

**COMPARING AIRPORT REGULATION
IN EUROPE: IS THERE NEED FOR A
EUROPEAN REGULATOR?**

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AIRPORT REGULATION IN EUROPE: IS THERE NEED FOR A EUROPEAN
REGULATOR?

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ABSTRACT

This paper provides an overview of how the major airports are regulated in Europe. In order to eliminate the potential of airports to exercise market power and protect the public interest, it has become increasingly necessary to set a common regulatory framework. We intend to discuss the need of a single regulator in Europe to monitor or establish the quality of service and the charges practiced by the airports, to ensure cost-relatedness, transparency and non-discrimination. The existing regulatory approaches regarding aeronautical charges and their economic implications are also analyzed. We propose the creation of a European Observatory for this sector.

Keywords: airports, economic regulation, European Observatory

JEL Codes: L51, L52, L93.

1. THE NEED FOR AIRPORTS REGULATION

The economic regulation of infrastructure services arises from the necessity of correcting market failures that take place when there is no competitive environment, such as the case of the natural monopoly, or when there is competition without fulfilling the required conditions. These circumstances sometimes lead to infrastructure misuse by the operators that provide an inefficient service with high prices and poor quality. Thus, the presence of a visible hand (regulation) is fundamental for the stakeholders' protection. Airports have several characteristics that call for regulation, particularly their monopolistic features with high economies of scale, scope and density, asymmetric information (moral hazard and adverse selection), very high and long-lived (sunk) assets and externalities (negative and positive).

Airports provide both aeronautical services (infrastructure, facilities and ground handling services) and non-aeronautical services (as car parks or retail concessions) to two main groups of customers: airlines and air travelers. The demand of these services is complementary, with complex relations and in order to attract air travelers airports have to attract air carriers in the first place. Furthermore, due to their complementary nature, the lack of competition in airport services can distort competition between airlines. Airports often have too much market power even when there is potential for competition (e.g. in ground handling services). Their market power depends on the airline's ability to use another airport and on the travelers' choice of other transportation. Starkie discusses the sources of airports' market power in relation to their aeronautical charges and concludes that the market power of an airport "is likely to vary between different, and possibly fairly narrow, segments of the air transport market" (Starkie, 2002). He also argues that an airport is likely to have more market power in relation to networked airline services where economies of scale and scope are pronounced than in relation to low-cost carriers, point-to-point and inclusive tour charter market. In general, inter-airport competition appears to be

limited (Starkie, 2002).¹ The introduction of competition between terminals, i.e., terminals under different operators, could be pointed as a possible remedy for this situation. Nevertheless, there are few examples of intra-airport competition.² Besides Starkie claims that airports would not have incentives to explore their market power raising airport charges, as it would reduce not only demand for flights, but also for commercial services and thus airport' revenues (Starkie, 2001, 2002). According to the same author reasoning an airport regulator might not be necessary. We disagree because there are high levels of inefficiency, poor quality of service, discriminatory procedures and lack of transparency in these public services. However, all European airports face some degree of regulation and fully liberalized airports do not exist in the world.

Economic regulation encompasses a wide range of motivations, depending on the country and sector regulated. Accordingly, the regulation objectives of airports are different from those of seaports, railways, water and electricity services. Likewise, the regulation of these services is certainly different in France, the UK, Germany, Australia, Portugal or other country. If it is clear that the infrastructures specificity determines the kind of regulation adopted, the same is not true for its variation from country to country, mainly in Europe where there are joint goals to build a common market. Nonetheless, both the aims and the regulation itself, besides being subject to the sector's tradition and evolution, peculiar to each country, also depend on the stakeholders' behavior, principally on the Government, which is the most volatile one. Governments intend, above all, to reduce the costs for the users and maximize their own rents (rent seeking), whereas the regulator and the operators favor the efficiency and innovation. The paths available and chosen, consistent with the legal framework of each country, as well as the incompatibility of some objectives, put forward the different regulatory processes. Airport ownership is, most of the times, in the hands of the public sector (State or local level) and it is often dominated by the flag airline. So, the airport industry

¹ Even when there are several airports into the same catchment area they are frequently under the same ownership. In London, for example, the airports of Heathrow, Stansted and Gatwick are owned by British Airport Authority (BAA). A recent study of the Office of Fair Trading shows that competition between these airports is very low (OFT, 2006).

² New York's John F. Kennedy International Airport, Perth and Toronto airports are three examples of competition within the same airport.

frequently faces several State failures sometimes more serious than the market failures associated with the monopoly power. The main objectives of economic regulation, similar to those of other public services (Marques, 2005), are the following: a) efficiency promotion (productive and allocative); b) protection of users interests (e. g. equity, quality of service, security and reliability); c) self-financing (whenever possible); d) stable policies; and e) fostering competition under equal conditions.

The structure of this article is as follows. After this introduction we provide an overview of the regulatory issues in relation to European airports including the regulatory governance of airports, a review of the major economic regulation methods and a discussion of single/dual till approach. Next, the main problems of airport regulation are analyzed. Then, we discuss the benefits and drawbacks of a single regulator for Europe and finally, some concluding remarks are presented.

2. AIRPORTS REGULATION IN EUROPE

2.1 Regulatory governance

The institutional framework of a regulatory system is associated with the infrastructure services ownership. The possible structures of these services comprise the private activity specially regulated, their concession to private companies under public control and their management by the Government. All these formulae have different interpretations, according to the ideological, political and legal contexts of each country. For example, as far as airport services are concerned, England (BAA) shows predominance of the first situation, Greece (Athens) of the second and Spain of the third. The institutional design of the regulatory systems depends, at large, on the referred configuration. Hence, the regulatory functions can be developed by different players which include the Government (Ministries, Departments,...), regulatory authorities with little independence (public institutes) and independent regulatory authorities.

Generally, when infrastructure services ownership are publicly owned, regulation is directly guaranteed by the Government. In this case, opacity is the main characteristic of the regulatory system (Stern and Holder, 1999), as the activities

of establishment of rules, operation and regulation are all performed by the same entity. This reflects a political interference in regulation and consequently in the users' charges. When the sector's operation is subject to direct State administration, it generally has the following characteristics: a) works in a little commercial or even non-commercial basis; b) only seems concerned in getting positive results rather than in being efficient; and c) subsidizes only some of the users. This scenario has been leading to a trend towards regulation by independent authorities, even when the private sector presence is irrelevant or non-existent (e. g. in Ireland and the Netherlands).

In countries where private participation is significant, regulation should always be carried out by independent authorities.³ This provides credibility and commitment to regulation and avoids the arbitrary interference of politicians. The independence of regulation enables benefits (Marques, 2005), such as impartiality in decision making, flexibility of regulatory processes, expertise of the regulatory agency, credibility of the regulator, financial accountability and promotion and mediation of conflicts resolution. The lack of accountability, the high cost of regulation, the difficulty of regulators' effective independence, the regulation methods ambiguity, the loss of sovereignty and the conflicts with other powers are pointed out as disadvantages of independent regulation.

It is often said that tight contracts (e. g. concession contracts) can replace independent regulation (Demsetz, 1968). We think, like other authors (Williamson, 1985), that this argument is not valid since it is not possible to have long-run, definite and complete contracts that comprehend all the contingencies and that can be invulnerable to an *ex post* opportunism. They will be serious but incomplete, at their best. So, contractual regulation is not an alternative by itself to regulation by an external authority.

The existence of independent regulatory authorities is usually defended as non-compulsory, as their competences are included in the functions of the transversal agencies responsible for the competition regulation. Regulation can be a result of

³ Notice that the importance of the private sector in airport industry is increasing. So far there are 11 countries in the EU (25) with private sector participation in the provision of airport services and 6 more announced the intention to privatise these services soon.

the agreement between the operator (airport) and the users (airlines) supervised by the competition authority. This “light-handed” regulatory process, which originated in New Zealand, in the 1980s, is based on three main principles, specifically the sectors restructuring with separation of the competitive elements from the non-competitive ones, the presence of an agency that fully assures the competition mechanisms and the disclosure of the main management information by the incumbent (Allport, 2000). Although this solution is sometimes adopted (e.g. New Zealand’s airports regulation), it frequently leads to a weak and not very encompassing regulatory process.⁴ Other countries defend that *ex post* regulation is much more rigorous than *ex ante* regulation (carried out by a regulatory agency) and that the latter should be triggered by a court of law (or by a regulatory agency) when necessary (e.g. Australian airports regulation).⁵ This process can raise some practical difficulties and it is a kind of regulation. More and more self-regulation is being defended as a better solution than hetero-regulation. This mechanism leads to several benefits, including the resources saving and the dismissal of political accountability. However, despite its success in some sectors, it does not seem to be a convincing choice for airports regulation, mainly due to their reduced number of players. Finally, particularly in the USA, in the energy, telecommunications and air space sectors, deregulation is advocated in opposition to regulation, underlining that a free market environment enables more benefits. Nevertheless, deregulation is not a hypothesis for the economic regulation of airports either. Their monopolistic features do not support it.

⁴ The success of this light-handed regulatory process is not very clear. The Commerce Commission concluded in 2002 that in the New Zealand airports, the Auckland one should be regulated.

⁵ In the middle of 2002 the Australian airports regulation based on price cap regulation was replaced by price monitoring. Although in such a way the charges are not established *ex-ante*, we can not state that there is not economic regulation in airports in Australia. What happened was that a tighter process of regulation as a result of several circumstances (e. g. September 11th and Ansett airline bankruptcy) was replaced by a milder one (see, about Australian airports regulation, Forsyth, 2004).

2.2 Regulatory method

There are several economic regulation methods at work. It is not easy to find consensus in their classification, but they can be sorted into two main groups, according to the incentives they offer the regulated industries towards costs minimization. The first group, with a very low degree of incentive, includes the rate of return regulation (henceforth, RoR), whereas the second, with a high degree, corresponds to the incentive regulation. The remaining regulation methods are variations or interactions between these two classes, such as the well-known sliding scale approach, in which the costs and revenues (profits) are shared among stakeholders.

2.2.1 Rate of return regulation (RoR)

RoR (also called cost based regulation) allows for the establishment of a rate of return upon the investment made (or assets) with the regulatory authority's approval.⁶ Despite being widely used, RoR is highly criticized since it does not encourage efficiency and innovation. This regulation method also implies that when the rate of return is higher than the capital cost over-investment is possible to occur without any technical reason, as the regulated operator gets an additional profit for each supplementary capital unit spent (Averch and Johnson effect). Likewise, it also fosters the gold plating practices. Airports do not have incentive to establish an efficient price structure and can manipulate the accountancy results when providing other non-regulated services. Finally, RoR needs a great amount of information, leading to high costs and to the regulator's possible capture. The Netherlands, Spain and Portugal, for example, use this regulatory method in their airports regulation.

⁶ The term cost based regulation is less precise because to any regulatory process will always correspond a rate of return.

2.2.2 Incentive regulation

Efficiency and innovation are the main aims of the regulated industries when incentive regulation schemes are adopted. With these regulatory methods, despite assuming higher risks, the operators can have higher earnings. The pioneers of incentive regulation were the Professors Littlechild and Beesley, in 1980s, in the UK, when the British Telecom privatization occurred. This kind of regulation comprises different methods such as price cap regulation (hereafter, PCR), revenue cap regulation, hybrid and yardstick competition methods.

PCR consists on the imposition of an average maximum threshold for the charges of the services provided. With the prices (charges) ceilings defined at the beginning of each regulatory period, the regulated services hold the earnings corresponding to the cost reduction which happens during that period. Therefore, the operators are encouraged to promote efficiency and innovation. At the end of each period the benefits coming from costs minimization are transferred to the users through a charge reduction in the next period. As PCR is not based on costs it fosters appropriate price structures, maximizing the welfare. The price cap formula is composed by two parts (CPI-X), one corresponding to the consumer price index (CPI), and the other (X) to the operator productivity change expected. Sometimes, an extra factor that accommodates unpredictable situations or some types of costs (exogenous or grounded in specific aims) which pass directly to the users is added to the formula CPI-X.⁷ A problem that is raised concerns the regulatory period. Although, generally, this period is long (3 to 8 years), there is no reason for the non-existence of a revision in-between, due to market or political pressures or both, usually as a result of the excessive profits attained. In spite of reducing the risk, this situation prevents the efficiency improvement and puts the PCR in closeness to the RoR. Service quality is another essential issue in PCR. One of the operators' main goals is the cost reduction to increase the profits. This is only possible if productivity growth or a reduction in the quality of service occurs. As there is no real competition, it is likely that the second hypothesis

⁷ The absence of this extra parameter was one of the major reasons for the failure of PCR in Australian airports regulation. The profit volatility in the PCR due to exogenous factors should have been avoided. There should have been an appropriate risk sharing between operator and users.

comes to work if not prevented. PCR might cause underinvestment, depending the investment decision on the credibility of regulation to allow for a fair return on investment. As a final point, it is important to stress that, in opposition to what was thought at first (Cabral and Riordan, 1989), this regulatory process also leads to significant costs, both for the regulatory authority and the regulated operators.⁸ PCR is being used in Sweden, Austria, Malta and Denmark among other countries.

Instead of prices, in revenue cap regulation, the airports revenues are limited to an average maximum value. In this regulatory method the operator has more autonomy to establish new tariffs, since the control is on all the revenues and not on the partial parts or on its structure. It brings more benefits when the fixed cost part is high and where demand side management (e.g. energy sector) is crucial. Often, the cap measure adopted is the revenue per passenger. Ireland, for instance, employs this regulatory method.

One other regulatory approach is the yardstick competition method. It is based on the comparison of performance between operators of the same sector. Its major advantage is to offer the operators strong incentives towards efficiency and innovation, fostering the sharing and transparency of information. The main purpose of yardstick competition is the redirectioning of an operator's practices through the information obtained near other colleagues (average or best practices), which leads to an artificial form of competition among them (Marques, 2006). This method is much adopted in the scope of PCR. For example, in the UK, the BAA regulation carried out by the CAA has been based on yardstick competition (in the factor X computation). Other price cap regime that uses yardstick procedures is Brussels (Belgium) and outside Europe, a noteworthy example is Macao (China), which adopts a quasi-pure yardstick competition regulatory method.

⁸ For example, last year Civil Aviation Authority (CAA) budget was almost 200 million Euros (CAA, 2007).

There are also hybrid methods where regulation leans on more than one of the regulatory methods mentioned above. It is common to find in the same regulatory period, among other combinations, regulation processes based on PCR and RoR. One of the most adopted is that where costs and profit sharing are defined *ex ante*. A profit sharing (or costs sharing) scheme often employed is the sliding scale method, which is applied, for example, in the regulation of Frankfurt airport (Fraport). In this process there is a partition rule that divides the profit (or costs) excess between customers and the regulated utility that only allows the increase of rate of return above the value established before if the prices are reduced simultaneously.

2.2.3 Regulatory methods in Europe

Table 1 systematizes the regulatory methods used in the major airports of each country in the European Union (EU) in 2006.⁹ In this table “no regulation” means that the charges of airports are determined directly and opaquely by the Government. However, it is probable that most of them employ the less incentivating RoR methods.

Table 1 – Airport regulatory method employed in EU (25) countries in 2006

Country	Regulatory method	Country	Regulatory method	Country	Regulatory method
Austria	Non-pure price cap	Greece	No regulation	Poland	No regulation
Belgium	Yardstick competition	Hungary	Pure price cap	Portugal	Rate of return
Czech R.	No regulation	Ireland	Revenue cap	Slovak R.	No regulation
Cyprus	No regulation	Italy	No regulation	Slovenia	No regulation
Estonia	Rate of return	Latvia	No regulation	Spain	Rate of return
Denmark	Pure price cap	Lithuania	No regulation	Sweden	Pure price cap
Finland	No regulation	Luxembourg	Rate of return	UK	Pure price cap
France	Revenue cap	Malta	Pure price cap		
Germany	Non-pure price and revenue cap and ROR	Netherlands	Rate of return		

Sources: Various [(Gillen and Niemeier, 2006), ATRS, IATA and airports and regulators websites]

⁹ Table 1 regards only the main airports. For example, in the UK it only reports to BAA and in France to Paris airports (ADP).

2.3 The scope of the regulation and single/dual till models

Airports services are not like other monopolistic infrastructure services. If their aeronautical facilities (runway, apron and terminal), as a rule, work in a monopoly environment and even the aeronautical activities (ground handling, catering and fuelling) have competition distortions and consequently are prone to abusive behavior, the non-aeronautical activities run at a commercial basis. Furthermore, commercial activities such as retail, catering and car parking represent a relevant component of airport revenues. So, if the profits from commercial activities are used to cross-subsidize aeronautical activities we are in presence of the single till regime. In the opposite circumstance the dual till scheme applies, where the two airport business branches are separated. Most countries, such as the UK (since 1987), have traditionally applied the cross-subsidy (single till). Table 2 displays the single/dual till regulatory models in the EU. The single till approach is widely used and its main advantages are to minimize the airport charges and to keep with the international recommendations (e. g. International Civil Aviation Organization - ICAO). As major drawbacks one can point out the reduced incentive to improve commercial activities, the flagging of the airport value, the forecasts required about the future commercial revenues and the non-cost reflective charges (Smith, 2002). Recently, the dual till approach has gained prominence in Europe. Indeed, despite producing higher airport charges for users and stand up cost allocation issues, dual till regulation makes charges reflect costs more closely and maximizes the airport value. Several studies have come out earnestly defending the dual till to the detriment of the single till regulation and, in our opinion, the arguments make sense, at least under certain conditions [(ACCC, 2001) and (CAA, 2002)]. Beesley and Starkie are two of the economists who attack the single till. The first author argues that regulation should focus on activities characterized by a natural monopoly (aeronautical activities) and that when there are commercial activities provided altogether it is impossible to separate them and consequently the application of price cap formulas is biased (Beesley, 1999). Starkie goes farther (Starkie, 2001). He even neglects the need for economic

regulation for the non-congested airports, since the increased airports charges do not only reduce the demand for flights but also the demand for commercial activities, and therefore the return of airports. Thus, airports do not have incentives to increase their rents. We reject these conclusions because the best rent of the monopolies, including airports, is the quiet life of Hicks and so without economic regulation we are encouraging the inefficiency-X of Leibenstein. Starkie defends, however, that for congested airports the application of a dual till scheme would lead to higher aeronautical charges which would have positive effects on the allocation of scarce slot capacity and on the investment incentives. These arguments are corroborated by other authors (e. g. Oum *et al.*, 2004), although others stand for the single-till approach as welfare maximizer when compared with the dual till method at non-congested airports [(Czerny, 2006) and (Lu and Pagliari, 2004)].

Table 2 – Single or dual till approach in the airport economic regulation in the EU (25) countries in 2006

Country	Single/dual till	Country	Single/dual till	Country	Single/dual till
Austria	Single till	Greece	Dual till	Poland	-
Belgium	Single till	Hungary	Single till	Portugal	Single till
Czech R.	-	Ireland	Single till	Slovak R.	-
Cyprus	-	Italy	Dual till	Slovenia	-
Estonia	-	Latvia	-	Spain	Single till
Denmark	Dual till	Lithuania	-	Sweden	Single till
Finland	-	Luxembourg	-	UK	Single till
France	Single till	Malta	Dual till		
Germany	Dual/single till	Netherlands	Dual till		

Sources: Various [(Gillen and Niemeier, 2006), ATRS, IATA and airports and regulators websites]

3. THE PROBLEMS OF AIRPORTS REGULATION

One of the main functions of regulation is to establish airport charges. They include, among others, a levy on aircraft landing, on passengers' departures, on passengers' transfers and on aircraft parking. The regulator intends to define a fair, reasonable and equitable charge basket and to foster airports efficiency and innovation. However, "there are several complexities in the airport pricing problem" (Forsyth, 1997) that should be accommodated in order to achieve the desired objectives.

As various studies show, many European airports are characterized by high levels of productive inefficiency [(Gillen and Lall, 1997), (Pels *et al.*, 2001) and (Brochado and Marques, 2007)]. Benchmarking could be a good tool to provide incentives for performance improvement, but there is the serious possibility of comparing “apples with oranges”. The institutional and operational environment make the operating expenses (OPEX) of each airport change, there are transferences between capital expenses (CAPEX) and OPEX (and vice-versa) and the consensus over the most appropriate benchmarking technique is not peaceful (e. g. parametric *versus* non-parametric methods) since each one of them has drawbacks. Nevertheless, the mitigation of asymmetric information and, consequently, the promotion of transparency always justify the benchmarking use (Marques, 2006). Moreover, as the airport industry has shown, the absence of transparency and of clear-cut consultation processes in tariffs setting and in future investments have constrained the regulatory processes effectiveness.

Airports are often congested as a result of inadequate investments made in the past and of feeble pricing regimes. Other times the airports display gold plating practices, highlighting an excess of capacity and luxurious facilities. Measuring the capital efficiency of airports is not an easy task (Holt *et al.*, 2006). Another problem related to the capital investments is the availability of slots. The monetary trading of slots in the EU is forbidden, being valid the grandfathering principle. This is very troublesome and harmful to competition in the airport sector, emphasizing the importance of the historic flag airline. In the EU flag airlines account for about 50 % of all traffic in each airport. Table 3 shows the importance of the dominant carrier at the chief airport in each EU country. A more efficient slot allocation would reduce the market power. Simultaneously, we have been observing the proliferation of low cost airline companies, a strong passenger and cargo growth, tighter security measures, the internalization of environmental costs and the upholding of the same privileged slots. Also, the subsidizing policy of smaller airports is not always the clearest, restraining the competition and infringing the European Commission (EC) Treaty and the Competition Law.

Table 3 – Importance of flag airline in the main airport in each EU (25) countries in 2004

Country	Importance / airline	Country	Importance / airline	Country	Importance / airline
Austria	59 %; Austrian Airlines	Greece	46 %; Olympia	Poland	-
Belgium	30 %; Brussels Airlines	Hungary	-	Portugal	-
Czech R.	-	Ireland	31 %; Air Lingus	Slovak R.	-
Cyprus	-	Italy	45 %; Air Italia	Slovenia	-
Estonia	-	Latvia	-	Spain	57 %; Iberia
Denmark	47 %; SAS	Lithuania	-	Sweden	43 %; SAS
Finland	-	Luxembourg	-	UK	42 %; B. Airways
France	58 %; Air France	Malta	-		
Germany	60 %; Fraport	Netherlands	51 %; KLM		

Source: ATRS (2006)

The inefficient structure of charges is also a relevant issue. The general tariff regime is not based on the Ramsey pricing principle, recommended when the airport is not congested. ICAO suggests the use of a weight based charge that could work as a quasi-Ramsey pricing (Niemeier, 2003). Some authors argue that the charges structure should be more focused on the passengers number, namely the variable component of the pricing system, since its change has consequences both in airside and in non-airside markets (Klenk, 2004). Besides, there is often no payment to use peak periods, fostering irrational investments. Depending on each airport features, single till or dual till regimes are adopted without clear justification. The non-incentivating American RoR also continues to be used, feeding the national champions of airport industry in several European countries (e. g. Spain, Portugal and Finland). The same happens with the price cap formulas, often misconceived, which do not provide real incentives to the productivity of airports nor do they defend the airports against the unexpected shocks as the downturn demand when September 11th happened. As a NERA study points out, there is a huge difference in profits between airports and airlines (NERA, 2006). Indeed, the market power and the absence of competition in airport industry are abnormal, presenting unacceptable monopoly rents for a service of general economic interest. Those national champions usually have various airports with some of them (the profitable ones) subsidizing others,

sending a wrong message to the market (e.g. AENA in Spain and ANA in Portugal).

Finally the non-definition of levels of service in airport industry is harmful to this sector's performance. Its features of general interest service (public service) do not allow for the provision of operating conditions without a minimum quality standard. For example, availability of flight information, toilet cleanliness and wayfinding are some of the aspects to be account and to be periodically displayed and publicized through performance indicators by airports (or regulators). As a rule, airports do not attribute real responsibilities to the outsourced firms for a poorer performance presented (for example, the ground handling services). Airports are always responsible for everything that takes place within their premises, although particular activities may be provided by other entities. As we will discuss next, there should be obligations of public service well defined and supervised by independent regulatory authorities. These agencies in Europe are still a kind of UFO ("Unidentified Flying Organism") protecting the Governments' interests rather than the public interest.

4. IS THERE THE NEED FOR A EUROPEAN REGULATOR?

The EC on 20 June 1997 developed a proposal for a Directive based on the principles of cost relatedness, transparency and non-discrimination. It aimed at a tighter relation between airport charges and the cost of service provided, greater transparency by means of compulsory consultation procedures between airports and the remaining stakeholders and the provision of non-discriminatory services in-between the State Members. The controversy between single/dual till was also pointed out. As expected, the proposal was rejected by the airports and also by some flag carriers close to the airports and to the Governments of each country, which generally own themselves a dominant position. The argument against the Directive was the subjection of airports to EC Competition Law (articles 81, 82 and 86 of EC Treaty). Although some decisions had been taken in the scope of the European Court of Justice, some airlines continued to claim fair charges and more transparency and participation in that decision process. For example, it is desirable that an airline can discuss the need for new investments in the airport

that will be paid by the airline itself. A recent study (ACI, 2003) reviewed the different practices of airport economic regulation concerning the type of charges applied at airports and the consultation process about the procedure of determining the charges and the planning of future airport investments. It underlines the high complexity and diversity of the regulatory processes with very different practices, sometimes incompatible between them and theoretically outdated.

Considering the past failure and the ICAO's recommendations (see ICAO, 2004) about the non-discrimination in charges application, the ensuring of transparency and consultation and the establishment and review of quality standards, the EC carried out a new proposal of a Directive on airport charges on 24 January 2007. It was developed bearing in mind the EU principles of subsidiarity and proportionality. The Directive was aimed at the fulfillment of seven goals, namely non-discrimination between carriers and passengers, existence of consultation and remedy, provision of transparency, ensuring of quality standards, fair differentiation of charges, establishment of security charges and implementation of an independent regulatory authority. Naturally, the Directive proposal was highly controversial and refused by the airports, by some airline companies and also by some Governments. The approval of the Directive would unquestionably interfere with diverse interests rooted in society. Indeed, as higher is the noise about the Directive more are we convinced of the importance of its establishment.

The proposal of a Community Act defining a general framework with a number of common principles that airport operators must consider when determining airport charges was selected through an impact assessment, among a set of four policy options.¹⁰ One of these options concerned the introduction of a legal framework requiring the determination of airport charges on the base of a regulatory system uniformly applied across the EU and based on a single method of calculation. We believe that the implementation of such a European regulatory authority could have several advantages:

¹⁰ The four options considered by the EC are no action, self-regulation by the aviation industry, general EU framework of common principles and binding regulation.

- The increase of transparency at airports reducing the traditional asymmetric information (e. g. about 80 % of the major European airports do not have the accounts and activities reports published in their websites);
- The possibility of decision making without political motivation avoiding the discrimination and obeying a thoroughly consultant process either for the charges establishment or investments decision;
- The identification of the most efficient, innovative and with higher quality standards airports that are best practices and that can constitute benchmarks (peers) for other airports;
- The creation of a competitive environment among airports, leading to the sector's improvement as a whole;
- The analysis of the market structure regarding the optimal airport size, its ownership and mode of organization (e. g. corporatization).

Nevertheless, the EC concluded that although this option was expected to have “the strongest impact on cost-efficiency on airports” the implementation of a European binding regulatory system would face several difficulties, as it would require substantial modification on the accounting systems, and considerable effort both for regulators and airports. Moreover, the EC recognizes that there is too much heterogeneity across EU airports to include them into the same regulatory model. Instead of a binding regulatory system, the EC is proposing a set of binding principles that airports above a certain threshold must adhere (one million of passengers or twenty five million tones of annual cargo) when they determine their airport charges. While a number of significant questions still remain, we believe that the development of a Directive on Airport Charges EC proposal could be considered the first step in the right direction - towards efficient airport operations, as it recognizes that there is a problem that must be fixed.

The Directive should be further accomplished by the creation of an Observatory for the EU airports with the task of collecting and sharing data, applying benchmarking and disseminating best practices not only for the operation and maintenance and infrastructure construction practices but also for the reforms carried out by European airports. It could be a source of technological

development in the airport industry. The Observatory would thus reduce the lack of information, enhance transparency and support the creation of a common vocabulary for the development of performance indicators. Thus, this intermediate solution between binding-principles and binding-regulation system might bring several benefits. The implementation of such an organization in a second step would allow airports to make the most of benchmarking application, a useful tool to share experiences, knowledge and best practices, providing clearness and fairness to the regulatory processes and incentives to the airports efficiency and productivity. It would enable the comparison of the European best practices at a level wider than the national. The public display of the airports performance results and their comparison with the remaining operators from the same sector, which is named sunshine regulation, produces very good results (Marques, 2006). The awareness of airports performance is obtained by pressure of different stakeholders. The option for the creation of a European Observatory would lead to the improvement of the quality of service of the sector as a whole, leading to the “value for money” spent in this service of general economic interest. At last, note that this European Observatory should be formed by elements representing the different stakeholders (e. g. airlines, users, operators and regulators) and should work close to other European institutions.

5. CONCLUSIONS

Airports offer facilities and services related to the handling of aircrafts and to the processing of passengers and cargo and generally recover their costs through airport charges. For the European airports, in view of the current limited competition and their monopolistic characteristics, all countries have adopted some degree of economic regulation. However, airport infrastructures across the EU are characterized by different charging models (e.g. RoR and PCR), charge components, charge structure (recovery of external costs, subsidization of aeronautical costs by commercial revenues, cross-subsidization in network operated airports) and charge levels. Owing to the lack of transparency and exchange of information between airports and airlines, airport charge levels are not always properly justified to airport users. This heterogeneity may also lead to a distortion of competition between airports. The EC recognized that there are

deficiencies in the airport charges and conducted an impact assessment of four policy options. The EC also recognized that European airports are under different ownership' structures, and basic airport characteristics, such as the degree of congestion on runways and terminals, catering mainly full-service or low cost airlines, hub or destination traffic and accounting practices vary. This heterogeneity across the EU and the high administrative costs and efforts both for airports and regulators associated with the creation of a European regulator has led the EC to adopt a principle-based approach instead of a common regulatory system in the sector. Despite presenting several advantages towards cost-efficient operations of EU airports, from a theoretical point of view, the implementation of a European Regulator would face several practical problems and actually it would be almost impossible to create a single EU regulatory framework. Nevertheless, we believe that regulatory benchmarking could be used as a successful improvement tool in a lighter sense through the creation of a European Observatory. This organization would enable airports to share experiences, knowledge and best practices and incentives to the airports efficiency and innovation, and thus match the main objectives of the new draft Directive.

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