THE POLICY OF THE EUROPEAN UNION IN THE AVIATION FIELD. SOME CONSIDERATIONS

Mihaela MANEA (cas.DUMITRIU)

Faculty of Economics and Business Administration, "Alexandru Ioan Cuza" University

of Iasi,

Iasi, Romania mihaelamaneadumitriu@yahoo.com

Abstract: The European Union has developed policies that have led to the optimization of investments and market conditions affecting the aeronautical industry, as well as the improvement of the regulatory framework, while maintaining the highest standards of the European Union in terms of safety, security and environment. By adopting an ambitious foreign policy in the field of air transport through negotiating global agreements with a clear focus on growing markets, the European Union can aid European air transport, helping to improve access to important foreign markets and investment opportunities in these markets. Increasing thus the international connectivity of Europe and guaranteeing fair and transparent market conditions for the airlines of the European Union. Airports, together with air traffic management service providers, are essential elements of civil aviation infrastructure. The quality, efficiency and costs of these services have become increasingly important for the competitiveness of the sector. The availability of highly performing and competitive airport services, including runways, passenger terminals and ground handling services, are essential for the competitiveness of the European Union's aviation sector and for the quality of travel services. Therefore, this analysis was carried out on the basis of surveys of the specialized literature in the field of aviation, taking into account the policies and regulations made by the European Union to support the aviation activity. Thus, a competitive and sustainable air transport sector will allow Europe to maintain its leading position in the interests of its citizens and its aviation sector.

Keywords: unique airspace, airline delays Aviation policies, regulations, European Union, aeronautical industry

JEL Classification: E61, L98, R48

ACKNOWLEDGEMENT

This work was co-financed from the European Social Fund through Operational Programme Human Capital 2014-2020, project number POCU/380/6/13/125015 "Development of entrepreneurial skills for doctoral students and postdoctoral researchers in the field of economic sciences"

INTRODUCTION

Air transport and air mobility is a strategic EU sector in which more than 5 million people work directly and indirectly and contribute 300 billion euros or 2.1% to EU GDP, meaning that air transport plays a vital role in the integration and the competitiveness of Europe, as well as its interaction with the world. Despite the current crisis, a long-term increase of 5% per year is expected until 2030. With the rise of air transport, in all its forms, the EU has set itself an ambitious goal of increase aviation safety to such an extent that European airspace becomes the safest in the world. I propose to clarify certain aspects related to the European Union's aviation policy, the effect of the agreements signed with

the USA and the countries outside the European Union, as well as the European Commission's efforts to create a single airspace. Closely related to this is the problem of overcrowding at airports, their extensions as well as the economic problems caused by aircraft delays.

THE UNIQUE EUROPEAN AIRSPACE

The international civil aviation developed in accordance with the establishment of bilateral relations by which Governments guarantee and control the expansion of their own air transport industry. The European Court of Justice (ECJ) brought judgments by which it declared *open skies* agreements between the USA and eight EU Member States contrary to Community law because of their discriminatory, distortive and destabilizing effect on the Community market. The Court declared one of the basic principles of *open skies* agreements, the so-called "nationality clause", which prescribes that only carriers owned and effectively controlled by the signatory Member State can be designated in a particular agreement, contrary to the EC Treaty.

International air transport industry has traditionally been arranged by bilateral air service agreements (ASAs) through which States exchange traffic rights, designate airlines that can provide air services between the signatory Countries and determine capacities, frequencies and fares of their service. Desiring to create a single airspace, similar to the maritime one, based on the objective of opening access to the markets of the states, on an equal footing with competition and respecting the same rules - including safety, security, air traffic management, social and environmental issues, etc., the EU has set itself an even more ambitious goal: to create a global free airspace. Air traffic, even if of a commercial nature, is subject to the access regulations of the states, based on their national sovereignty, so that the plane of a nation requires the prior approval of the respective state it flies over. Member States have, by virtue of Article 100 (2) of the Treaty on the Functioning of the European Union, conferred on the European Parliament and the Council the prerogatives of legislation and decision in the field of air transport. The combined efforts of the European Commission aim at the constant expansion of this European airspace, not as a foreign policy objective alone but for practical reasons: to reduce flight time. The natural consequence would be to shorten itineraries and the number of delays, as well as reduce flight costs and aircraft emissions.

The first set of common requirements establishing a single European airspace was adopted in 2004 (SES I)¹ and amended in 2009 (SES II) Regulation (EC) no. 1070/2009 to include performance-based mechanisms. Thus, a European foreign policy in the field of aviation was born in 2005 that managed to conclude agreements with non-EU countries and strategic partners, which resulted in a common aviation area with the EU's neighbouring countries. Moreover, during the leadership of Jean Claude Junker, the Aviation Strategy for Europe was adopted. This initiative, demanded by the airlines, would give a boost to the European economy, to strengthen its industrial base. Not only European affairs would benefit from this leading position, but also the citizens who now benefit from new transport routes at reduced prices.

The US and the EU signed an agreement in June 2010 and strictly built on the 2007 EU-US Open Skies agreement. In particular, it affirms that the terms of the 2007 agreement will remain in place indefinitely. In addition, it provides the basis for a closer cooperation

on environmental norm. The parties also agree on the importance of defining a high labour standard in the airline industry.

EUROPEAN UNION AVIATION POLICY

The success of the negotiations, which had the effect of creating a single aviation market, was accompanied by the adoption of common rules to ensure its proper functioning. The European Union has remained consistent with its principles in other economic areas. Thus, ensuring a level playing field and a high and uniform level of protection of passengers' rights have also been found in the field of aviation. If state aid is banned for European companies, non-European ones are not subject to such restrictions, hence the pressure on the European Commission to be more aggressive in negotiations and to defend their interests. The agreements should remove restrictions on capacity and frequency, code sharing, routes, multiple designation of airlines, ownership as a basis for designation and price. Regulation (EC) no. 868/2004 had to deal with combating unfair competition from foreign carriers. However, this tool proved to be impossible to apply. In 2017, the Commission therefore presented a new mechanism to ensure fair competition between EU and foreign carriers (COM (2017) 0289), and this proposal is currently under discussion.

The regulation of civil aviation between U.E and US evolved from a bundle of traditional bilateral ASAs of rather protectionist nature by following a more liberal approach. This resulted in the coexistence of protectionist agreements and open skies agreements that revoke restrictions in capacity, frequency and price. The need to avoid the fragmentation of internal European Open Aviation Area, led to a multilateral agreement negotiated by the European Commission on behalf of all its Member States with US, the so-called EU-US Open Skies Agreement (March 2008). The US accepted the concept of "EU carrier" and provided any Community Air carrier the right to fly between any point in the EU to any point in the US without any restrictions on pricing or capacity. EU carriers are also provided with the possibility to continue flights beyond the United States towards third countries both for passengers and cargo flights and with the so-called 7th freedom rights for passenger flights between US and a number of non-EU European Countries.

The 2007 agreement provided EU and US carriers with a greater opportunity to introduce commercial cooperative arrangements for code-sharing, franchising and leasing and greater possibility of antitrust immunity for the development of airline alliances. It also established a Joint EU/US Committee to oversee the agreement's implementation and harmonisation of EU and US air transport industry standards. EU and US established to cooperate in the areas of safety, security and environment. In the same register of equal opportunities, it was established that access to airports and airport services (Regulation (EEC) No 95/93) should be provided in a non-discriminatory and transparent manner by an independent 'slot coordinator' who distributes to airlines "time slots" based on an optimum airport capacity.

As the aeronautics industry becomes increasingly global, it should provide a more comprehensive solution to bilateral problems, regional or international. The possibility of creating an international, truly global airline regulatory policy is advancing more and more, covering competition between airlines and an institution (regulatory body) which would regulate global airline competition and create a level playing field for all. For example, Qatar Airways does not comply with European rules on the cost of carbon emissions, which allows it to save millions and can thus offer lower prices for detour routes to Asia. Therefore, its aircraft pollute enormously, just the opposite of what the European Union wants to achieve.

In order to protect passengers and aircraft and ensure a high and uniform level of safety throughout the EU, national safety rules have been replaced by common safety rules, which have been progressively extended to the entire air transport chain. "Placing users at the heart of the transport policy" seems to be the key action proposed by the Commission of the European Community in the aeronautical field. Particularly, specific new measures are needed on user's rights so that, regardless of the mode of transport used, users can both know their rights and enforce them.

In addition, a European Aviation Safety Agency has been set up to develop, among other things, these rules. Security requirements at all EU airports have also been harmonized to improve the prevention of malicious acts against aircraft as well as passengers and crew. However, Member States retain the right to apply more stringent security measures. In addition, the common rules [Regulation (EC) No. 261/2004] for the protection of the rights of passengers using air transport are intended to ensure that passengers receive at least a minimum level of assistance in the event of long delays or cancellations. These rules also provide for compensation mechanisms. However, the application of these regulations is proving difficult, which is why legal action is often initiated. In March 2013, the Commission presented a new proposal to amend Regulation (EC) No. 261/2004 [COM (2013) 0130] in order to further improve the application of Union rules, clarifying the essential principles and implicit rights of passengers that have led to numerous disputes between airlines and passengers in the past. The co-decision procedure is still ongoing, and Parliament and the Council have not yet agreed on the final solutions. On 24th September 2019, the Committee on Transport and Tourism decided to open interinstitutional negotiations after the first reading in Parliament.

The single aviation market continues to improve in terms of the time slot allocation system, with the vast majority (80%) of routes departing from Union airports still being served by a single carrier (60%) or two carriers (20%), the financial difficulties faced by a number of airlines and secondary airports or the complexity of supervising air carriers currently operating in several Member States. Significant is the increase in air/passenger transport (approximately 74%) as well as the share of the air sector in total passenger transport (9.2%).

The aviation market has changed radically in the last two decades. American and European airlines have gone through dramatic changes in corporate strategy and internal structure. They have been forced to adapt to regulatory changes that are intended to create greater competition in an industry that has tended toward oligopoly and that in many countries has been the object of state ownership. More exposed on long-range routes than their American counterparts, European carriers have made a major strategic change from for measures of protectionism through efforts at intra-European cooperation to an emphasis on alliances with US carriers - a process that has culminated in the recently announced agreement between British Airways (BA) and American Airlines (AA).

The renegotiation of previous bilateral agreements has placed the protected national carriers into a competitive and turbulent deregulated market. If deregulation leads back to oligopoly, this outcome will be perversely logical. Advocates of airline deregulation in the

US have always wanted the process extended to international aviation, though mainly because they believe that it will lead to greater competition. European liberalizers are more reticent about the international benefits of the liberalization entailed in creating a single EU aviation market. Such reticence may be due to the universal E U propensity to be preoccupied with the complexities and benefits of creating a single market to the exclusion of concern about its external ramifications. It may also be due to an uncertainty about what deregulation will do to the international stakes of EU carriers. The liberalization of international aviation is imperative and, indeed, long overdue.

The expansion of the Low-Cost Carriers is often considered as one of the most important recent advances in the European aviation because it offers a different product based on services offered at significantly lower prices. Due to this market segment, as well as the problems associated with managing this growth airfreight is expected to expand at 6.6 percent annually. In the absence of enough capacity expansion, this demand growth may be counterproductive for air transport. In addition, environmental costs are expected to rise, and air carriers will bear additional costs resulting from delays. Several European Airports already face severe capacity problems. A forecast of demand growth to the year 2025 without additional capacity growth predicts excess demand of around 3.7 million flights. This means that in year 2025, more than 60 European airports are expected to face severe capacity problems in their peak hours and at least 20 airports will have to cope with capacity problems during a few not only peak hours, but around 10 hours per day.

THE PROBLEM OF DELAYS

Even if airlines through Europe have signed voluntary agreements (not binding) to deliver defined standards of service to air travelers (such as the 2002 undertaking by the major players in the sector), in the absence of Community legislation, passengers are confronted with an increasing level of delays and with a set of national rules to protect them which are largely ineffective. The effect of such an increase was the congestion of airports, at least those of large cities. The operation of expanding airports through the construction of new terminals is a complex one involving financial and logistical efforts on the part of governments, which is reflected in the increase in airport prices and taxes. Security issues have increased operational times, which means new cost curves and significant traffic management efforts. Traffic problems have increased the number of flight delays and, in turn, generated new marginal costs.

The problem of delays is a global one. In Europe, over 25 per cent of all intra-European flights leaving from these airports departed more than 15 minutes later than their scheduled departure time (AEA, 2019). In the U.S., the Department of Transportation's Bureau of Transport Statistics reports that 30 percent of domestic flights arrived more than 15 minutes late. The losses caused by the delays in the United States alone amount to over \$ 40 billion. The hub airline dummies have puzzling negative coefficients, but this result may be explained by the fact that the hub-and-spoke system in Europe is not as extensive as in the U.S. and the waves of arrivals and departures are constrained by slot coordination at most hub airports. The ever-tighter mismatch between the demand and supply of airport services has already triggered policy discussions that bring into the forefront a challenging dilemma for decision makers and the various stakeholder groups in the airport domain: Demand Management or Capacity Enhancement? When we analyze delay costs, we should not consider the whole delay. We should be able to distinguish what it is the optimal delay, in the total amount of delays because airlines usually add some extra time to their schedules in addition to what it is technically required to avoid partial congestion. This is the so-called buffer delay, meaning a number of minutes the airlines should add to the schedule so that marginal cost of this buffer is equaled to the expected benefit. Airlines obtain different benefits from this practice. It helps them building their reputation in terms of reliability. For the society as a whole, minutes of congestion should be added up to the point where benefits equal costs. Only the difference between observed and optimal delays could be harmful for the consumers of air traffic and airport services. For example, France presents quite high average delays however we have to take into account that this can be increased due to the central geographic position of France in Europe (more than one of each four flights in Europe cross the French airspace).

Also, there is a discrepancy between the scheduled arrival time and the real arrival time, as well as a distinction between arrival delays and departure delays. All this depends on a relative subject. For airlines is the difference between scheduled and what could be considered an optimal or minimum time for a trip. Due to the high cost that delays can represent for airlines, it is quite common to schedule a longer time for the trip than what could be gained without any kind of congestion. This difference is know as "buffer", and is specially used by hub-airlines, which want to ensure the connections for all their passengers, and by low-cost companies that wants to build a reputation of on-time flights. Airlines use buffers to recover from delay by "padding" the schedule so that they can improve the predictability of rotations and also improve their punctuality performance with respect to published schedules. The most usual approach to estimate buffer time is to just compare the schedule time with the minimum travel time for each route. This measure is imprecise as it could be affected by very favorable weather conditions. In that case it would be more adequate to consider some percentile of the distribution of buffer times. However nobody has even proposed such a measure.

An estimation of the costs of delays is based on the price for passengers and airlines drawn about the value of time. There is an "operated flights versus schedule" and "schedule versus optimum" balance that we are going to denote as schedule delays and buffer delays respectively. Buffer delays make reference to the extra time that airlines add to the schedule of a city pair, with respect to what is technically needed while schedule delays refer to the observed difference between announced arrival/departure time and the real one. The number of passengers affected by Air Traffic Flow Management (ATFM) is calculated from an estimated number of delayed flights, and an average aircraft capacity and load factor. Passengers are distinguished between business, personal convenience and tourism travelers. Two scenarios for the value of time of the different categories, high and low, are considered. The values of time comes just from "a conservative range" that moves between 34 and 44 euros taken from values of time offered by previous studies.

The alternative is more efficient traffic management or a different allocation of time slots. As access to airports is conditioned by the landing fee which is proportional to the maximum take-off weight of the aircraft, some European states (Italy, France, The Netherlands, Germany) have proposed technical amendments for clarifying the role and position of the slot coordinator, better determining and declaring airport capacities, and revising slot allocation towards the direction of economic approaches and market clearing mechanisms. In parallel, the European Commission suggests that the structure and level of

airport charges be revised accordingly to reflect externalities and real costs for providing airport services, as well as the demand levels related to available capacity. Regional airports had both the unused capacity and the willingness to negotiate and offer competitive low fees.

CONCLUSION

All the problems in the aviation sector are more interconnected than in any other field of activity. Airports, together with air traffic management service providers, are essential elements of civil aviation infrastructure. The quality, efficiency and costs of these services have become increasingly important for the competitiveness of the sector.

In order for air transport in the European Union to remain competitive, it is essential that access to the aeronautical market is based on a regulatory framework that also applies to non-EU companies, especially with regard to subsidies from national governments and pollution taxes.

By adopting an ambitious foreign policy in the field of air transport through negotiating global agreements with a clear focus on growing markets, the European Union can help European air transport by improving access to foreign markets and increasing investment opportunities in these markets. All these increases Europe's international connectivity and guarantees fair and transparent market conditions for European Union airlines.

References

1. Dias, Francisco, Alves, *European Union External Aviation Policy-What works? available at:* https://www.academia.edu/9572376/European_Union_External_Aviation_Policy_-What_works

2. Evangelinos, Christos, Stangl, Jacqueline, Obermeyer, Andy, (2012) *Peak-Load Pricing and Airline and Reactions at European Airports*, in "The Journal of Air Transport Studies", volume 3, No 1, January, p. 1-23.

3. Kara, Abdul, Qadar, Ferguson, John, Hoffman, Karla, Sherry, Lance, (2013) *Estimating Domestic U.S. Airline Cost of Delay based on European Model* in "Transportation research. Part C, Emerging technologies", Vol 33, p. 312-321.

4. Katarelos, Eleftherios D., Koufodontis, Iason, (2012) *Business Relations Between the Low Cost Carriers and Airports as a Consequence of the Air transport Deregulation* in "The Journal of Air Transport Studies", volume 3, Issue 1, January, p. 57-77.

5. Klasić, Dario, (2016) Towards Fair Competition in European and International Aviation: a Proposal for the New European Aviation Strategy, in vol. Current Issues in Maritime and Transport Law, p. 337-359.

6. Morandi, Valentina, Malighetti Paolo, Paleari Stefano, Redondi, Renato, (2012) *Liberalization of International Air Transport: the case of North-Atlantic Market*, in The Aviation & Space Journal, XI, no.2, Aprilie/June, p. 2-9.

7. Santos, Georgina, Maël, Robin (2010), *Determinants of Delays at European Airportsin Transportation Research B: Methodological*, Volume 44, N°3, p. 392-403.

8. Staniland, Martin, (1996) Open Skies - Fewew Planes Public policy and corporate strategy in EU-US aviation relations. European Policy Papers #3

9. Urdánoz, Miguel, Billette de Villemeur, Etienne, Ivaldi, Marc, Quinet, Emile, (2005), *The Social Costs of Air Traffic Delays Part One: A Survey* Interim Report

10. Zografos K.G., Madas M.A., (2003) A Critical Assessment of Airport demand Management Strategies in Europe & U.S.: A Comparative Perspective, in "The Transportation Research Board" - Annual Meeting, p. 41-48.

- 11. European Commission, Mobility and Transport Report, 2019.
- 12. Regulation (EC) no. 549/2004 establishing the framework for the creation of the single European sky,
- 13. Regulation (EC) no. 550/2004 on the provision of air navigation services,
- 14. Regulation (EC) no. 551/2004 on the organization and use of airspace in the single European sky
- 15. Regulation (EC) No 552/2004 on the interoperability of the European air traffic management network



EX NO NO This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution - Non Commercial - No Derivatives 4.0 International License.