), Article 10.4.

³⁵³ Regulation 95/93 as amended (346), Article 14.6.b.

where 50% of the requests for slots come from them - the new entrants³⁵⁴. Additionally, if several airlines operate together, only one of them is allowed to request the slots on behalf of the group³⁵⁵. Moreover, where airlines do not use the slots in the way they should (e.g. do not respect the indicated time for landing), the coordinator can intervene and withdraw the slots which will be reallocated through the pool³⁵⁶.

7.2.2.2. The proposed modification (2011)

In 2011, the Commission has proposed the "Better Airports" Package introducing some modifications to the slot allocation framework³⁵⁷.

The proposed measures are as follows:

- To allow secondary trading of slots, i.e. to buy and sell them³⁵⁸;
- To broaden the scope of the "new entrant" definition³⁵⁹;
- To increase the transparency of the allocation of slots³⁶⁰ (e.g. creation of software to allocate slots, cooperation between coordinators... etc.);
- To associate airport management to slot allocation³⁶¹;
- To define a new category of airport: the "airport belonging to a network"³⁶², which are not coordinated airports but are still important;
- To change the threshold of the grandfather rights from 80 to 85% time use of the slots³⁶³;
- To change the threshold for non-use slots from the first 20% to the first 15% of scheduling period³⁶⁴ after which the coordinator can withdraw the slots from an airline.

³⁵⁴ Regulation 95/93 as amended (346), Article 10.6.

³⁵⁵ Regulation 95/93 as amended (346), Article 10.8.

³⁵⁶ Regulation 95/93 as amended (346), Article 14.4.

³⁵⁷ European Commission, Proposal for a Regulation of the European Parliament and of the Council on common rules for the allocation of slots at European Union airports, COM (2011) 827 final/2, 2011/0391 (COD) (Regulation Proposal).

³⁵⁸ Regulation Proposal (357), point 26 and Article 13 on slot mobility.

³⁵⁹ Regulation Proposal (357), point 27.

³⁶⁰ Regulation Proposal (357), point 28.

³⁶¹ Regulation Proposal (357), point 30.

³⁶² Regulation Proposal (357), point 31.

³⁶³ Regulation Proposal (357), point 32.

³⁶⁴ Regulation Proposal (357), Article 18.5.

The Commission also proposes to enhance the role of coordinators³⁶⁵ and to have recourse to new technologies to improve the allocation of slots, and have a more transparent picture of the process³⁶⁶. Those proposed modifications need to be discussed in greater details.

7.2.2.3. Comments as to the slot allocation system within the EU

In my opinion, the proposal made by the Commission is promising for several reasons and seems to go in the right direction. The role of the different actors is more clearly defined and allows a better cooperation at different level. Additionally, the proposal permits a stricter control of the use of slots³⁶⁷ while giving a precise guidance to airlines on the rules they are subjected to. Legal certainty is essential.

This proposal would also allow a more efficient use of the slots, by modifying the two thresholds linked to the use of the slots. Indeed, it will be in the interest of any airline to schedule flights and maybe to coordinate its network, so as to have a maximum use of its slots and benefit from the grandfather rights.

However, the trading of slots lacks some explanations and a clear mechanism. Trading of slot, and allowing compensation for it is more in line with a liberal view of the market. Nonetheless, in an industry such as the transport of passengers, detaining access to the infrastructure is crucial, and will be translated into market power. Therefore, if the EU allows for monetary compensation it must be supervised in a way to avoid misuse of slots. It should be noted that the risk of misuse is nonetheless balanced, to a certain extent, by the "*use it or lose it*" rule and the proposed 15% threshold.

On the other hand, allowing more flexibility regarding the use of slots is essential. Trading a slot before the end of a scheduling period allows other airlines to have access to a slot which otherwise would not have been accessible. The issue remains to decide what kind of trading system would suit the objectives of the EU.

In the proposed regulation³⁶⁸, the Commission had the following ideas: - The creation by the Member States of a transparent framework to trade slots, and - compulsory notification of the transfer/exchange which must be expressly confirmed by the coordinator (he must have access to the details of the compensation agreed upon, if any).

³⁶⁵ Regulation Proposal (357), point 15.

³⁶⁶ Regulation Proposal (357), Article 6.3.

³⁶⁷ See for example: Regulation Proposal (357), Article 9.5.

³⁶⁸ Regulation Proposal (357), Article 13.

Article 13, as proposed, may impose too much power on the shoulder of a coordinator. There is a risk linked to the independence of the coordinator, but also to the difficulty to assess what is a right compensation. The assessment of the value of a slot is a difficult one, and depends on the airport concerned (hub or secondary). Moreover, it should be recalled that a slot is only a right to use and does not include any right of ownership³⁶⁹.

The second concern is related to the grandfather rights, which have been maintained in the proposal and can be assimilated to a "*perpetual usage right*" of a slot³⁷⁰.

Besides, this is linked to a practice consisting in "babysitting" slots³⁷¹, that is to say using a slot to the sole benefit of preventing a competitor from accessing the airport. Such a practice can be translated into using aircraft of very low capacity and using the slot to the minimum percentage of time allowed to maintain the grandfather rights.

Nonetheless, the existence of grandfather rights may be justified by the need for airlines to maintain their network and to have a certain continuity in the services they are providing. Not all the airlines pursue a foreclosing strategy. Therefore, after considerations, a total prohibition of grandfather rights would be absurd, it appears to be a blessing in disguise.

To remove those concerns, several tracks have been discussed and may also be convincing. Some more or less realistic and desirable such as to increase the capacity of airports (extend the infrastructures) which would have an impact on environment and would not be necessary "*viable*"³⁷².

Some alternative slot allocation processes have also been discussed. In 2002, the Nordic Competition Authorities gave the example of an auction system for slots³⁷³, where the airline with the higher bid would win the slot for a limited period of time, after which a new auction would automatically take place for all the slots. But as concluded within the report, even if the idea seem idyllic, in practice such a process would not benefit competition because dominant airlines will be in a position of strength and will increase the bid needlessly to foreclose some markets. The possibility to have secret biddings would not be enough to constitute an efficient solution³⁷⁴. Also, the nature of the network would not

³⁶⁹ Report from the Nordic Competition Authorities (49), p.102.

³⁷⁰ Report from the Nordic Competition Authorities (49), p.105.

³⁷¹ Report from the Nordic Competition Authorities (49), p.105.

³⁷² Report from the Nordic Competition Authorities (49), p.105.

³⁷³ Report from the Nordic Competition Authorities (49), p.106.

³⁷⁴ Report from the Nordic Competition Authorities (49), p.106-107.

render the auction system workable: too many slots to auction at once, a need for coordination between slots and services provided, and the risks would be borne by airlines³⁷⁵.

To finish, as a reminder, the fact that a release of slots has been and is commonly accepted as a commitment within a Merger case highlights how important such rights are as to the structure of competition within the airline industry.

7.3. Member States' interventions

There is no definition of state aid within the treaties³⁷⁶, but Article 107.1 TFEU provides that, in principle, "*any aid granted by a Member State or through State resources in any form whatsoever which distorts or threatens to distort competition by favouring certain undertakings or the production of certain goods shall, in so far as it affects trade between Member States, be incompatible with the internal market*".

Therefore, Article 107.1 TFEU requires four conditions as underlined: the aid must be imputable to a Member State; it must have a potential effect on competition and trade; and, it must be selective and give an economic advantage to the recipient.

Regarding the existence of an advantage conferred to the recipient of the aid³⁷⁷, the ECJ has commonly (but not exclusively) recourse to the private investor test³⁷⁸ to assess whether a private entity would have agreed upon the same terms as the public entity did.

Nonetheless, where the advantage granted, by the public entity to an undertaking, consists on a compensation which has been given in exchange to the completion of a service of general economic interest ("SGEI"), such advantage will not be considered as state aid under certain conditions.

Following the *Altmark* case³⁷⁹, four cumulative conditions must be fulfilled: i. there is a clearly defined public service obligation³⁸⁰; ii. the compensation mechanism is established "in advance in an objective and transparent manner"³⁸¹; iii. the compensation "cannot exceed what is necessary to cover all or

³⁷⁵ Report from the Nordic Competition Authorities (49), p.106-107.

³⁷⁶ Craig and de Burca (103), p. 1087.

³⁷⁷ Craig and de Burca (103), p. 1088.

³⁷⁸ Craig and de Burca (103), p. 1090.

³⁷⁹ C-280/00, *Altmark Trans GmbH and Regierungspräsidium Magdeburg v Nahverkehrsgesellschaft Altmark GmbH, and Oberbundesanwalt beim Bundesverwaltungsgericht*, 24 July 2003, EU:C:2003:415 (Altmark).

³⁸⁰ *Altmark* (379), para. 89.

³⁸¹ *Altmark* (379), para. 90.

part of the costs³⁸²; and, iv. in absence of a public procurement procedure, the compensation must be calculated in function of the costs incurred by a typical undertaking³⁸³.

Additionally, several block exemptions³⁸⁴ must be taken into consideration when assessing a measure and if the aid under scrutiny fulfils the conditions provided in a block exemption it will be compatible with the internal market, and avoid the notification requirement.

Aside from these exceptions, "*any plan to grant or alter aid*" must be notified "*in sufficient time*" to the Commission under Article 108.3 TFEU³⁸⁵. The Commission has for mission to assess whether the measure is a state aid under Article 107.1 TFEU and if it is, whether it can be compatible with Articles 107.2 and 107.3 TFEU. When a measure implemented without the authorization of the Commission (i.e. an unlawful aid) is found incompatible with the internal market, the Commission may order the suspension of the aid or/and its recovery³⁸⁶.

In the specific case of the airline industry, different kinds of state aids can be observed (7.3.1.). Additionally, public service obligations which may be the object of compensation have been regulated under Regulation 1008/2008³⁸⁷ (7.3.2.).

7.3.1. State aid in the airline industry

State aid in the airlines industry, but also in general, may be problematic because it can distort competition and affect trade. State aid rules also crystallise the conflict which may exist between different objectives pursued the EU. For instance, the EU aims at protecting competition in the internal market but also to promote regional and social developments. Certain measures granted to airlines create a clash between these objectives³⁸⁸. It is for the Commission to balance all the interests at stake.

³⁸² *Altmark* (379), para. 92.

³⁸³ *Altmark* (379), para. 93.

³⁸⁴ e.g. European Commission, Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty (Text with EEA relevance) OJ L 187, 26.6.2014, p. 1–78; and, European Commission, Regulation (EU) No 1407/2013 of 18 December 2013 on the application of Articles 107 and 108 of the Treaty on the Functioning of the European Union to de minimis aid, OJ L 352, 24.12.2013, p. 1–8

³⁸⁵ For more details on the procedure see: European Council, Regulation (EC) No 659/1999 of 22 March 1999 (as amended in 2006 and 2013) laying down detailed rules for the application of Article 93 of the EC Treaty, OJ L 83, 27.3.1999, p. 1-9 (Regulation 659/1999 as amended).

³⁸⁶ Regulation 659/1999 as amended (385), Article 11.

³⁸⁷ European Parliament and European Council, Regulation (EC) No 1008/2008 of 24 September 2008 on common rules for the operation of air services in the Community (Recast) (Text with EEA relevance) OJ L 293, 31.10.2008, p. 3–20

³⁸⁸ Schmauch (16), p.260.

In 2014, the new guidelines on state aid to airports and airlines³⁸⁹ saw the day and *replaced the 1994 and 2005 Aviation guidelines*. The new guidelines develop a market-oriented approach³⁹⁰ and promote the concept of sound business³⁹¹, i.e. the airline industry must be more efficiently developed.

The 2014 Guidelines also introduce a new test to assess the advantage given to the recipient of an aid: the Market Economic Operator test, which "replaces" the private investor test³⁹². This test has been described as an umbrella³⁹³ concept which covers the former tests developed by the Union Courts (private investor test, private creditor test and private vendor test)³⁹⁴. The Market Economic Operator test follows the same methodology and allows "*to assess whether a range of economic transactions carried out by public authorities, public bodies or public undertakings take place under normal market conditions and, therefore, whether they involve the granting of an advantage (which would not have occurred in normal market conditions) to the undertakings concerned*"³⁹⁵. The assessment should consider the market conditions at the time the measure was decided³⁹⁶. The appeal of such a test resides in the possibility to apply it in all circumstances, without having to use different test titles in function of the type of aid granted. It also brings coherency and clarity.

State aids are in principle incompatible with the internal market (107.1 TFEU) but there are some exceptions that can be relevant in the airline industry.

7.3.1.1. start-up aid

7.3.1.1.1. The actual framework

Article 107.3.c TFEU provides that "*aid to facilitate the development of certain economic activities or of certain economic areas, where such aid does not adversely affect trading conditions to an extent contrary to the common interest*" may be compatible with the internal market.

³⁸⁹ European Commission, Communication — Guidelines on State aid to airports and airlines, OJ C 99, 4.4.2014, p. 3-34 (the 2014 Guidelines).

³⁹⁰ The 2014 Guidelines (389), point (19).

³⁹¹ The 2014 Guidelines (389), point (15).

³⁹² European Commission, Communication — Community guidelines on financing of airports and start-up aid to airlines departing from regional airports (Text with EEA relevance) OJ C 312, 9.12.2005, p. 1–14, section 3.2.4 (the 2005 Guidelines).

³⁹³ Agenda Advancing economics in business -*Turbulence ahead? The new state aid guidelines for aviation*, OXERA Agenda Mars 2014, available at: <http://www.oxera.com/Latest-Thinking/Agenda/2014/Turbulence-ahead-The-new-state-aid-guidelines-for.aspx>

³⁹⁴ European Commission, Communication — Draft Commission Notice on the notion of State aid pursuant to Article 107(1) TFEU (2014), para. 77-78.

³⁹⁵ Draft Notice (394), para. 78.

³⁹⁶ Draft Notice (394), para. 81.

Similarly, start-up aids are "*aid granted to airlines for launching a new route with the aim of increasing the connectivity of a region*"³⁹⁷ and they may be compatible with the internal market under Article 107.3.c TFEU where they fulfil the following requirements³⁹⁸:

- The aid must pursue an objective of common interest: increase citizens' mobility or connectivity of the regions, facilitate regional development of remote regions³⁹⁹.
- There is a need for State intervention⁴⁰⁰;
- The aid must be appropriate to the objective: the airline will have to provide an ex-ante business plan showing prospect of profitability following the three years of state aid, or a commitment to operate the route for a period equivalent to the duration of the collection of the state aid⁴⁰¹;
- The aid must be an incentive to do something that otherwise would not have been realized: the new route would not open without the aid⁴⁰²;
- The aid must be proportionate to the objective: the start-up aid is limited to three years, and cannot cover more than 50% of the airport charges on the new route⁴⁰³;
- The negative effect must be balanced: The start-up aid plan must be made public appropriately and can only concern a limited number of routes where no substitutable transports (e.g. rail) are available⁴⁰⁴;
- Transparency of the aid.

Also, following Paragraph 153, airlines cannot combine several aids granted for the operation of a specific route.

7.3.1.1.2. The improvements brought by the 2014 Guidelines

³⁹⁷ The 2014 Guidelines (389), para. 138.

³⁹⁸ The 2014 Guidelines (389), para. 79.

³⁹⁹ The 2014 Guidelines (389), para. 139.

⁴⁰⁰ The 2014 Guidelines (389), para. 141-144.

See Para. 142: start-up aid will only be considered compatible for routes linking an airport with less than 3 million passengers per annum to another airport within the Common European Aviation Area, Para. 143: Start-up aid for routes linking an airport located in a remote region to another airport (within or outside the Common European Aviation Area) will be compatible irrespective of the size of the airports concerned; Para. 144: Start-up aid for routes linking an airport with more than 3 million passengers per annum and less than 5 million passengers per annum not located in remote regions can be considered compatible with the internal market only in duly substantiated exceptional cases; and, Para. 145: Start-up aid for routes linking an airport with more than 5 million passengers per annum not located in remote regions cannot be considered compatible with the internal market.

⁴⁰¹ The 2014 Guidelines (389), para. 147.

⁴⁰² The 2014 Guidelines (389), para. 148.

⁴⁰³ The 2014 Guidelines (389), para. 150.

⁴⁰⁴ The 2014 Guidelines (389), para. 151-152.

Under the previous guidelines, the 2005 Guidelines, a list of criteria was also set to determine when a start-up aid could be compatible with EU law. Twelves conditions were listed, and some of them have been modified by the 2014 Guidelines.

In the 2005 Guidelines, for instance, Paragraph 79.d provided for at degressive system of aid, based on the number of passengers transported⁴⁰⁵. The system was complex, and according to Paragraph 79.f. the aid could last up to 3 or 5 years depending on the route and airports concerned. The aid could not exceed up to 50%, 40% or 30% of the costs borne depending on the route and the period of reference considered (full period of aid or only on a year-basis). The 2005 Guidelines also required the route to be viable on a long-term ("*ultimately prove profitable*")⁴⁰⁶. Additionally, Paragraph 79.d provided that "*the aid should be stopped once the objectives in terms of passengers have been reached or when the line breaks even, even if this is achieved before the end of the period initially foreseen*".

Such system had been criticised. One of the issues was that an aid granted could become incompatible with the internal market thereafter, if the route stopped to prove to be profitable⁴⁰⁷. Also, when an airline had reached the objectives of the aid, it automatically lost the benefits of the aid. Therefore, airlines had no interest in being completely efficient⁴⁰⁸.

More problematically, the 2005 Guidelines did not clearly define the types of efficiencies airlines could use under Article 107.3.c TFEU to justify the recourse to start-up aid⁴⁰⁹. Indeed, Paragraph 79.b and c of the 2005 Guidelines only referred to "*the opening of routes (...) which will lead to an increase in the net volume of passengers*" and to a case-by-case assessment for routes departing from outermost regions' airports.

To finish, and contrary to the actual system, the 2005 Guidelines allowed for additional start-up costs including marketing and advertising costs for the new route⁴¹⁰, and set a system of penalties towards airlines failing to respect their commitments⁴¹¹.

To conclude, it appears that the 2014 Guidelines set a more clear and efficient system to grant start-up aid to airlines. Certainty is guaranteed as airlines know exactly how much and for how long they will be granted the aid and can focus on the development of the new route. Additionally, they have a

⁴⁰⁵ The 2005 Guidelines (392), para. 79.g.

⁴⁰⁶ The 2005 Guidelines (392), para. 79.d.

⁴⁰⁷ Schmauch (16), p.296.

⁴⁰⁸ Schmauch (16), p. 297.

⁴⁰⁹ Schmauch (16), p. 295.

⁴¹⁰ The 2005 Guidelines (392), para. 79.e.

⁴¹¹ The 2005 Guidelines (392), para. 79.l.

clear understanding of the purpose and justifications of start-up aids even though Guidelines are not binding for the Courts.

In the same time, airlines are still subjected to a strict procedure and a start-up aid must follow the transparency, proportionality and necessity requirements. Additionally, the aid is only granted where there is no substitutable transport and where the airlines has made commitments to operate the route or has shown some prospect of profitability.

The final comment on the 2005 Guidelines is related to point (17) where the Commission highlighted the possibility of anti-competitive behaviours of LCC during aid negotiations⁴¹². As previously stated, it is usually LCC that focus on secondary airports as their point-to-point system is more adapted to the situation. They are more likely interested in building new routes with small airports. From the Commission's perspective the development of LCC was also presenting a risk to competition. Nonetheless, the position of the Commission through the 2014 Guidelines has become more favourable to LCC, and the Commission recalls "*the positive contribution of the low-cost carriers*" business model to the development of some regional airports⁴¹³". It adopts a neutral approach to the different business models of airlines while condemning any distortion to competition⁴¹⁴.

7.3.1.2. Other aids

7.3.1.2.1. Aid of a social character under Article 107.2.a TFEU

The 2014 Guidelines also set a list of conditions following which a measure shall be compatible with the internal market where it has a social character within the meaning of Article 107.2.a TFEU.

To be considered as such, the aid must: be to the benefit of the final consumer (i.e. the passenger); have a social character (it involves either passengers with children/disabilities/low income, students and elderly; or the entire population of outermost regions, islands and sparsely populated areas); the scheme must be applied without discriminating between airlines⁴¹⁵.

7.3.1.2.2. Regional aids granted under Article 107.3.a TFEU

A regional aid is defined through Article 107.3.a TFEU as an "*aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious underemployment, and of the regions referred to in Article 349, in view of their structural, economic and social situation*".

⁴¹² Schmauch (16), p. 294.

⁴¹³ The 2014 Guidelines (389), point (19).

⁴¹⁴ The 2014 Guidelines (389), point (19).

⁴¹⁵ The 2014 Guidelines (389), para. 156, and Article 107.2.a TFEU.

Under the 2005 Guidelines, it was possible to assess start-up aids under both 107.3.a and c⁴¹⁶, but there is no reference to Article 107.3.a TFEU in the 2014 Guidelines. Nonetheless, it does not mean that airlines cannot receive aid under this provision.

7.3.1.2.3. Capital injections, loans and guarantees

Capital injections, loans and guarantees were widely included within the 1994 Guidelines⁴¹⁷ (which were applicable in parallel to the 2005 Guidelines) but only a few reference appeared in the 2015 Guidelines. Under the 1994 Guidelines, capital injections, loans and guarantees from Member States could constitute state aids and be incompatible with the treaties. This remains the same under the 2015 Guidelines but the Commission's approach differs. Indeed, instead of writing a specific paragraph for each practice, the Commission only gives a broad definition of state aid and state resources, and applies the Market Economic Operator test to assess whether the public body behaves as a private body. Moreover guarantees have been the object of a specific Notice⁴¹⁸ in 2008 to clarify the application of the state aid rules, and a separate communication (applicable to the airline industry) from the Commission focuses on rescuing and restructuring aid⁴¹⁹.

To finish, it should be noted that a financial relationships between an airport and an airline may be considered as a state aid in certain circumstances⁴²⁰. A similar position was adopted by the 2005 Guidelines⁴²¹. Therefore vertical agreements between airlines and airports have also to be scrutinized under Article 107 TFEU.

7.3.2. Public service obligation (PSO)

Article 93 TFEU, contained on Title VI on Transport, provided that "*aids shall be compatible with the treaties if they meet the needs of coordination of transport or if they represent reimbursement for the discharge of certain obligations inherent in the concept of a public service*". Nevertheless, air transport is excluded from the provisions of Title VI⁴²². This is Regulation 1008/2008 that regulates the issue of public service obligations in the airline industry, in combination with the SGEI package.

⁴¹⁶ The 2005 Guidelines (392), points (28) and (29).

⁴¹⁷ Community guidelines on the application of Articles 92 and 93 of the EC Treaty and Article 61 of the EEA Agreement to State aids in the aviation sector, OJ C 350, 10.12.1994

⁴¹⁸ European Commission, Communication - Notice on the application of Articles 87 and 88 of the EC Treaty to State aid in the form of guarantees, OJ C 155, 20.06.2008, p.10-22.

⁴¹⁹ European Commission, Communication — Guidelines on State aid for rescuing and restructuring non-financial undertakings in difficulty, OJ C 249, 31.7.2014, p. 1-28.

⁴²⁰ The 2014 Guidelines (389), para. 53.

⁴²¹ The 2005 Guidelines (392), para.51-52.

⁴²² Article 100.2 TFEU

Regarding PSO, to summarise, a Member State can impose a PSO on a route under Article 16 of Regulation 1008/2008. The PSO can be related to the continuity, regularity, pricing or capacity of the service operate on the route, and such standards must be "*set in a transparent and non-discriminatory way*". The routes that may be subjected to a PSO are routes between any Community airports and airports serving peripheral or development regions, or tiny routes which are essential for the economic and social development of a specific region. Both adequacy and necessity of a PSO have to be assessed, and the proportionality of the measure, the existence of transport substitution but also the price and conditions of the service provided and the competition climate on the route are taken into account.

Members States are expected to inform the concerned Member States, airports and airlines of their intention of setting a PSO, following that, the PSO will be published in the Official Journal of the EU or of the Member State concerned. After the publication, airlines are free to operate on the route under the PSO conditions⁴²³. When no airline does so or plan to do so, the Member State can restrict the access to the route to a single airline for four years nay five years through a public tender⁴²⁴. Compensation may only be granted in consideration for the PSO for which an airline went through a public tender, but it "*may not exceed the amount required to cover the net costs incurred in discharging each public service obligation, taking account of revenue relating thereto kept by the air carrier and a reasonable profit*"⁴²⁵. This compensation may amount to state aid, but the Commission can decide to investigate the PSO.

To conclude on state aid and service of general economic interest, the air transport sector is subjected to a plurality of rules and the system remains complex, even though it has been simplified in the last years.

⁴²³ Regulation 1008/2008 (387), Article 16.8.

⁴²⁴ Regulation 1008/2008 (387), Articles 16.9, 16.10 and 17.

⁴²⁵ Regulation 1008/2008 (387), Article 17.8.

8. CONCLUSION

Airlines competition is a complex matter requiring a deep analysis of the different models and strategies of the undertakings concerned, but also of the consumers' behaviour. Therefore, competitive assessments of airlines activities is difficult.

Everything starts with a market definition, and in the airline industry the current method is based on the origin and destination city-pair. This approach draws distinctions between the type of passengers, direct and indirect flight, etc... but this approach should be improved. Indeed, in my view, isolating a specific route from the network of an airline can lead to some misconception as to an airline real position on the market. The network effects, which are considered as to alliances (*Part 7.1.*), should be given a bigger place in the assessment. In the same time, it has been argued, by the Commission among other, that the network approach was not interesting for consumers, who do not focus on the whole picture but on specific routes which are relevant for them; or the main purpose of competition law is to protect consumers and not competitors. Nonetheless, the origin and destination city-pair approach does not always represent the reality and can be problematic. Currently, one way to mitigate the situation could be to use the concept of *neighbouring markets*⁴²⁶ when one undertaking is dominant in one market and uses it to influence another market. A more dynamic approach towards the market definition is essential.

To continue, several points described in the present thesis may call for improvements. If we consider pricing practices, for instance, there is a fine line between competitive and anti-competitive prices. Therefore, the Commission and the Courts should operate a meticulous assessment on a case-by-case basis. Cost-based tests, such as in the Post Danmark case, are problematic because it can be difficult to identify fixed and variable costs (they can also depend on the period under consideration and the industry concerned). On the other hand, excessive low prices can be disastrous both for competitors and for consumers in a long term. In parallel, the cost-reduction race, which has started with the appearance of LCC, can lead to a degradation of the workers' working conditions and may give rise to labour issues. This is a social consideration which must be discussed in the light of the EU objectives. Regarding predatory prices in the airline industry, we cannot predict the position of the EU yet, but the solution adopted by the German Competition Authority appears to be a bit lacking.

In the context of alliances, the EU has accepted specific remedies from airlines, inter alia, the divestiture of slots and the opening of frequent flyer programmes. Alliances allow for better deals and more

⁴²⁶ See C-333/94 P, *Tetra Pak International SA v Commission of the European Communities*, 14 November 1996, EU:C:1996:436

efficient services (more destinations, synchronisation of services - luggage, tickets etc.) to the benefit of passengers, but they can also distort and prevent competition. The Commission tries to prevent that by limiting the latent exclusivity of certain alliances. Nonetheless, the Commission has a tendency to rely mainly on the two remedies cited above, and it should maybe consider a wider range of remedies (e.g. prohibiting code-sharing on route where both airlines operate).

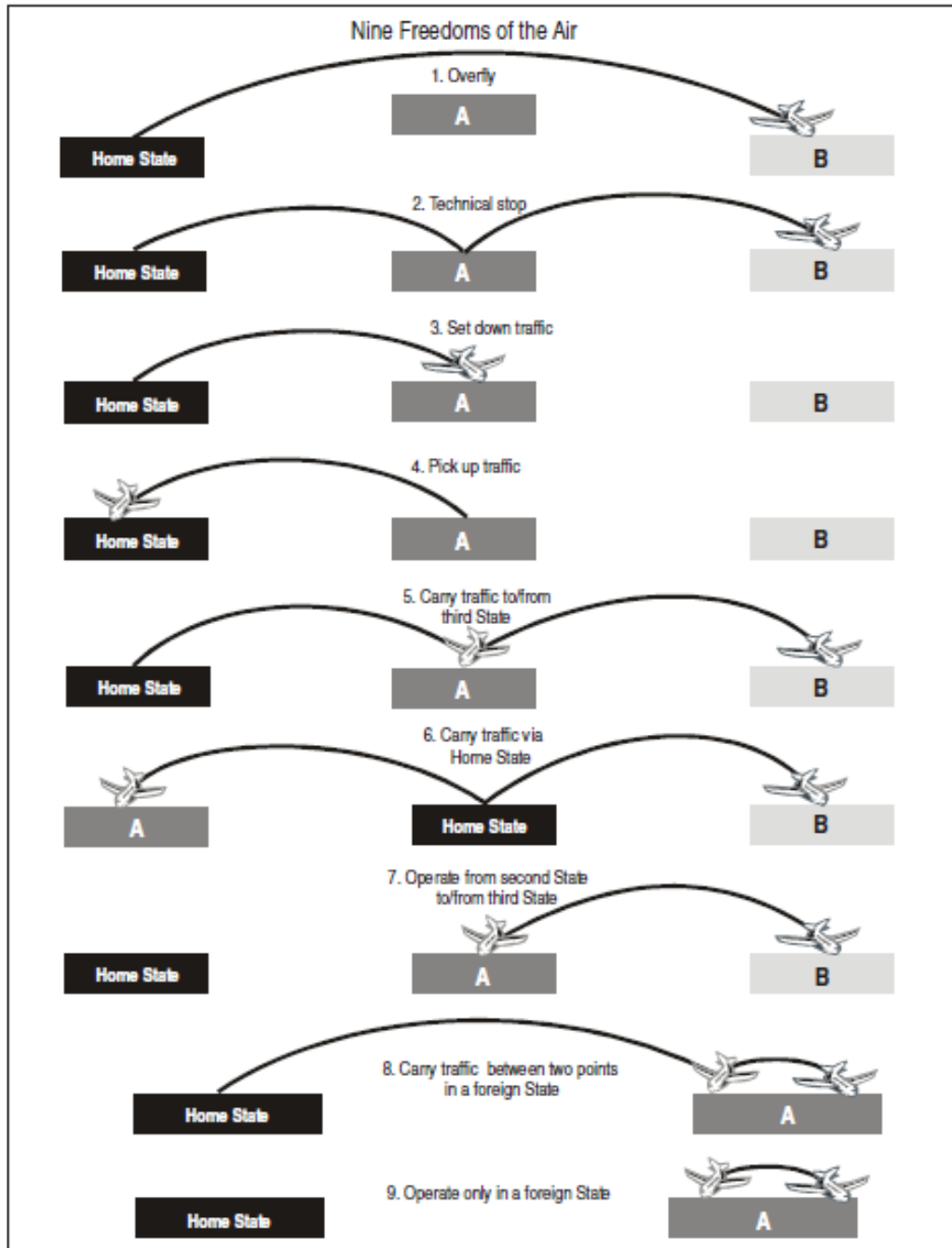
Nonetheless, slots remain at the heart of the debate. The 2011 Regulation proposal may solve one side of the problem by suggesting stricter requirements to maintain grandfather rights. Indeed, obtaining slots at certain airports will still be difficult. Nonetheless, an industry without a minimum certainty cannot be viable. To invest and to put strategies into effect, airlines cannot navigate through troubled waters. The 2011 Regulation proposal sets a balance between the need for flexibility and the need for stability.

Regarding state aid, the transport sector is not harmonized and different sources of rules are applicable to airlines. The situation has been improved but still lack coherency between the different modes of transport. Besides, the recourse to state aids is not unusual in the industry even though it has been limited to precise circumstances and conditions. Airlines should stay vigilant when they enter into contractual relationships with airports as they may received indirect state aids. Moreover, the Commission and the competition authorities should pay more attention to vertical agreements. From the above, it is more than apparent that competition in the airline industry is influenced by a multiplicity of variables.

To conclude, more generally, I believe that the airline industry is mature and highly competitive nowadays. The tools implemented and used by the EU promote efficiently competition even though It is impossible to prevent every anti-competitive behaviours. Moreover, we must wait a few years to see the effects of the latest legislations and the entry into effect of new rules which are currently under discussion. Also, dominant airlines are not reigning unconditionally on the market, and the development of LCC has created a new dynamic. Airlines are not sheltered from a plurality of risks inherent to their activities. Terrorism, fuel prices and geopolitics in general have a huge impact on them. The challenge, in the future, will probably be for airlines to focus on labour conditions and security.

9. ANNEXES

9.1. The nine freedoms of the air explained



Source: *Manual on the Regulation of International Air Transport* (Doc 9626, Part 4, p.106)

9.2. The hub-and-spoke and point-to-point systems

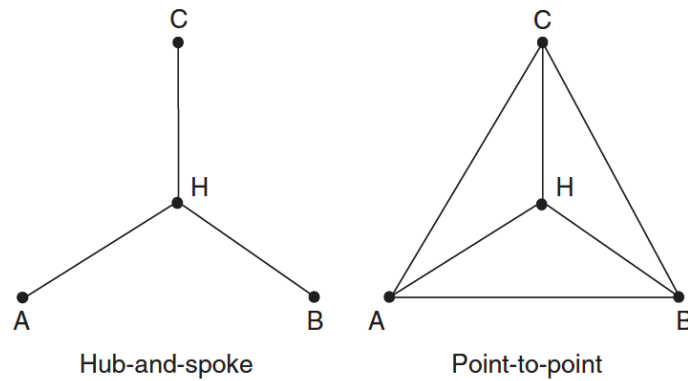


Fig. 2.6 A scheme of point-to-point and hub-and-spoke configurations

Source: Alessandro Cento, *The Airline Industry: Challenges in the 21st Century (Contributions to Economics)* (Physica-Verlag Heidelberg, 2009), p.32.

9.3. Alliances within the airline industry

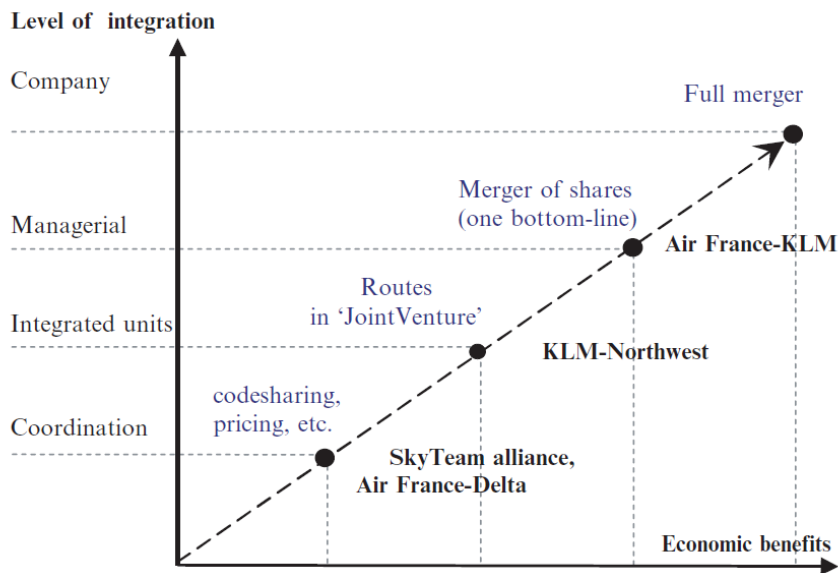


Fig. 2.10 Different forms of alliances (Source: KLM, (2005))

Source: Alessandro Cento, *The Airline Industry: Challenges in the 21st Century (Contributions to Economics)* (Physica-Verlag Heidelberg, 2009), p. 39.

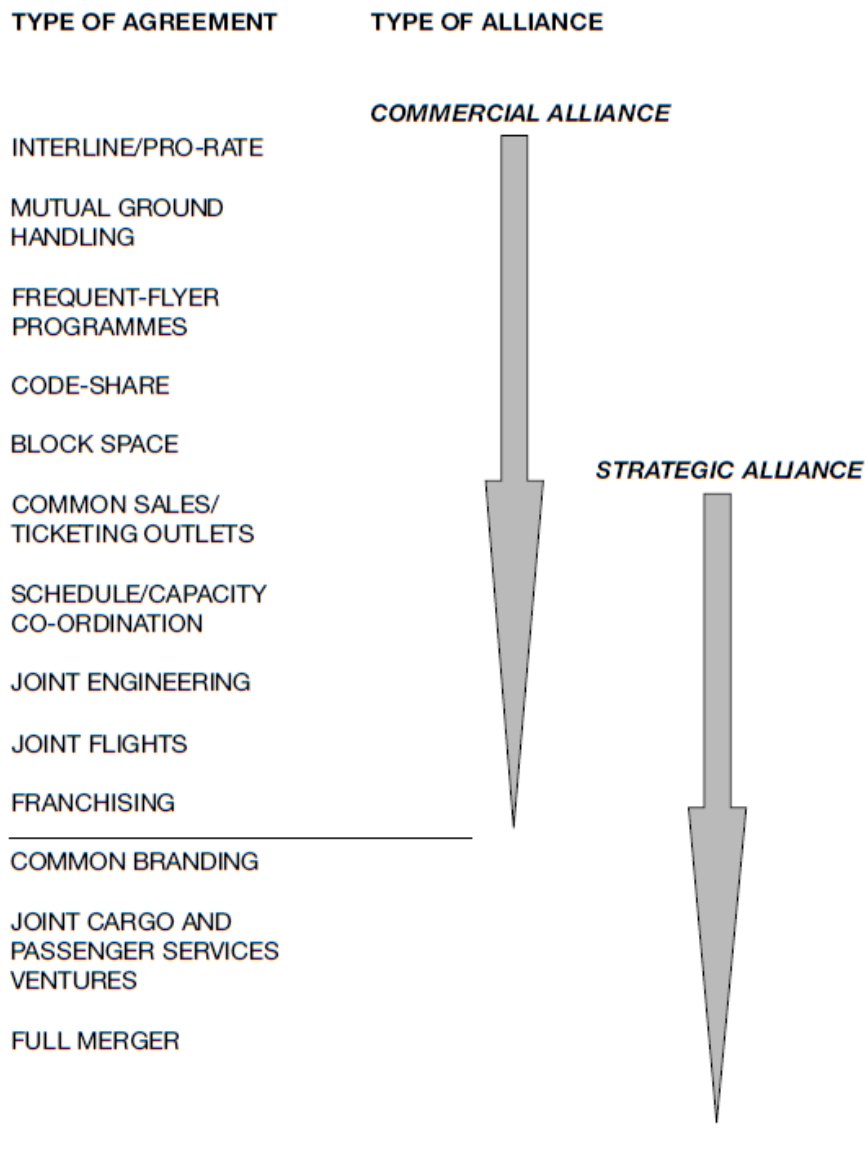


Figure 4.1 Alliance categories.

Source: Rigas Doganis, *The Airline Business* (2nd Edition, Routledge, 2006), p. 89.

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