Free and Nondiscriminatory Access to Airports: A Proposal for Latin America

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Foreword

The Inter-American Development Bank has actively promoted infrastructure reform in Latin America. The Bank has also financed private projects aimed at fostering the implementation of reforms in the power, gas, water, and transport sectors. Now, the Bank is engaged in a program to develop transnational infrastructure projects.

Two regional initiatives have been recently proposed to promote transnational infrastructure: the Initiative for the Regional Integration of South America (IIRSA in its Spanish acronym) and the Plan Puebla Panama (PPP) for Central America and Mexico. These initiatives face significant challenges, most of which have not been properly appreciated because transnational projects have costs and benefits in several countries, with asymmetric distribution of those costs and benefits. These features of transnational projects raise new issues that do not appear in projects in which benefits are costs mainly affect a single country. One relevant issue for developing transnational infrastructure projects is the regulatory framework of these infrastructures. Stable and non-discriminatory regulations promote transnational investment, while regulations to protect domestic industry from external competition are a major obstacle for these investments. The Inter-American Development Bank is developing a program for studying and discussing regulatory principles for ensuring free and non-discriminatory access to domestic and transnational infrastructures.

This article discusses the regulatory framework and organization of airports in several Latin America countries in order to identify obstacles preventing free and non-discriminatory access to airport. In particular, the article exposes the basic elements of air transportation liberalization and discusses airport organization options and some basic principles on airport regulation. After reviewing the obstacles in Latin America for the integration of air transportation services, the article establishes a set of recommendations to promote competition and air transport market integration in Latin America.

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Introduction

Introducing competition and establishing an integrated regional market in air transportation services differs vastly from introducing competition into conventional or nonnetwork industries, where competition is promoted simply by market *liberalization* and privatization, followed by enforcement of antitrust law.[1] Structural measures, such as placing constraints on mergers or rulings on abuse of dominant position, may also be taken in conventional sectors to promote competition, but these measures should be *a posteriori* and as a result of behavior exhibited by companies. In network-based industries, conversely, these measures are implemented in reverse order; that is, restructuring mechanisms must be adopted in advance to enable these sectors to begin operating under a competitive model. Antitrust enforcement is only effective when anti-competitive behavior is not the natural result of the existing business structure. For example, if vertical integration is kept in place, owners of the essential facility will take advantage of this edge, making it impossible for any competition to emerge.

Two other distinguishing characteristics of the processes of establishing an integrated regional market in network industries are the need to keep regulatory constraints and the convenience of transitioning gradually toward competitive markets. Total loosening of regulatory constraints in effect is impossible because not every productive segment is able to work properly under a competitive system. In fact, most airport services cannot be offered under pure competitive regimes such as handling services or slot assignation. When air transportation agents work in strictly monopolist environments, gradual transition to competitive environments is required because lack of experience on how the market works may provoke the collapse of investment and irrational economic behavior.

[1] See Fernandez-Ordoñez (2000) for a discussion of the liberalization processes in network industries.

The importance of air transportation for economic development in general and for market integration in particular is widely recognized. However its effect on economic welfare depends on its competitive structure, which is defined by the interaction of three factors: the competitiveness of the airlines sector, the structure of airport services and the efficiency of air traffic control (ATC) and airspace services. In all three factors the basic elements that determine their competitive interaction are access policy and practices for using the noncompetitive segments. Therefore, the liberalization of the airlines sector or the privatization of airports is not a sufficient condition for introducing competition in air transportation services. In fact, if airport access policies are restrictive or airport fees are set in an anti-competitive fashion, the liberalization of airlines does not generate market integration and may even generate some efficiency loss.

Although the level of air traffic congestion is much lower in Latin America than in the European Union or the United States, free, nondiscriminatory access to airports is an important issue for market integration in Latin America. First, let us imagine that one country has a flag carrier that gets very cheap aeronautical services in its airports because of the "domestic bias." If this airline is small, and even if aeronautical costs are low, its marginal cost may be high and, therefore, fares can also be high. In addition, since the airport charges higher aeronautical fees to "foreign companies," then their fares will also be high. Therefore consumers will be worse off with respect to a situation where fees are nondiscriminatory. Traffic will also be deterred which would impede to take advantage of scale economies and constrain the speed of integration. Secondly, there is a clear process of consolidation of the aeronautical industry in Latin America (see, for instance, the case of Mexicana, Taca, Copa, Avianca-Aces, etc.). This implies an increase in the probability that strong regional carriers may try to influence the setting of fees in the airports of the area. The pressure

will increase even further if, as it is probable, these consolidated firms set hubs in particular airports. The likely increase in air traffic in Latin America, the consolidation of aeronautical firms in the region and the cost structure of the carriers make it necessary to address the issue of competitiveness in the airport industry before these processes develop fully.

In this report we are concerned with access policies and nondiscriminatory treatment for airport users, which are at the core of the regulatory and competitive environment of the noncompetitive segment of air transportation. The objective is to analyze the situation in a set of Latin American countries (Argentina, Brazil, Colombia, Ecuador, Paraguay, Peru, Uruguay and Venezuela) and propose a group of feasible regulations to deal with nondiscriminatory access to airport services in those countries. Most of the recommendations derive from the European[2] experience since this is the only process of regional air transportation integration that has been running long enough to good examples on how to promote free and nondiscriminatory airport access.

We will also discuss issues related to airport privatization as long as they are directly connected to access and nondiscriminatory fees. Even though airlines competition and air traffic management (ATM) services are also very important for the competitive structure of the air transportation sector we do concentrate our attention on the issues around free and nondiscriminatory access to airports. As we discuss previously the structure of the airlines sector and, in particular, their decisions to set hubs in particular airports are very important for the market setting of airports. The increase in the presence of a company in an airport can generate some market power that alters the general principle of free and non-discriminatory access.

The rest of the paper is organized as follows. Section 2 exposes the basic elements of air transportation liberalization. Section 3 discusses airport services and the options for organization, while Section 4 exposes a few basic principles on airport regulation. Section 5 illustrates the formation of the Single Air Transport Market in the context of European Union. Section 6 considers regional integration of air transport in Latin America. Section 7 describes the situation of airports across several Latin American countries with special emphasis on privatization issues, and it also establishes a set of recommendations to promote competition and air transport market integration in the region. Section 8 presents the conclusions.

[2] It is true that the US experience of deregulation of the airline industry is of interest. However the circumstance in which such a process took place and, in particular, the fact that it did not involved several countries, makes it less interesting for our purposes. As will be seen in this paper, most airport access problems arise from the restrictive policies of air traffic rights across countries.

Air Transportation Liberalization

A necessary condition for the integration of air transportation service markets is the liberalization of the airlines sector, which requires freedom for trading air services and for entry and exit in the industry. Industry liberalization can be described in terms of eight rights, which grade the level of liberalization of air traffic according to ownership structure of the carrier and countries where they depart or land:

1. The right to over fly a territory.
2. The right to land in another country without any commercial reason (for a technical stop-over or to refuel).
3. The right to load passengers, freight and mail in the carrier's country of origin and unload them in another country as stipulated by a bilateral agreement.
4. The right to load passengers, freight and mail in the carrier's country of origin and unload them in another country back to the origin country.
5. The right to load passengers, freight and mail in one country and then fly on to another country.
6. The right to load passengers, freight and mail in another country and unload them in a third after a stop-over in the country of origin.
7. The right to carry passengers, freight or mail between two countries and stand-alone service, where the fight does not go via the carrier's country of origin.
8. The right to carry passengers, freight and mail within the borders of another country ("cabotage").

In fact the absence of these freedoms can be interpreted as trade barriers, which is more typical of trade in goods. In particular, each of these freedoms defines a different type of service. The exclusion of foreign carriers from the provision of cabotage implies a trade restriction in a service (plane trips). However, if contracted with other services, these freedoms are not subject to negotiation in trade rounds like the WTO but they are negotiated, in general, between two countries in bilateral terms.

NETWORK OF BILATERAL AGREEMENTS

Under the Chicago Convention on International Civil Aviation (1944), international civil aviation is based on a network of bilateral agreements (on market access, fares, security, etc.) between countries, with access rights negotiated between national authorities. The use of bilateral agreements is still the main procedure to gain access to these freedoms between two countries. Under these agreements, air service between two signatory countries can be operated only by airlines owned and controlled by nationals of those countries, which means that changes in ownership nationality result in loss of traffic rights.

The Chicago Convention produced six documents for giving access to those rights on a multilateral basis. For the purpose of liberalization, the relevant documents are the III (the so called Two freedoms) and the IV (the so called Five freedoms). Document III allows the signatory countries to benefit from the first two freedoms mentioned above. Originally signed by 36 countries, today it is accepted in 100 nations. Document IV (Five freedoms) would have granted the first five rights to signatory countries, but it was never approved multilaterally.

Since 1992, the United States has signed 56 bilateral agreements with different countries to grant, and be granted, the rights to the five freedoms (with some limitations depending on each case). In November 2000, the United States signed the first multilateral agreement of "open skies" including Brunei, Chile, New Zealand and Singapore.[3] However, the traditional ten-

[3] Peru was included after the original agreement. The approval by the Chilean Congress took place on June 19, 2002.

dency of the US Department of Transportation to open skies (already in the Chicago Convention it pushed for the Five Freedoms) has at least two limitations in his own airspace: the first restriction is related to freedom 7 and 8 (cabotage) since it does not allow non-US companies to fly between two US cities even that portion is part of an international flight. The second restriction establishes limitations on the stake of US airlines in the hands of foreign investors. In US airlines, at least 75% of the stock with voting rights should be in the hands of US citizens. In addition, the president and at least two thirds of the board of directors should be American citizens. This second restriction is generating many problems with respect to the multilateral agreement signed in 2000.

OTHER AGREEMENTS

At the regional level, the more significant multilateral agreements are the ones on open skies at the European Union, the Cartagena protocol of the Andean Community and the Fortaleza protocol of MERCOSUR. The depth and extended experience of the European Union regulation on open skies deserves special consideration since many lessons can be learned, and possibly applied to Latin America.

Choices for Airports' Organization

Airports are considered essential facilities with limited competition capacity. Nevertheless, the number of services provided by airports is large and complex and some of those services may be provided with some degree of competition. Table 1 presents a summary of airport services divided in three large categories: operational, handling and commercial. The apparently limited scope for competition among most airport services does not preclude enhancing efficiency thorough competition among different airports or different providers within a given airport. In fact, as will be discussed below, there are successful examples showing that most services in Table 1 may be provided efficiently with some degree of competition.

BUNDLING VERSUS UNBUNDLING AIRPORTS

The first choice to be made is whether airports can be considered for private participation in isolation or as part of a national airport system. The package for private participation can include a set of airports grouped by geographical location (as in the Mexican case), a set of large airports (like in Argentina) or only one airport at each time (the rest of the countries considered in this report). In general, when private participation involves one airport at a time, only the profitable airports are included. In many of these cases there will be cross-subsidies[4] from the privatized airports to the public airports system.

But even when privatization involves a set of airports in a bundle, there may be cross-subsidies from profitable airports to unprofitable ones carried out by the private operator (like in the case of Argentina).

An unbundling program for private sector participation in a country's airports allows competition among the different airports, while a bundling program shrinks the market. However, this general principle is limited by the financial viability of isolated airports. Other aspects that should be taken into consideration when deciding on an airport package for private participation are differences between freight and passengers. Distance from final destination is essential for passengers, while logistic infrastructure is the variable relevant for freight.

Table 1. Airport services.

Operational	Handling	Commercial
Air traffic control (ATC)	Aircraft cleaning	Retail shopping
Meteorological services	Provision of power and fuel	Restaurants
Telecommunications	Luggage and freight loading and unloading	Leisure activities
Police and security	Processing of passengers, baggage and freight	Hotel accommodation
Fire and ambulances		Banks and money change
Runway, apron and taxiway maintenance		Car rental and parking
		Conference facilities
Airside services		Landside services

Source: Betancor and Rendeiro (2001)

[4] On cross-subsidies see Beato (2000).

AIR TRAFFIC CONTROL

Airport infrastructure includes not only airport spaces but also all other infrastructure needed to help airplanes travel from one airport to another. Those include air traffic control, route ATC, meteorology, aeronautical communications, aeronautical aide, etc. These services can be provided jointly or separately from airport space and other airport services. Therefore, several decisions should be made when reorganizing a publicly owned airport. First, the competitive or monopolistic regime under which the air traffic management service will be provided. Second, bringing private sector participation to those services. Third, ATM provision independently or together with other airport services The Latin American experience, as most of the international cases, is that the ATM services are provided under a monopolistic regime which is kept under governmental control through management by civil aviation authorities[5]. Although in this paper we will assume that whatever the arrangement for the rest of the services are, the ATM services are provided by the public sector under a monopoly regime. However, we should note that one of the important reasons for privatizing airports (i.e., to obtain resources to finance large and complex infrastructure projects) is also present in the case of air navigation services. In addition, the efficiency of those services is basic for competition in air transportation services. Nevertheless, security and national defense arguments weight more than the need for financing in the provision of this particular service.

BUNDLING VERSUS UNBUNDLING OF OTHER SERVICES

Separation of competitive and monopolistic services must be the general principle for choosing the organization of airport services. Services provided under a competitive regime may be provided in any fashion. The first issue, therefore, is deciding the service provision regime. Today, there is proof that allowing companies to operate simultaneously as both monopoly and competitor obstructs, or at least delays, the start-up of competition. Third-party access to monopoly-owned networks is only viable in sectors where the potential for competition between networks exists. Lacking such potential, the presence of any other competitor firms in the market would be merely symbolic.

The regimen for providing ground-handling services deserves special attention. Ground-handling services comprise all activities performed during an aircraft stopover, with respect to the aircraft, passengers, and cargo. In general, ground-handling services may be provided to airlines by the airport operator, another airline or an independent, specialized ground-handling company. Air carriers may also provide their own handling services, either individually or pooled. In most Latin American airports with a private operator, the airport operator provides these services under a monopoly regime. By contrast, in the European Union, freedom for third-party suppliers was established on January 1, 1999. Countries are allowed to set restrictions to this freedom since specific constraints imposed by the availability of space or capacity make it impossible to open up the market. However the Commission has received many complaints concerning the supply of poor ground-handling services at exorbitantly priced in monopolistic regimes. The Commission took steps to ensure that the monopoly was broken and that second operators were allowed entry on a non-discriminatory basis. These are some of the most difficult cases the Commission must handle.[6] Often, there is substantial local political interest in the outcome of these cases. Moreover, they raise significant questions about the technical feasibility of allowing competing operators to provide services where safety is of paramount concern and space is limited.[7]

INVESTMENT VERSUS MANAGEMENT

The basic functions related to airport services are regulation, investment and management.

[5] Only in a few developed countries steps have been taken to corporatize air navigation services.

[6] We discuss at length the issue of ground handling competition in the following sections.

[7] See D. Wood (2000)

Regulation responsibility always lies with the public sector. In most cases, regulation refers to airside fees and charges (landing fees, parking charges, take-off fees, etc.) and not to landside services. A public institution under the department of transportation or other governmental department usually carries out this role.

Many options are available for distributing the other two functions between the public and private sectors[8] for each airport service. Regarding investments, the government maintains the responsibility for planning investment in airports through the civil aviation authorities (CAA) and the department of transportation. However, when bringing private sector participation to airports, financing airport investment is assigned to the private sector through appropriate concession contracts or similar arrangement. The need to guarantee the financing of expensive airport projects is one of the basic reasons that justify the increasing presence of the private sector in airport infrastructure, specially in countries where financing large public projects could be problematic (as in Latin America).

In some cases, the assets of an airport can be held by the public or the private sector. The ownership could refer to all airport services, to airside services (like owning a runway) or to landside services. Table 2 shows the basic choices for private participation in airports according to the responsibilities transferred from the public sector and the specific legal instruments used to materialize the participation.

It should be noted that the three cases could coincide in a single airport. For instance, a private company, say company A, can have a BOT for investing in and managing a new runway of an airport, a private company B can own and finance the infrastructure to deliver handling services, and a public company C can manage parking space that belong to the public sector.

The simplest type of private participation is Case 1, which when only involving landside services can be observed in many airports around the world. The increasing participation of the private sector in the management of airports has implied its presence also in the provision of airside services. Investment commitments are either lacking or they are very low (only maintenance). The instruments used to allow the private sector to provide these services are concession contracts, management contracts and the contracting-out of some services (maintenance, security, etc.). Examples of Case 1 are the airports of Cartagena and Barranquilla in Colombia.

The second case is the option usually chosen in Latin American when privatizing airport infrastructures. It involves a long-term concession to the private sector of airside and/or landside services in return for a commitment to fund the required investments for the development of the

Table 2
Options for Private Sector Participation In Airports

	Case 1	Case 2	Case 3
Management	Private	Private	Private
Financing Investment	Public	Private	Private
Ownership	Public	Public	Private
Vehicles	Service concession Contracting-out Management contracts	Built Operate and Transfer (BOT) Long Term Leases Master concession	Private Equity Capital Markets

Source: Juan (1995)

[8]ARDF (1992) and Juan (1995).

facility and its operation and management. The concession determines what part of the revenues of the airport the concessionaire should receive. It may only involve landside revenues or some, or all, of the airside charges and fees.

Many airport privatizations in Latin America are master concessions, an LDO (lease-develop-operate) or a BOT (build-operate-transfer) scheme (like the second runway of El Dorado). In a BOT, the private firm has the obligation to build a facility (this is usually a passenger terminal, but could also be a runway or the whole airport) and to operate the facility for the duration of the lease after which it is transferred to the public sector. The case of El Dorado is interesting since it involves a BOT for a second runway and the operation and maintenance of both runways. The third case, which involves the transfer of property to the private operator, has not been used in Latin American airports yet.

Table 3 shows the services provided by the air transportation industry divided into three basic segments: airline services, air traffic management and airport infrastructure services. Although airline and traffic management services required a large investment, it may be moved from one location to another with relatively low cost. Thus, competition and entrance are theoretically possible. As pointed out before, for security reasons in most countries, air traffic management services are provided by the public sector under a monopolistic regime. However, fees for providing ATM services must be nondiscriminatory and fair. These services were not regulated due to lack of tradition of regulating public sector providers. Nevertheless, experience shows that discriminatory practices between national and foreign airlines are a common practice in many Latin American countries.

Airport infrastructure is characterized by the presence of large sunk costs. Therefore, it cannot be provided under competitive regimes and regulatory restrictions should be established. Although regulations of airport services depend upon the organizational structure of the airport, some general principles should inform the regulatory frameworks of countries willing to promote competition and integration of air transportation services.

PRICE REGULATION OPTIONS

The type of regulation with respect to the price of airport services is also important. In general, any regulation establishes a trade-off between efficiency and information rents.[9] On one extreme we have *low powered incentives* (like cost of service or cost-plus regimes). Low powered incentives are low risk regimes for concessionaires since cost recovery is guaranteed with independence of demand. However, this type of regulation generates very few incentives to reduce costs. At the other end of the spectrum we find *high-powered incentives* (price-cap regulations) that give firms a schedule of price cuts over a period of time to guarantee cost reductions. These incentives shift risks to private operators.[10] There are also intermediate situations called medium-powered systems, or *hybrid systems*, which imply a certain degree of rent sharing.

In general, price-cap regulations are considered the best way to balance rent extraction and incentives for cost minimization. However, price-caps may be ineffective as regulators force continuous renegotiation that erodes incentives to minimize costs. For this reason, some argue that traditional rate of return regulation may be more appropriate in some situations. However, in Latin American countries there are at least two factors that favor the use of price-cap regulation: the lack of reliable accounting procedures and the lack of regulatory experience. In addition, as experience has shown, rate of return regulations are not more effective than price caps when governments have little credibility.

Table 3. Market Power in Air Traffic Services

Services	Fixed cost	Sunk cost
Airline	Yes	No
Air traffic management	Yes	No
Airport infrastructure	Yes	Yes

Source: Knieps (2002)

[9] Laffont and Tirole (1993) or Laffont (1999).

[10] Alexander et al. (1999) have shown that the assets betas of airports regulated by price caps are higher than the same betas for the intermediate or the cost-plus regimes, which provides empirical evidence of the riskier nature of high-power schemes versus low-power systems.

Air Transport Single Market: The EU Experience

The European Air Transportation Single Market is one of the most interesting experiences of liberalization and regulation of air transportation. It can serve in some instances as a set of good practices for the improvement of competition. It also represents a good example of how badly set regulations can be abused by market players in the air transportation sector. The lessons from the evolution of competition in the air transportation sector of the EU can be very helpful in the formulation of recommendations for Latin America.

The integration of EU countries in a single air transport market had three basic elements:

- The configuration of an *open skies agreement*, which increases the number of air freedoms that countries concede to each other and favors competition among the airlines of different countries. This is a precondition for infrastructure competition.
- The configuration of a *single sky area*, which integrates airspace regulations, ATS certifications, safety regulations, etc. This process of technical homogeneity favors transparency and the competitive environment.
- The implementation of *regulation* to avoid the abuse of a dominant position in the airlines sector and in the airport sector. These types of regulations are particularly important in the infrastructure sector since many services are natural monopolies.

OPEN SKIES IN THE EUROPEAN UNION

Perhaps the most successful achievement outside of the bilateral paradigm has been the liberalization of air transportation in the European Union. For this reason it is interesting to turn now to this case. The liberalization of air transportation in the European Union follows three stages. The so called *first package* was adopted in 1987. With respect to access to markets other than the carrier's own country, the first package established the possibility of sharing seat capacity between carriers of two countries that had a bilateral agreement with no obligation of adopting the 50/50 split rule. The *second package* was adopted in 1990. It allowed carriers to load passengers, freight or mail in another country and bring them back to the country of origin and, with few limitations, it permitted loading in one country and flying on to a third country. This regulation is of general application for carriers of the European Union. The so-called *third package*, operational since the beginning of 1993, included a gradual liberalization of the services not included in previous packages and culminated in 1997 with the liberalization of cabotage.

The basic elements of the third package are:

- *Community license*. Carriers for which the member states or nationals of the EU hold the majority of their capital (and have de facto control of the carrier) were allowed to receive a Community Air Transport Operator's License (conditional on having national certification proving the carrier's technical fitness and financial situation).
- *Freedom of access to the market for carriers with community license.* It allows unrestricted access to international and intra-Community routes for any carrier holding a Community license. In 1997 it included also the unrestricted access to all domestic markets. There is only a safeguard concerning public service obligations which allows governments to maintain essential services setting conditions in terms of capacity, frequency and fares.
- *Price freedom.* It is no longer required that carriers file their fares with national authorities.

THE SINGLE EUROPEAN SKY

Another important issue related to access has to do with the characteristics of the air traffic management system and its integration across countries. The basic features of the single European sky are:

- A single regulator.
- Regulatory agency separated from service provision.
- Uniform airspace design without national borders.
- Once an ATS certificate is recognized by one country it is valid within the EU.
- Charge schemes that encourage low costs without endangering safety.

In order to develop the single European sky it was a priority to sign the accession of the EU to EUROCONTROL. This took place on the 8th of October 2002 when the EU signed the Protocol on the accession of the European Community to EUROCONTROL after more than two years of long negotiations. This represents an improvement in the European air traffic management that could accelerate the process towards a single European sky. One of the basic programs of EUROCONTROL is the Performance Enhancement Program for European Traffic Management, which has four basic objectives:

- Improve safety levels.
- Reduce en route delays to less than 2.5 minutes per flight on average (the objective is to reduce delays below 1 minute by the summer of 2006).
- Further reduce en route air navigation unit costs (between 1994 and 2000 these costs fell from 0.86 Euros to 0.67).
- Mitigate the effect of ATM on the environment.

AIRPORT REGULATIONS FOR A SINGLE MARKET

However, freedom of access does not guarantee competition if some other conditions are not met. There are at least four other issues that are important for competition and non discriminatory access to the air transport markets. The liberalization of the *handling* market is basic to guarantee non-discriminatory access. Since 1996 these services have been gradually liberalized. Full liberalization is expected to be operational at the end of 2003. Another important issue is the *allocation of slots*. If a carrier is granted access to load passengers, freight and mail in an airport of a country different from the one of the owner of the airline, but there are no slots allocated to take-off and landing operations, then freedom of access becomes an empty concept. The initial rules in the EU imply that an established carrier will keep its slots no matter how little it uses them. However, the regulation also stipulates that 50% of the unused or newly created slots must be allocated to newcomers. Finally, and less important than the case of handling, *airport charges* related to landing fees, parking fees, passengers fees, etc. should also be set in a way that does not deter the entrance of new carriers that have been granted access to the infrastructure. In April 1997, the European Commission proposed to regulate these issues by means of a directive in order to reduce the effect of high airport charges on new carriers. The basic idea of the proposal was to set prices according to the cost of the services provided while guaranteeing the transparency of the charges.

The air transportation legislation in the EU includes regulation of all the issues mentioned above. The basic regulations before the culmination of the third package was:

- Licensing of air carriers (Council Regulation 2407/92).
- Fares and rates for air services (Council Regulation 2409/92).
- Computer reservation systems for air transport services (Council Regulation 3652/93).
- Definition and use of compatible technologies and operating specifications (Council Directive 93/65).
- Common rules for allocation of slots (Council Regulation 95/93).
- Regulation on access to the ground handling market (Council Directive 96/67/EC).

THE RESULTS OF THE EUROPEAN OPEN SKIES

The increasing liberalization in line with open skies agreements and the achievement of the eight freedoms is not a sufficient condition for competition.[11] In fact, the experience of the EU with respect to the European aviation single market is very illustrative of the challenges of promoting competition in air transportation. Different regulatory and commercial barriers can be used to restrain competition in the aviation single market resulting from the open skies agreement. In some areas, member states still have differentiated practices that can alter the functioning of the single market, despite the provisions of the third package. In fact, the application of the EU regulation with respect to air transportation has encountered many problems. The EU legislation has been challenged, in practice, by some states and airports. Moreover, some of the regulations were technically imperfect or ineffective. For this reason, the Commission has proposed changes in the original regulation of airports. The main practical problems with the application of the legislation and the legislative reaction of the Commission can be clustered around access to slots, discretionary measures by national authorities, leasing of aircraft, barriers to ground handling competition, discriminatory treatment with respect to fees and services and open skies with third countries.[12]

Access To Slots

Access to slots is the most important problem faced by carriers, specially when they compete with national flag carriers. The slot allocation mechanism is an important barrier to true competition. In principle, as we mentioned before, the incumbent kept the slots they had before liberalization while newcomers could ask for 50% of the unused or newly created slots. In practice, the high degree of congestion of the slots at the time of adoption of this regulation (October 1993) implied a very limited ability of new entrants to compete against incumbents. The problems of airport capacity mean that the pool of slots that can be allocated to newcomers is small. Additionally, flag carriers and incumbents had the mechanisms to control the allocation of new slots: the signature of franchises and alliances with other partners and the bias in favor of large airlines in the allocation of slots because slot coordinators are often former employers of flag carriers. In addition the Directive on slot access was also largely ineffective because established carriers prefer to operate loss-making services rather than to return slots to the pool.

The Commission has taken discretional measures to enable the entry of new competitors. For instance, *alliances between two carriers involving operations in congested airports have been accepted conditional on the alliance giving up some of the slots at those airports.* A particular case was the alliance between Lufthansa and SAS. The Commission required the airlines to give up 224 weekly slots in exchange for the eight core routes between Germany and Scandinavia were Lufthansa and SAS were the only operators. Despite this requirement, there are still no other airlines competing with these alliance partners. As a result, the Commission has included additional clauses to authorize alliances that can restrict competition in some routes. For instance, it authorizes alliances provided that there actually is a new entrant on certain key routes. However, the problem arises when a new actual entrant cannot be found. This is quite likely since EU flag carriers operate mainly from their home markets and competition on routes that do not connect their national hubs with other airports is very unlikely.

The Commission has also proposed changes in the regulation ECC 95/93 *on common rules for allocating slots at EU airports. Regulation 95/93 was clearly insufficient to lead to a fair, non-discriminatory and transparent allocation of slots. Thus, the Commission asked* Price

[11] Liberalization has addressed only air service within the boundaries of the EU. The routes between EU countries and countries outside the EU are still regulated by the traditional system of bilateral agreements.

[12] European Commission (2002), The European Airline Industry: from single market to world-wide challenges.

Waterhouse Coopers *to prepare a report on measures to improve the situation.* Two specific problems required a change in the regulation. First, parts of the regulation were unclear with respect to transfers and exchanges. The main problem with slot allocation was the balance between the interest of the incumbent and the new entrants in airports that operate close to full capacity. Grand fathered rights were not sufficiently flexible to guarantee efficient use and competition. Slot hoarding was very common even if it was economically inefficient. These actions reduced the number of new entrants. Second, the rules were not clear enough with respect to enforcement mechanisms and the legal nature of slots. The *Price Waterhouse Coopers* study points out two basic options: restrict grand fathered rights or create a system for the secondary trading of slots.

However, the EU Commission warned against free slot trading quoting the US experience, which deviates from the IATA Scheduling Guidelines. Most of the parts agreed that unilateral slot transfers, in the form of slot trading, was not the right answer to the problems since slot trading did not help to improve competitive in US airports. The proposal for amending Regulation 95/93 includes the following elements:

- Airport coordinators should be neutral and independent. This means that the coordination should not be under the control of the main carrier or the airport. Allocation should be transparent and all the relevant information should be public.
- It clarifies the legal nature of slots. They are entitlements to access the airport infrastructure at specific times of the day during the scheduling period. Slots do not generate property right neither for airlines nor for airports.
- With respect to the allocation of slots the new regulation opens the possibility to retime slots with grandfather status and require a minimum size of aircraft for the use of slots. It reconfirms the "use it or loose it" principle on the basis of coordinator clearance (which happens if at least 80% of the time during the six-month period the slot has been operated) for the next period. After the initial allocation, air carriers can exchange their slots one-to-one so as to move closer to there initially required times.
- Prohibition and strict monitoring of slots transfers, including slots leases between air carriers with or without monetary compensations. Slots can only be transferred within a group of air carriers with corporate links.
- In order to balance the grandfather rights, the new regulation improves the definition of "new entrant". In addition it allows new entrants to exchange their slots provided they improve their timing.

Since there have been many cooperation schemes among airlines in recent years (codesharing, joint operations or franchise operations), the limits of the proportion of slots that a single carriers could hold were increased from 3% to 7% per day for a single carrier.

Discretionary Measures by National Authorities

Some airlines complain that national authorities in some EU states impose barriers to competition by using very strict public service obligation contracts, bilateral agreements with non-EU markets and allocating slots in a discriminatory way. The most important barrier is the application of article 4 of regulation 2408/92 with respect to public interest in air transportation. Some EU countries have interpreted the public interest in a very broad sense requiring a large set of conditions in their domestic markets.

Leasing of Aircraft

Another provision that has a different interpretation in different EU countries is the leasing of aircraft registered outside of the EU. Article 8 of Regulation 2407/92 regulates leases and requires the aircraft to be registered within the EU. However, under special circumstances, a member state may authorize a short-term lease of an aircraft registered in a non-EU country. Therefore, depending on the rules for licensing aircraft in non-EU countries there will be a differential

treatment with respect to safety, environmental effects, and other matters within EU countries. This is contrary to the basic principles and the coherence of the EU market.

Barriers to Ground Handling Competition

The basic regulation covering competition in ground handling services is Council Directive 96/67/EC, which has two basic parts: freedom of third party handling and freedom of self-handling.

Freedom of third party handling applies to airports whose annual traffic is not less than 2 millions passengers or 50.000 tones of freight.[13] The basic objective of the Directive is to ensure free access to the market for the provision of ground handling services to third party suppliers of those services. The general rule of free access has an exception: member states can limit some ground handling services (baggage, ramp, fuel and oil and freight and mail), but never to fewer than two for each category of ground handling. In addition, at least one of the authorized suppliers many not be directly or indirectly controlled by the managing body of the airport, any airport user or a body controlled directly or indirectly by any managing body or user.

Freedom of self-handling, which applies to all airports regardless of their traffic volume implies that there must be at least two airport users at airports with more than 1 million passengers or 25,000 tones of freight per year in particular handling services (baggage, ramp, fuel and oil and freight and mail). Member states may reserve the right to self-handle to no fewer than two airports users chosen with objective, transparent and non-discriminatory criteria. In addition if an airport has specific constraints of available capacity that make it impossible for it to open the market to self-handling, then the member state may limit the number of supplier for one or more categories of ground handling, reserve one or more categories of ground handling for a single supplier or reserve self-handling to a limited number of airport users.

Many European carriers complain that the directive on ground handling liberalization is not sufficient to guarantee competition since it has too many safeguards, does not ensure enough competition and is not compulsory for airports with less than two million passengers. Examples of these problems abound. For instance, several airlines complained that the Frankfurt ground handling market was an effective monopoly. The Commission ruled that Frankfurt Airport could not enter into long-term contracts with its best customers. The Commission also found that ADP (Paris Airports) levied discriminatory fees on caterers, while introducing competition on ramp services. Not surprisingly the lowest fees were paid by a subsidiary of Air France.

In general, there are six basic problems with the application of the ground-handling directive.[14] First, some national administrations have not been sufficiently diligent in implementing the Directive. Second, handlers are granted too short periods of license. Third, various forms of abuse of dominant position have appeared as a consequence of the involvement of the airports operators in ground handling. Fourth, several airlines complain that requirements for a minimum of one handler that is independent of the major airlines suppresses competitive pressures on that independent handler. Fifth, new entrants in the handling market complain that their market share is constrained by the monopolistic supply of ramp services. And sixth, some new entrants complain about the quality of the facilities provided by the airports to perform their operations.

The EU Commission will revise the ground handling directive on the basis of a study of the quality and efficiency of ground handling services at EU airports that will result from the implementation of Council Directive 96/97/EC that was recently presented by the SH&E International Air Transport Consultancy (2002).

[13] If it reaches the freight threshold but not the corresponding a passenger movement the Directive does not apply to categories of ground handling services reserved exclusively for passengers.

[14] SH&E International Air Transport Consultancy (2002).

Discriminatory Treatment With Respect To Fees And Services

Since the beginning of the process of air transport liberalization, some member countries and airports have adopted decisions that affect competition among airlines, showing a tendency to identify the public interest with the interest of the former flag carrier. Several Commission decision attempt to avoid this kind of discrimination. It deemed that the practices described below are *non-competitive*, including discriminatory landing fees, discrimination based on the quality of the services provided and discriminatory traffic distribution between airports.

Discriminatory landing fees. There are two basic variants of this situation. The Brussels airport, for example, set up steep discounts on landing fees depending on the volume of flights to the airport. In principle, this volume rebate would not have been a problem. However, since the only company that could meet the lowest threshold was Sabena and the discount was around 30%, the Commission prohibited this practice. A second example can be found in two decisions by the Commission against landing fees in Portugal and Finland. In both cases the system discriminated between domestic flights and intra-EU flights giving to domestic flights a discount between in landing fees of between 50% and 60%.

Discrimination based on the quality of the services provided. In 1996, the operator of the Paris airports assigned the exclusive use of West terminal (a large and modern terminal) at the Orly Airport to Air France and sent other carriers to the South (a smaller, older terminal lacking the capacity to handle so much traffic). The Commission argued that Air France could not have the exclusive use of the West terminal and that the South terminal should be renovated in order to improve the quality of the services it provided.

Discriminatory traffic distribution between airports. In 1998, the Italian government mandated the transfer from Linate to Malpensa for all traffic (except the Rome-Milan route). Alitalia was permitted to send passengers from Linate to Rome to supply onwards routes, but other companies could not feed passengers from Malpensa to their hubs because of insufficient transportation for their volume of passengers. As a result, persons flying to Linate would have to take an Alitalia flight in order to avoid a long trip to Malpensa.

In April 1997, the Commission prepared a proposal outlining airport charges. The need for this proposal was based on three arguments: (i) the charging systems were complicated, had no transparency and vary from country to country; (ii) active discrimination in some airports which offer discounts to national flag carriers and national (domestic) services; and (iii) fares that did not reflect the cost of services. The draft proposal was based on the principles: of transparency, non-discrimination and cost-relatedness. In particular, the same charges should be applied to "intra Community air services in terms of aircraft types and characteristics, the distance flown and/or the administrative and customs formalities;" charges should be related to overall costs, including a reasonable rate of return on invested capital.

The opposition of the ACI and the conflicting interests of several EU member countries made approval of such a proposal at that time impossible. Nevertheless, the Commission has continued its efforts to reform and homogenize charging schemes. It recently published a white paper on fair payment for infrastructure use, which contains the basic principles that should apply to infrastructure charges in order to avoid discriminatory treatment. The reason for a common infrastructure charging policy is that charges affect the competition in the internal market. The basic principles, some of which appeared already in the 1997 proposal, are transparency, non-discrimination, cost-relatedness, user pays and marginal social cost charging. There are three phases in the application of the fair payment document. The second phase lasts until 2004 and the third phase starts at that date.

With respect to the air transportation sector, the fair payment document distinguishes between ATS charges and airport charges. ATS charges are used to recover total costs, not just variable costs, and do not consider environmental and congestion costs fully. Principles governing ATS charges are established by international organizations like the ICAO or Eurocontrol. Given this, the document suggests that this area does not need immediate action by the Commission although a more precise use of the principles of "user pays" and "polluter pays" will result in more efficient charges. To reduce the possibility of excessive charging by airports, the Commission proposes to apply the principles of cost-relatedness. This implies that airports charges should be based on the cost of facilities and services provided by the airport.

Open Skies With Third Countries

Finally there is another important concern with respect to the issue of access to market that has to do with the signature of bilateral agreements between member states and non-EU countries. The so called "headache of open skies agreements" is a direct consequence of the bilateral agreement signed between EU countries and the United States, and also of the lack of external dimension in the single European aviation market. The Commission has argued that open skies agreements are a major distortion of the internal market created by the third package because they grant the 5th freedom to US carriers within the EU and, indirectly, discriminate between EU carriers on grounds of nationality, giving those airlines whose countries have signed an agreement a competitive advantage over the rest. The European Commission was given a mandate in June of 1996 to negotiate a multilateral agreement with the United States but, since they could not negotiate traffic rights, it was of little help to solve the problem. The European Commission has asked to the Council of Ministers on many occasions to include traffic rights in the negotiation, but the Council has opposed it. For this reason, the Commission challenged these open skies agreements in the EU Court of Justice. On January 31, 2002 the Advocate General announced that bilateral ("open skies") agreements concluded by some member countries (the United Kingdom, Denmark, Sweden, Finland, Belgium, Luxembourg and Austria) went against the EU legislation.

Regional Integration and the Air Transport Sector in Latin America

Air transportation in Latin America is very complex. There are more than 44 civil aviation authorities and 39 flight information regions. In addition, the liberalization of air traffic access in Latin America has been based on bilateral agreement with the United States and the European Union as well as regional open skies protocols among Latin American countries. Most analysts recommend an intensification of the open skies policies in Latin America before signing open skies agreements with the United States or the European Union. Two examples of open skies agreements among Latin American countries are of interest to this discussion: the Andean Community and MERCOSUR.

THE ANDEAN COMMUNITY

The Andean Community is a sub regional organization with legal status. It is formed by Bolivia, Colombia, Ecuador, Peru and Venezuela. The initial agreement was signed in Cartagena in 1969; although Venezuela did not sign it until 1973 and Chile withdraw in 1976. For the purpose of this report, the single most important event in the chronology of the integration of the Andean Community took place on May 17, 1991 when the presidents of the member countries approved the open skies policy (the so called Cartagena protocol). This is known as Decision 297 and establishes the extension of the open skies policy for the Andean countries. This regulation was complemented by decision 360 (on the concept of scheduled and nonscheduled flights) and Decision 320 (later modified by decision 361) on multiple designations for air transportation in the Andean sub region.

Decision 297 establishes the two freedoms among the countries integrated in the Andean Community (art. 4), but without restricting the facilities that those countries have granted (or could grant) to each other under bilateral or multilateral agreements (art. 3). Decision 297 also grants to the Andean countries the free exercise of the third, fourth and fifth air freedoms for regular passenger, cargo and mail within the subregion (art. 5). Another important element of this decision is the acceptance of the principle of multiple designations for the provision of regular services (art. 9).[15] In addition, Decision 297 points out that the Andean countries ("while maintaining the principle of equity and under appropriate formulas for compensation") grant each other the fifth freedom of air traffic rights for regular flights subject to bilateral or multilateral negotiations in flights between subregional and third countries (art. 11). Finally, article 14 creates the Andean Committee of Aeronautical Authorities. Decision 360, which was adopted in Peru in 1994, modified the meaning of scheduled and unscheduled flights that appeared in Decision 297 in accordance with the International Civil Aviation (ICAO) guidelines.

AIR FREEDOMS AND MERCOSUR

In December of 1996 the countries of MERCOSUR (Argentina, Brazil, Paraguay and Uruguay) signed an agreement (in line with the Fortaleza Protocol) for the provision of subregional air transportation services with Bolivia and Chile. This protocol allows regular air transportation services among the countries that signed it, in routes different from the ones for which they had bilateral agreements. Many of the provisions are similar to Decision 297 (multiple designation, elimination of discriminatory measures, subsidiary regulations with respect to previous

[15] Decision 320 (1992) defines clearly the meaning of multiple designation in the context of the Cartagena Protocol. It also establishes the principles of free and non-discriminatory access for the airlines of the countries in the Andean Community. The designation of an airline for regular transportation will not have any effect on its ability to provide non-regular services. Decision 361 (1994) modifies two articles of decision 320.

bilateral agreements signed by the countries, etc.). Article 4 grants to the designated airlines the first and second freedoms of air traffic. It also points out that designated airlines have the right to load and unload passengers, freight or mail in regular flights inside the subregion. Finally, article 12 creates the *Consejo de Autoridades Aeronáuticas* (CAA), which supervises the application of this agreement. The agreement has to be renewed every three years.

BILATERAL AGREEMENTS

As in the case of the European Union, the most important set of bilateral agreements is the one signed by Latin American countries with the United States.[16] Currently, three countries have signed open skies agreement with the United States: Chile (September 1997), Peru (May 1998) and Argentina (August 1999).[17] Other Latin American countries have signed agreements that cannot be considered open skies. Colombia signed an agreement on routes, frequencies and all cargo rights in March 2000, and Brazil signed agreements in June 1995, October 1996 and October 1997 regarding carrier frequency, charters and scheduled capacity.

Peru and Argentina could have open skies in 2003. Peru's Minister of Transportation announced that his country and Argentina have agreed to increasing frequencies between the two countries, increasing from the 7 currently allowed to 21 weekly flights by December 1, 2002, 28 in July 2003 and totally open skies by the end of 2003.

On August 13, 1996, Chile and Argentina signed a protocol that granted free access to regular air transportation of freight for both countries and any third country of the American continent without limitations regarding the flight material or points of operation. With respect to passengers, each countries granted the other the third, fourth, fifth and sixth air traffic freedoms. The designated airlines could have any joint venture, block space or code sharing with any other airline if they have the appropriate rights.

On February 10, 1983, Argentina and Uruguay signed the Regular Air Transportation Agreement under which grant each other all freedoms of air traffic with the exception of cabotage. The agreement also included multiple designations even though the conditions for the unilateral cancellation of the designated airlines by the other country were quite strict.

There has been some talk about the possibility of an open skies agreement between the Andean Community and Mercosur, which would lead to open skies for all of South America. In general terms, Brazil is the least eager to sign open skies agreements.

[16] Notice that the US-Latin America routes are the largest air transportation market in the region representing the 57% of traffic flow in 2001 (for comparison the within Latin America routes represent 30% of the traffic, Europe 12% and Asia 1%). Most of the traffic in the US-Latin America market originates in the US & Canada (64%) although 57% of the passengers are Latin America citizens.

[17] This agreement was suspended by the Government of de la Rua in 2000, even though negotiations continued.

The competitive structure of airport services is very important for the level of competition of the whole air transportation industry. The sunk cost nature of large investments in airport infrastructure and arguments of national security and safety have kept in public hands most of the airports (property and management). This fact has an effect on access and non-discrimination policies at airports since public owners tend to favor domestic user over foreign ones. Private management is less driven by the nationality of the airlines even though it may be affected by hub and spoke policies and non-competitive arrangements. Therefore, it is useful to evaluate the extent and conditions of airport privatization in Latin America in order to develop appropriate policy recommendations.

This section provides an overview of the current status airport infrastructures in most Latin American countries. During recent years there has been a trend toward the privatization of airports that has also affected many countries in Latin America. The PPI database includes 18 transport projects with private participation in Latin America that were undertaken during the period 1990 to 1999. Table 4 presents a summary of the current situation.

ARGENTINA

In 1997, the Government of Argentina (Laws 375 and 500) privatized through concessions the operation and administration of a large part of the National Airport System (*Sistema Nacional de Aeropuertos*, SNA, which is made includes 33 out of 57 airport). In January 1998, the Government of Argentina awarded the concession to *Aeropuertos Argentina 2000* (AA2000), a group that included *Societa per Azioni Esercizi Aeroportuali SEA, Societa Italiana per le imprese miste all'estero simest SA, Riva sociedad inmobiliaria, OGDEN Corporation* and the *Corporación América Sudamericana, SA*. In fact, 32 airports were taken over by *Aeropuertos Argentina 2000* during 1998 and 1999.[18] There are two other concessions of airports that do not belong to SNA. They were awarded to *London Supply SA* and include the Malvinas Argentinas airport (in 1995) and the Calafate airport (November 2000). The AA2000 concession, a BOT, had the following characteristics: (i) a 25-year period,

Table 4. Privatization of airports in Latin America

Country	Concessions	In progress
Argentina	32	1
Bolivia	3	-
Brazil	-	2
Colombia	3	1
Ecuador	-	2
Paraguay	-	2
Peru	1	-
Uruguay	1	1
Venezuela	1	1
Total	41	10

[18] The Jujuy airport was still pending.

(ii) an investment commitment of US$2.2 billion and (iii) royalties of US$171.2 million per year.[19]

In order to regulate the privatized part of the system and manage the public airports, the government created *Organismo Regulador del Sistema Nacional de Aeropuertos* (ORSNA), which functions in the Department of Economy and Infrastructure. The agency's aims include setting airside fees and charges, approving development plans and overseeing the quality of the services provided by the airports. In cases of conflicts between AA2000 and the airlines, the airlines could ask for ORSNA mediation. However, ORSA does not set landside fees.

IATA has criticized the lack of transparency of fees, the existence of large cross-subsidies across profitable and non-profitable airports and the increase in fees (although landing fees were required to remain stable for five year, there has been an increase in landside fees and new unregulated airside fees). In addition, IATA has doubts about the ability of AA2000 to pay such a high royalty when the total airport system generates only US$140 million per year. IATA sources point out that AA2000 owes the Argentine Government US$240 million.

The problems evident in Argentina's privately managed airports show how sensitive infrastructures regulation is to establishing the right arrangement. It has been apparent in the past that, in some instances, Latin American governments have seen privatization only as a source of financial resources to deal with fiscal stress rather than as a means of improving efficiency and the provision of services. As a result, they have tended to set many fees and establish concession rules that leave the concessionaire without sufficient tools to properly manage airports. In addition, some concessions may offer overpay the government for the concession in the knowledge that the cannon is too high and the investment commitment too optimistic, in the belief that they will be able to renegotiate the contract after it is signed. This is a relatively safe assumption because governments have shown themselves to be willing to accept changes in the original conditions of the concession in an effort to safeguard services and avoid the appearance of privatization failure. This means that neither side is confident of that the original conditions of the contract will be enforced, which generates a high degree of legal uncertainty.

[19] Investments have been concentrated in the new terminal of the Ezeiza International Airport, enlargement of the Bariloche International Airport and the construction of a new passenger terminal in the Cordoba International Airport.

BOLIVIA

Since 1997, the Government of Bolivia has privatized three airports: the International Airport of El Alto in La Paz, the Jorge Wilstermann Airport in Cochabamba, and the Viru-Viru Airport in Santa Cruz. The airports are operated under a 25–year concession by *Servicios Aeroportuarios Bolivianos S.A.* (SABSA), a subsidiary of the Airport Group International (US). The remaining 34 airports are managed by the *Administración de Aeropuertos y Servicios Auxiliares a la Navegación Aérea* (AASANA), which is also in charge of air traffic control in the national air space.

Bolivia's air transportation sector is regulated by the *Superintendencia de Transportes* (STR), which is in charge (Law 24718) of setting fees and overseeing the quality of the service. It is also charged with guaranteeing competition in the sector. Security is under the control of the *Dirección General de Aeronáutica Civil* (DGAC).

COLOMBIA

The privatized sector of Colombian airports includes the second runway of the Bogotá airport as well as the airports of Cartagena, Barranquilla and Cali. Privatization of the second runway of Bogota's El Dorado airport took place in 1995 and was awarded to CODAD S.A., a consortium formed by Ogden, Dragados and Conconcreto. The concession is a 20 years BOT concession. The Cartagena Airport was awarded to Schipol Management Services (a Dutch firm) in 1996. Schipol operated the airport from Au-

gust 1996 until June 1998 when administration of the airport was transferred to the *Sociedad Aeroportuaria de la Costa S.A.* and the operator became *AENA Servicios Aeronáuticos S.A.* These firms administer and operate the Cartagena as well as the Barranquilla airport under a 15-year concession. AENA also operates the Cali airport (awarded in 2000).

Following privatization of the Cartagena and Barranquilla airports, *Aerocivil* asked Colombia's National Planning Department to review the nation's airport privatization process because there were major obstacles in terms of airport and airspace security. In addition, there were also problems with the definition of the investments that needed to be developed by the concessionaires. To address these issues, it was proposed that the investment needed to modernize the airport throughout the term of the concession should be included in the master plans. Currently, master plans exist for the Jose María Cordoba airport in Rionegro and for updating the El Dorado airport.

Air transport services in Colombia is regulated by the Colombian Civil Aeronautics Department (*Unidad Espacial de Aeronáutica Civil*), which also provides air traffic control services, air navigation, safety and maintenance of air traffic control systems.

The characteristics of the concessions for the El Dorado, Cartagena and Cali airports are described below.

- *El Dorado*.[20] This airport a BOT concession. The concessionaire built a new runway with lighting and instrumental landing equipment, and maintains the existing runway. The total cost of the project was US$98.8 millions[21] plus an estimated US$2.8 million for maintenance of the runways. The concessionaire financed at least 20% of the total cost with equity participation; the remaining 80% was financed through the placement of Eurobonds. In exchange, the concessionaire received a 20-year concession and landing fee revenues after the second runway became operational.[22] Interestingly, the Colombian regulator guaranteed the concessionaire a minimum level of revenues in case the landing fees were insufficient to cover estimated revenues. Note that although the concessionaire proposes the minimum level of revenue necessary to accept the project as well as the landing fee structure, it is the regulator who establishes the landing fees. The regulator created a trust fund equivalent to 30% of annual landing fee revenues to cover the minimum revenue guarantee that includes a special provision for compensation in case of tax policy changes.
- *Cartagena* (Rafael Núñez Airport) *and Barranquilla* (Ernest Cortissoz Airport). These airports are operated under a 15year concessions. The concessionaire is in charge of managing, operating and maintaining the infrastructures. *Aerocivil* is responsible for managing ATC. The concessionaire has to pay *Aerocivil* US$24.1 million (1996 dollars) in the case of Cartagena and US$9.4 million in the case of Barranquilla. From quarterly fees it receives, *Aerocivil* uses 30% to fund obligatory investments and 70% for other airports and air traffic control facilities. The concessionaire is ceded airside fees.
- *Cali*. The Cali airport is operated under a basic BOT concession. The concessionaire must manage, maintain and operate airside and landside activities and keep the infrastructure operating according to OACI, IATA and FAA international standards. The concessionaire should be associated with a firm specializing in the management of airports (with a minimum participation of 30%). Airlines and service companies can have at most a participation of 25%. The concessionaire must also pay US$487,500

[20] For details on this concession and the process of privatization of El Dorado airport the reader should refer to Elis Juan (1995).
[21] The final contract sets the level of investment in 97.15 millions of dollars.

[22] The construction phase was estimated to take 33 months. After construction it starts the maintenance phase that last until the end of the concession.

twice a year (indexed to US inflation).[23] The obligatory investment plan includes rebuilding the passenger terminal, as well as the connection between Alfa and Delta. According to the master plan, investments are expected to total between US$60 and US$80 million throughout the concession period. In exchange the concessionaire obtains a 20 years concession and is ceded all revenues (regulated and nonregulated). Airside charges are regulated by *Aerocivil* but (as in the case of El Dorado) the concessionaire proposed a complete range of airside fees (including indexing for inflation). Landside charges are set directly by the concessionaire.

PERU

The only privatized airport in Peru is the Jorge Chavez international airport in Lima.[24] Lima Airport Partners, a consortium made up of Flughafen Frankfurt Main AG, Bechtel Enterprises International Ltd. and Cosapi SA, obtained the 30-year BOT concession for an investment commitment of US$1.2 billion and royalties equivalent to 46.5% of gross income. No renegotiation of the investment commitment will be allowed because, after only five months of managing the airport, Lima Airport Partners asked for a delay in the construction of the second runway and modifications to the economic provisions.

The CORPAC (*Corporación Peruana de Aeropuertos y Aviación Comercial SA*) is an agency owned by the Peruvian Government that is responsible for the operation of the Peruvian public airport network (60 domestic airports of which 28 are airfields). CORPAC is in charge of managing, operating and maintaining services and facilities (including navigation aids, radiocommunication equipment and airport safety). It also coordinates air traffic control and airspace traffic. Its revenues are obtained from landing fees, air navigation fees and departure charges.

[23] There is also a variable fee as a percentage of the gross revenue of the concessionaire.

[24] The original privatization projects included also the airports of Arequipa, Cuzco, Iquitos and Trujillo.

The *Dirección General de Transporte Aereo* (DGTA, General Air Transportation Bureau) supervises aeronautics and airport safety for public and private airports. It also develops and updates policies in accordance with international civil aviation. Finally, OSITRAN (*Organismo Supervisor de Inversión en Infraestructuras de Transporte de Uso Público*) is the regulator of the private airport system. OSITRAN is a multimodal regulatory agency responsible for handling the relationship between airport concessionaires and the government. It will not formulate new regulation in areas where they already exist (that is, were established by another government agency or under terms specified in concession contracts).

URUGUAY

Uruguay (as well as Paraguay) is rated as a category III by the US Federal Aviation Administration. This means that Uruguayan carriers (as well as those from Paraguay) are denied entry into the United States unless flights are conducted with a duly authorized and properly certified foreign carrier from a country meeting international aviation safety standards.

The international airport of Laguna del Sauce (Punta del Este) was privatized in 1996 using a 20-year BOT concession. On several occasions, IATA has claimed that the concession has increased drastically the charges to users (up to 40%). The same charge has been made about Uruguay's other international airport, Carrasco. *Latin Trade* has calculated that each aircraft landing in Carrasco airport has to pay US$286 compared with an average of US$241 per aircraft for Latin America as a whole or, for instance, US$123 for landing in Rome.

The concession of all civil and commercial services at the Carrasco airport is in the process of being awarded. It is a 25-year contract with an investment commitment of US$170 million. In addition to building a new passenger terminal, needed improvements in Carrasco include the cargo terminal, runways and apron expansion, new lighting, navigation equipment and markings.

Uruguay's airports are owned and operated by the Department of Defense. Airport development is the responsibility of the *Dirección General de Infraestructura Aeroportuaria.* The Department of Defence is working on upgrading the air traffic management system and installing a new ATM services radar. The *Dirección Nacional de Aviación Civil e Infraestructura Aeronáutica* has worked with the US Federal Aviation Administration to transition to a CNS/ATM environment.

VENEZUELA

Venezuelan airports were decentralized in 1989 and transferred from central to state government control. Some states have improved airports, some have privatized them and some have done nothing. The first privatization attempt took place in 1992 in the state of Zulia and involved three airports: La Chinita, Oro Negro and Santa Barbara. The state government changed hands after privatization was completed and the new governor terminated the concession agreement and devolved to the state operational responsibilities for the airports.

ATM services in Venezuela are provided by the *Dirección General Sectorial del Transporte Aéreo* (DGSTA), which also regulates civil aviation (including safety issues) and manages the operations and facilities of domestic airports that have not been decentralized.

In 1994, the CVA consortium was awarded the management, operation and development of the Santiago Mariño International Airport, which services the island of Margarita. The concession included the operation of passenger terminals, parking areas and real estate. Air traffic control and air navigation aid remained under the control of the DGSTA. The concession included an investment commitment of Bs11.2 billion (US$100 million) and payment of 15% of gross revenues for the 20-year concession.

The Simon Bolivar Airport in Caracas is operated by a semi-corporatized agency, the *Instituto Autónomo Aeropuerto Internacional Maiquetia* (IAAIM), which has responsibility for international airports. The Plan Maiquetia 2000 includes three basic projects: enlargement of the international terminal, construction of a new cargo terminal (under a BOT scheme) and construction of a new hotel.

In 1998, the state of Sucre entered into a contract with AAEROTEC to develop strategies for concession at three state airports. It included investment plans, privatization alternatives and assistance on bid documents. The state of Monagas was also interested in the development of a new international airport in Maturin. At some point, there were also talks about the possible privatization of the Cumana and the Puerto Ordaz airports as well as the Barcelona international airport.

BRAZIL

Plans for privatizing 67 out of Brazil's 694 airports have been in the works since 1998. Brazil's aviation infrastructure company, (*Empresa Brasiliera de Infra-Estrutura Aeroportuaria*, INFRAERO) is currently responsible for the administration of all the airports, while the Department of Civil Aviation will become the regulatory agency and provide some ATC. The first airport to be effectively privatize is the Ribeirao Presto airport. A BOT may be employed to build two new terminals in the country's largest airport, São Paolo International.

ECUADOR

The municipalities of Quito and Guayaquil, which are home to the country's major airports (Mariscal Sucre in Quito and Simon Bolivar in Guayaquil) have been authorized to construct, manage and operate new international airports with formulas that provide for the participation of private investment (*Ley de Modernización*). The municipalities of both cities have created special corporations (the *Corporación para los Aeropuertos de Quito* and the *Fundación Autoridad Aeroportuaria de Guayaquil*) for that purpose. In principle, 60% of the financing should come from the private sector.

Discrimination, Access and Proposals for Action in Latin America

A quick look to the situation of access and fees in Latin America airports shows several important facts.[25] Air traffic management and air traffic control equipment are quite different across Latin American countries and airports. ICAO even classifies come countries' airspace as low safety. This means that some carriers will not fly to those countries even if they were given the right to do so. Discrimination in airport fees between domestic and foreign carriers, as well as discrimination in fuel fees are also problems. Cabotage across countries of the region is forbidden. Ground handling in most of the airports in the region is provided under a monopolistic regime, generally under the control of the dominant carrier. Allocation of slots follows the traditional IATA scheduling process which naturally acts in favor of incumbents carriers.

The final objective of this report is to propose a set of recommendations to ensure free and non-discriminatory access to the non-competitive segment of the air transportation sector in Latin America as a precondition for infrastructure financing. We have seen that the most fruitful experience in this respect is that of the European Community. For this reason we use the EU case as a source of good, but also bad, practices. In addition, some Latin American countries have been involved in the beginning of what could become a single market, provided there is a final agreement between the Andean Community and MERCOSUR which, unfortunately, does not seem to be as close as it appeared to be in the recent past.

Harmonizing Airspace Categories And Navigation Facilities (Single Latin American Sky).

In order to have competition and take advantage of free and non-discriminatory access, the operators should be confident that a minimum set of technical regulations are in place. However, there are still countries, that are classified as Category III;[26] namely Paraguay and Uruguay. Additionally, the standards of the navigation facilities of some countries are very low. For this reason, the Plan of Action for Regional Infrastructure Integration in South America should consider not only investing in airport facilities, but also in the improvement of navigation facilities. We should note at this point that there are enormous network economies to be gained from the improvement of air navigation facilities but, at the same time, the size of the investment needed to modernize air traffic management is usually very large.[27] Insufficient radar coverage, scarce route coverage, few instrumental landing services (ILS) and obsolete air traffic control services could be an important obstacle to open skies in Latin America.

However, the improvement of air traffic management is only part of the changes needed to guarantee that free and nondiscriminatory regulation will be fully effective as a device to increase competition. The standardization of ATM systems and practices is also needed. This could be achieved in a manner similar to the emerging

[25] See the Survey for Government Officials and Airport Representatives in the original version of this article.

[26] Category I implies full compliance with ICAO safety standards. Category II indicates conditional compliance while Category III implies no compliance. Carriers from Category II countries are allowed only limited operations with the US and must be controlled by the FAA in terms of operations inspections and surveillance. Carriers from Category III countries are denied entry unless their flights are properly supervised by a foreign air carrier from a country meeting international aviation safety standards.

[27] For this reason, some small Latin American countries at some point considered the privatization of ATM as the only way to finance its modernization.

role of EUROCONTROL in Europe. Unfortunately, there are more than 40 civil aviation authorities and close to 40 information regions in Latin America. As a result, the path to multilateral air traffic management entities will have to address the opposition stemming from traditional views, which hold that ATM should be under government control for national security reasons. However, we believe that the movement toward multilateral ATM authorities is an important step toward the integration of the air space of Latin American countries. This is, the option taken by the European Union with the recent signing of an accession agreement with EUROCONTROL, an important step toward the creation of a single European sky. Notice that one of the basic implications of a common ATM is the reduction of costs. The effect of EUROCONTROL on cost has been quite important.

Recommendation 1: Free access and competition require a minimum set of technical conditions. The harmonization of air traffic management and control could facilitate the process of introducing free and non-discriminatory access for airports.

Independent Regulatory Agency

An important difficulty for any set of feasible regulations that try to guarantee free and non-discriminatory access to airports, is the scarce regulatory experience, or even the absence of regulatory authorities, in some of the countries involved. As mentioned, even in the European Union, with its long experience in regulation and supranational regulatory agencies, regulations for free and non-discriminatory access to airports are challenged by governments. In MERCOSUR there is a clear bias against the creation of multinational agencies without which it appears difficult to ensure free and non-discriminatory access across countries. Therefore, as things are now, the enforcement of regulations will have to be assigned to agencies that depend on each government, even though the best choice would be the creation of a unique and independent regulatory agency.

Recommendation 2: Creation of a common and independent regulatory agency to monitor and control the enforcement of non-discriminatory access regulations.

Harmonizing Air Freedoms Across Countries: Open Latin American Skies (OLAS).

The integration of the air transportation sector across Latin America would improve dramatically with a multilateral open skies agreement.[28] Such an agreement simplifies negotiation and approval and generates a domino effect that provides incentives to other countries to participate in this kind of processes. It also provides a competition-enhancing model for future agreements and avoids the prolonged negotiation of numerous individual bilateral agreements. Multilateral open skies agreements also increase the negotiation power of the members countries with respect to third countries. By expanding the open skies model to the multinational level, the new agreement would help set the terms for the Latin American market. Finally, an open skies agreement expands carrier access to equity financing. Most bilateral agreements require that substantial ownership of each country's carriers be vested in that carrier's homeland nationals. This requirement makes it difficult for many foreign carriers, which don't have access to large domestic capital markets, to obtain cross-border financing. The multilateral agreement substantially liberalizes the traditional ownership requirement, thus enhancing foreign carriers' access to outside investment.

The Andean Community is in an advanced stage of the process toward the liberalization of air freedom rights. At least at the regional level, air cargo is liberalized and there is a multilateral

[28] Rufatt has argued (Annual Meeting of the BID in Santiago de Chile) that open skies agreements have advantages and disadvantages. Even accepting that services and security may improve and fees could be reduced Rufatt argues that small domestic airlines may have problems to survive and the market could end up being a duopoly of two large companies. This is another reason why it would be important to deepen the Latin American Open sky before opening it to third countries outside of the region.

agreement. One possibility for implementing the OLAS would be signing a generous open skies agreement between the Andean Community and MERCOSUR. However, even if this were feasible, several open questions remain. In particular there should be a mechanism, institution or council to enforce the conditions of the agreement.[29] In addition, the agreement should include a provision to control, or even avoid, bilateral negotiation between signatory countries and third countries. In this respect, bilateral agreements with the United States are particularly important since such agreements are already known to create many problems for the European open skies system. This situation is further complicated in the case of Latin America because the United States represents its largest air traffic market. The regulation of open skies agreements with third countries is critical since it can break any free and nondiscriminatory access rights that signatory countries may have agreed to grant to each other.

The Open Latin American Sky should give a clear mandate to a unique institution or agency (for instance, the foreign affairs ministers of the countries involved in the agreement) for discussing multilateral agreements between the OLAS and third countries. Bilateral agreements between OLAS countries and third countries could interfere with the goal of free and nondiscriminatory access across the countries of the region. To complete a single aviation market it is necessary to have a common external dimension and, therefore, common agreements have to be negotiated both at the multilateral and bilateral level.

What happens then to the agreements already singed between some Latin American countries (Chile, Peru and Argentina) and the United States? In principle, any bilateral agreement, by its very nature, generates discriminatory access since the airlines of the signatory countries are allowed air rights that are prohibited to airlines from other countries. If the bilateral agreement takes place between a country involved in an open skies agreement and a country outside of it, then the situation is even more critical since bilateralism has significant repercussions for a single air transportation market. The main problem is the following: say that Mercosur and the Andean Community were to sign an open skies agreement. Then US carriers will have the right to operate within the OLAS and compete with Latin American carriers, while only carriers from Peru and Argentina would have reciprocal rights with respect to the United States. This means that the competitiveness of individual airlines will depend on the details of the bilateral agreements and not entirely on their efficiency. This is the reason that the European Commission considers bilateral agreements between EU members and non-EU countries undesirable and illegal. In principle, and while some of the countries adapt their airspace to higher safety standards, the bilateral agreement may be accepted. Once technical conditions are improved and coordinated across the OLAS, bilateral agreements should be renegotiated.

Recommendation 3: Free and nondiscriminatory access requires spreading flight freedoms across countries in the region and between them and third countries. The relationship with third countries should be carefully examined in order to avoid bilateral agreements that generate discriminatory access for the carriers of the region. EU experience indicates that the external dimension of an open skies agreement has significant repercussions for a single market.

Isolate Open Skies Agreements From Economic And Cyclical Conditions In Latin America

If an open skies agreement is to have an impact on access and air transport competition it should be a long-term institution. For this to happen, it should be isolated from the economic consequences of cyclical downturns typical of Latin American countries. OLAS should be enforced and implemented independently of political and economic circumstances.

[29] We should remember the problems with the exceptional provisions on public services of open skies in the EU and the frequent intervention of the European Commission to guarantee non-discriminatory access.

Recommendation 4: Open skies agreements should be protected from cyclical conditions (political and economic circumstances).

Be Very Careful With The Exceptions To Air Freedom Rights Across The OLAS Countries.

One of the worst nightmares of the European Open Skies is the abuse of public service obligations by many national authorities as they tried to impose barriers to competition. In fact, some European countries have interpreted the public interest in a very broad sense requiring a large set of conditions to allow operations in the domestic market, even after the third package was fully operational.

Recommendation 5: Public service obligations should be carefully regulated.

Slot Allocation Rules And Access.

Another important question that has deterred competition in the EU air transportation system has been the allocation of take-off and landing slots to new competitors. Notice that, even if there is an open skies agreement, the rules for allocating slots can hinder actual competition. This problem is not as severe in Latin America as it is in the European Union because congestion is lower. There are basically two alternatives for allocating slots and access: the market based approach and the grandfathered rights approach (used in the EU).

This market-based approach (OECD, 1998) is based on four main principles: (1) allow buying and selling of slots; (2) avoid preserving some slots for certain categories of operators (positive discrimination); (3) concerns about the persistence of dominance should not merit additional interventions in the slot market; and (4) avoid hoarding of slots without relying on the rule use-it-or-leave-it rule. The grand fathered rights approach is, in many respects, the opposite of a market based approach. This system, which is used in the EU, forbids the regulation of slots allocation, preserves slots for certain categories of operators, relies heavily on the use-it-or-leave-it rule, and large airports employ a coordinator to regulate the market every six months.

Table 5 presents a comparison of the efficiency and non-discriminatory access characteristics of alternative allocation procedures for slots.

Given that most Latin American airports are not heavily congested, a system of grand fathered rights and "use-it-or-leave-it" may be enough to guarantee access since any sensible criteria to distribute all the unused slots will generate enough landing and take-off time for new entrants. Even though these procedures are low in the efficiency scale, their cost is small if there is no congestion and they have the advantage of protecting, at least initially, small or financially weak domestic carriers.

Recommendation 6: Test the performance of grandfathered rights and the use-it-or-leave-it principles for access to slots in Latin American countries.

Introduce Real Competition In Handling

Liberalization of ground handling is basic to promoting competition and fair access to airport infrastructure. Expensive and discriminatory

Table 5. Procedures for allocating slots.

Procedure	Efficiency	Non-disc. Access
IATA scheduling and grandfathered rights	low	low
Slot trading	intermediate	low
Buy and sell rules	high	intermediate
Auctions	high	intermediate
Congestion fees	high	high

Source: Knieps (2002).

charges for handling can have a large effect on air transportation competition. It is important to avoid vertical integration in handling and to allow self-handling, at least at the level of passenger services (if there is enough space). It is also very important to have a transparent policy with respect to handling concessions and charges.

Restrictions to self-handling should only be allowed in ramp (for security reasons), but in this case there must be a mechanism to guarantee nondiscriminatory charges. In large airports the fact that there is more than one handling firm does not imply real competition. Potential entrance into this market does not guarantee more competition and lower charges, since the exception of capacity constraints is claimed very often.

Recommendation 7: Ground handling in large airports should be carried out by independent corporations (independent from the airlines operating in the airport, the airport operators or any body controlled directly or indirectly by the airport operator or airlines with operations in the airport). If not, a possible rule could be to have at least two independent operators.

Make Sure That There Is No Price Discrimination In Fuel

Fuel represent approximately 22% of airline costs. This is a very high percentage compared with aeronautical charges (ATC, landing and take-off fees, parking charges, etc.) or even passenger and cargo handling charges. There is evidence of large deviations in the price of fuel (even up to 30%) depending on the origin and type of flight, even in very developed airport systems like the EU. In Latin America this differences are even larger. As a result, it is very important to guarantee that there are no discriminatory charges. Since introducing competition in fuel provision services at the airport level may be difficult, a regulatory agency should monitor these charges closely.

Recommendation 8: Avoid discriminatory fuel charges.

Monitor The Quality Of Access Services.

The access to new facilities and the quality of services is another issue that should be carefully monitored in order to avoid discriminatory policies.

Recommendation 9: New aeronautical infrastructure should be constructed with the clear idea of a non-discriminatory use. It would be interesting to make financing conditional to a commitment in this regard.

Keep Cost-Based Charges For Airport Services And ATM (Including New Security Measures And Environmental Externalities).

In many cases, according to IATA and AITAL complaints, the privatization of airport infrastructure in Latin America has implied a substantial increase in charges (20-35%). There are at least two reasons for this increase. Ruffat (insert Date from bibliographical reference) has argued that, in many cases, the concession of aeronautical infrastructure to private firms in Latin America has been deficient because governments tried to achieve too many objectives at the same time. In addition, infrastructure prices may remain low under public ownership to meet short-term political objectives. As a result, private sector participation might increase airport charges, especially if they coincide with rising environmental, quality or security standards. However, it is important that post-privatization regulation yields increased benefits for consumers and users.

The structure of charges should avoid differences in fees that are not related to cost differentials in order to ensure non-discriminatory access. The application of differential charges according to nationality or transport provider generates distortions in competition. It makes senses to charge a higher landing fee to a large aircraft than to a small aircraft. However, it is discriminatory to charge differently according to the domestic versus international nature of the flight. The basic principles of "user pays" and "marginal social cost" developed by the EU (1998) white paper on fair payment for infra-

structure use could be a good benchmark. The ICAO's policies on charges for airports and air navigation services could also establish a detailed account for how to set cost-related charges and fees.

Recommendation 10: Different charging principles distort competition. Charges should be transparent and related to the cost that users impose on the infrastructure and on others (including environmental and other external impacts). Charges for air navigation services should also be non-discriminatory.

Other issues that should also be regulated and closely monitorized in order to maintain and support competition in the air transport sector are designation rules, regulation on leasing of aircrafts, limitations on airlines ownership nationality, competitive advantages derived from the hub nature of some airports for the old flag carriers, competitiveness of the electronic reservation systems, loyalty programs, and alliances.

The problems generated by a technically deficient regulation on these issues could make it difficult to promote competition. However, they are second order problems with respect to the ones already mentioned and should be tackled once the primary concerns are addressed.

Conclusions

This paper reviewed the basic principles of non-discriminatory access to airports. The competitive structure of the air transportation industry depends on the interaction of three factors: the competitiveness of the airlines sector, the structure of airport services and the efficiency of air traffic control and airspace services. In all three factors the basic elements that determine their competitive interaction are the access policy and nondiscriminatory charging. Therefore, the liberalization of the airlines sector or the privatization of airports is not a sufficient condition for the liberalization of air transportation services if the access policies are restrictive or airport fees are set in an anti-competitive fashion.

A section of this paper was devoted to the experience of the European Union with respect to nondiscriminatory access to airports in order to extract some lessons that could be applied to Latin America. The history of the implementation of open skies and single market policies in the EU shows which regulations are effective and which ones are ineffective to improve and guarantee nondiscriminatory access to airports.

Access to airports and ATM services in Latin America suffer many of the problems present EU airports before the consolidations that took place with the creation of the single European aviation market. These include deficient ATM services in some countries, discriminatory fees with respect to the nationality of the carrier, monopolies in the provision of ground handling services, among others This paper presents some feasible recommendations to improve free and nondiscriminatory access to airport services in Latin America.

- Free access and competition require a minimum set of technical conditions. ATM and ATC harmonization could be very helpful in the process of introducing free and non-discriminatory access for airports.
- It would be reasonable to have a common
- And independent regulatory agency that could monitor and control the implementation of non-discriminatory access regulations.
- Free and nondiscriminatory access requires the spread of flight liberties across countries in the region and between those countries and third countries. The relationship with third countries should be carefully examined in order to avoid that bilateral agreements with third countries outside the region generate discriminatory access across the countries of the region.
- Open skies agreements should be protected against cyclical conditions (political and economic circumstances).
- Public service obligations should be carefully regulated.
- Test the performance of “grandfather rights” and the “use-it-or-leave-it” principles for access to slots in Latin American countries.
- Ground handling in large airports should be carried out by independent corporations (independent from the airlines operating in the airport, the airport operators or any body controlled directly or indirectly by the airport operator or airlines with operations in the airport). If not, a possible rule could be to have at least two independent operators.
- Any new aeronautical infrastructure should be constructed with the clear idea of non-discriminatory use. It would be interesting to make financing conditional to this commitment.
- Avoid discriminatory fuel charges.
- Different charging principles and price discrimination distort competition. Charges should be transparent and related to the cost that users impose on the infrastructure and on others (including environmental and other external impacts). Charges for air navigation services should also be non-discriminatory.

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