



EXECUTIVE SUMMARY

The Economic Benefits of Opening Aviation Markets between the EU and Brazil

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European Commission

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London
June 2009

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EXECUTIVE SUMMARY

The European Commission engaged the Project Team to assess the potential economic impact of creating an open air transport market for passenger and cargo services between the EU and Brazil with a high level of convergence in the regulatory policies and procedures.

Brazil and the EU have already established close relations in other policy areas. In May 2007 the EU proposed to launch a strategic partnership to further deepen its ties with Brazil. At the second EU-Brazil summit held in December 2008 a Joint Action Plan was adopted that expressly foresees an increased cooperation in aviation.

In considering why and how such cooperation should and could be advanced at Community level, this Study:

- Considers the strategic importance of Brazil and its air transport market;
- Assesses the quantitative benefits that liberalisation and moving toward an Open Aviation Area (OAA) between the EU and Brazil could produce;
- Reviews the regulatory framework for air transport between the EU and Brazil as well as Brazilian aviation law and policy; and
- Outlines specific steps that might be taken both to open the market and deepen regulatory cooperation.

BRAZIL AND ITS AIR TRANSPORT MARKET

With a surface area of more than eight and a half million km² (larger than the continental US), Brazil is the fifth largest country in the world by area, and the largest country in South America. Brazil is the world's fifth most populous country with 189 million inhabitants.

Vast natural resources (including large oil reserves), a large labour pool, prudent economic and monetary policies make present-day Brazil South America's prime economic power and regional leader. A leading member of the G-20, Brazil has the tenth-largest economy in the world with a GDP of over a trillion dollars.

The EU is Brazil's largest trading partner, accounting for 22.5% of total trade. In goods, the EU runs an overall trade deficit with Brazil of over €11 billion, although it has a surplus in services trade of €500 million. The EU is also the prime foreign investor in Brazil.

Travel demand

Air transportation between the two economies plays a key facilitative role in economic development. The key demand drivers for travel to Brazil are:

- *Tourism*: Brazil is a country with a rich history and culture, not to mention the pleasant climate and the rapidly developing tourism sector.

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- *Business:* São Paulo is the financial capital of South America. The development of the highly specialised oil and financial industry is strongly connected with a growing demand for air travel.
 - *Family, friends and relatives travel.* As a country of immigrants, Brazil retains strong bonds with the countries of origins, mainly Portugal, Italy and Germany. Large Brazilian communities are based in Portugal, Spain and France.

EU travel to Brazil

UNWTO figures suggest that the total number of visitors from the EU to Brazil is 1.74 million, or 35% of the 5.02 million total foreign visitors in 2007.

Tourism accounts for more than half of the visits to Brazil, whereas business travel is also an important demand driver. Forecasts suggest a faster rate of growth in future for business traffic.

Brazil Outbound Tourism

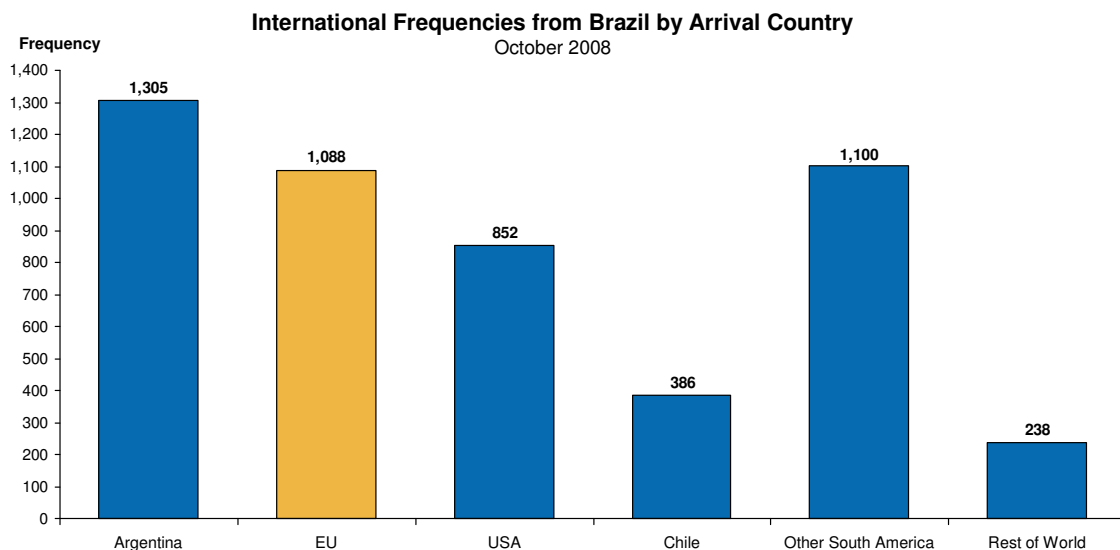
Brazil ranks 27th in the world by outbound tourism expenditure, according to World Tourism Organisation figures. Outbound tourism expenditures in 2006 stood at \$5.8bn. Outbound tourism expenditure is likely to continue to increase, given that Brazil has a rapidly rising middle class and good connections to the rest of the world. According to Eurostat, Brazilians visiting the EU spend €876 million Euros in 2006, compared to EU citizens spending €1,297 million in Brazil.

Domestic Air Transport Passenger Market

According to World Air Transport Statistics, Brazil is the fourth busiest domestic aviation market in the world and the 'shuttle' service between São Paulo and Rio de Janeiro is one of the world's busiest routes. Brazil's exceptionally large surface area and difficult topography have resulted in greater modal reliance on air transport. Brazil thus has strong domestic passenger and freight links by air. São Paulo State accounts for around 35% of passengers through Brazilian airports.

International Air Transport Passenger Market

International departures are overwhelmingly from São Paulo and (to a lesser extent) Rio de Janeiro airports. The EU (22% of international flights) is the second-biggest international market behind Argentina, followed by the US. These three markets together make up almost three quarters of all international frequencies.

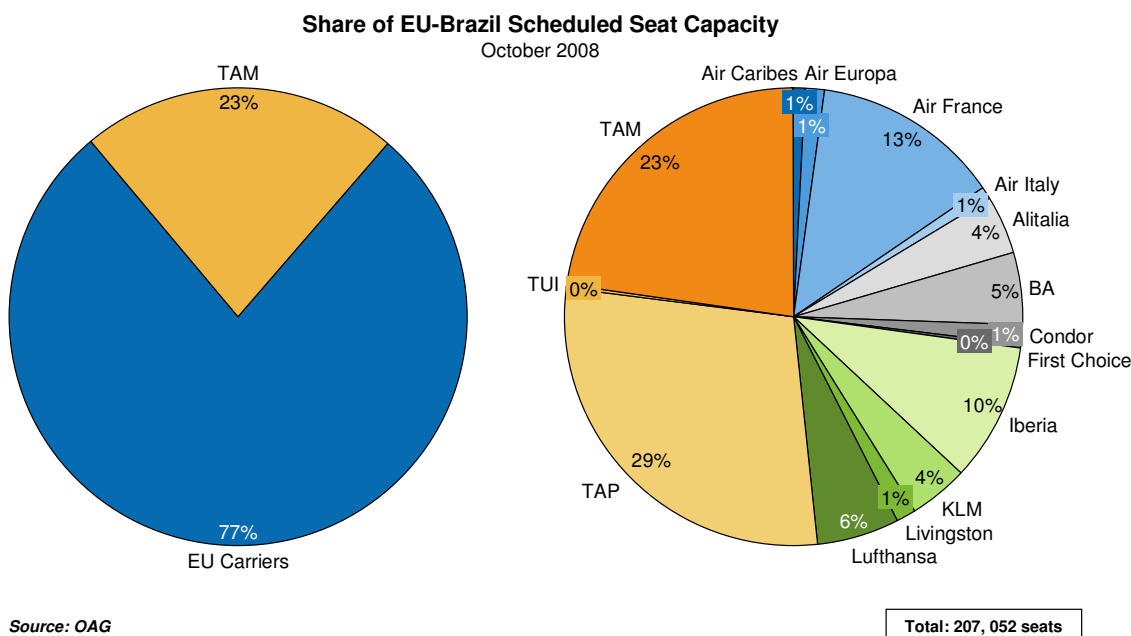


Source: OAG

Figure 1: International Frequencies from Brazil, 2005 vs 2008

Capacity in the EU-Brazil passenger market

As a consequence of the bankruptcy of the former Brazilian flag carrier Varig, EU carriers currently provide around three quarters of seat capacity available between the EU and Brazil: in October 2008, the EU carrier offer was around 225,000 seats, whilst TAM (the only Brazilian carrier operating scheduled passenger services to the EU) was offering about 66,000 seats – respectively 77% and 23% of the total. For TAM, this represents a substantial increase from 2007, when its offer was around 4% of total capacity.



Source: OAG

Figure 2: Scheduled Seat Capacity, EU-Brazil, October 2008

Air cargo market

The importance of air cargo in Brazil needs to be understood in the context of its large land mass, physically difficult terrain and regional linkages. In Brazil a large amount of domestic cargo travels by air. Considering the international cargo market only, the regions with the greatest amount of air cargo traffic are North America, followed by Europe and South America.

Cargo Market Brazil-EU

All-cargo services carried some 75,000 tonnes of cargo¹, or around 38% of the total between the EU and Brazil (slightly above their 30% share of available cargo capacity). Lufthansa Cargo is by far the individual carrier carrying the largest share of capacity, with Air France combination services occupying the second place ahead of VarigLog's dedicated cargo service. Likewise, TAP Air Portugal combination services, in fourth place, carry a greater amount of cargo than the dedicated cargo services offered by Cargolux.

All-cargo services are operated only between 5 EU markets and Brazil, including Brazil's major trading partners, Germany and the Netherlands, but excluding Portugal, which nevertheless has the largest capacity due to its passenger services. In total, nearly 70% of available cargo capacity is in combination services. ANAC data indicate that the proportion of cargo *carried* on these services is around 62% (versus ca. 38% on all-cargo services in 2007).

THE BENEFITS OF LIBERALISATION

For aviation markets, the concept of liberalisation fundamentally concerns the removal of quantitative limitations or barriers to market access coupled with qualitative controls that will build consumer confidence in the air transport product and encourage and protect fair and open competition.

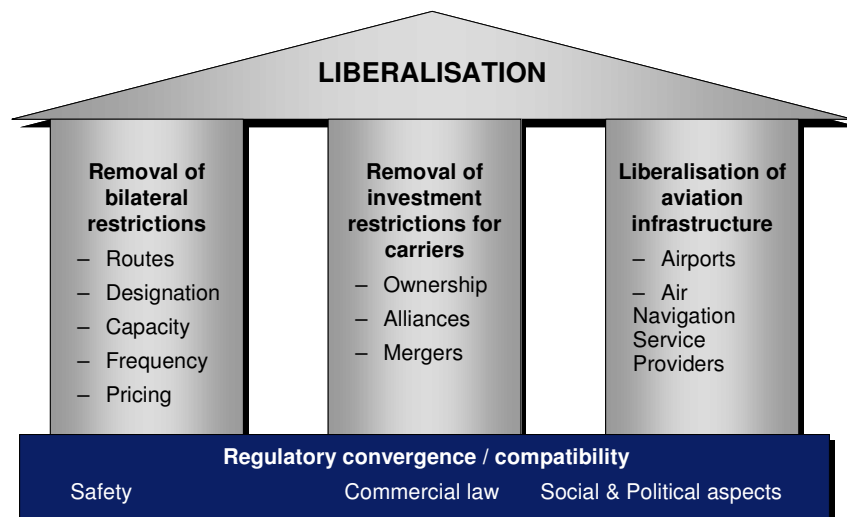


Figure 3: Aspects of Liberalisation

Liberalisation creates a number of economic benefits. The removal of bilateral restrictions allows existing airlines to fly the routes and frequencies they wish, and to charge a market-

¹ Note: Air France dedicated cargo services are not separately captured by ANAC statistics, thus the total carriage on dedicated cargo services is likely to exceed the indicated 75,000 tonnes / 38% of the market

appropriate fare, as well as allowing new entrants to the market. This leads to increased competition and thus to increased efficiency and lower prices. It can also lead to a service more closely matched to customer requirements. The removal of ownership and control restrictions can further enhance the competitiveness of the market. Consumers benefit from greater choice in terms of routes and carriers as well as lower fares. The increased availability of routes and lower fares stimulates demand and allows for increased tourism and international business activity. International connectivity is enhanced, meaning that barriers to trade and foreign direct investment are reduced. This, in turn, stimulates GDP and creates employment.

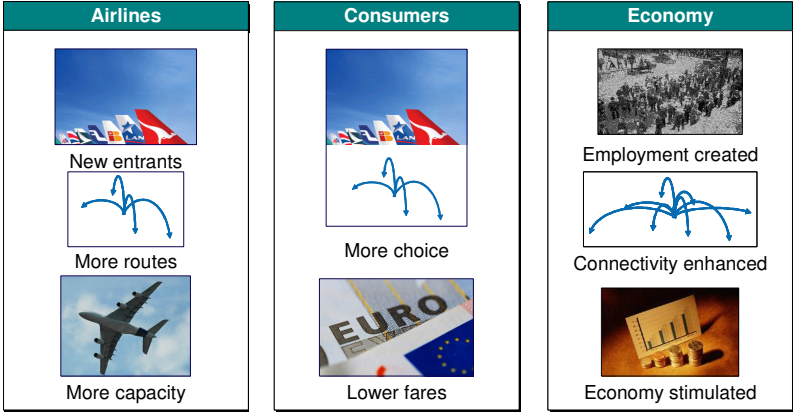


Figure 4: The Benefits of Liberalisation

Cargo markets can also gain from liberalisation. The freedom to fly the routes and frequencies they choose, utilising 5th, 6th and 7th freedoms, allows firms to make the most efficient and profitable routings. This can result both in increased supply and lower prices, facilitating the import-export industry and stimulating the economy.

There is yet another benefit to liberalising markets with Brazil, in that the provision of more frequent and better services between the EU and Brazil may raise Brazil’s profile as a as a potential tourist destination and thus stimulate passenger demand. An example of this occurred when Morocco liberalised its aviation market and considerably enhanced its appeal with the increase in air services which made it more accessible.

Regulatory Constraints in the EU-Brazil Market

The bilateral agreements between Brazil and the Member States of the EU (as well as certain national laws and policies) have historically imposed a considerable range of restrictions on market access and doing business. As a point of departure, the EU-Brazil market is more constrained today than was the case in the EU-US market prior to the new EU-US air transport agreement. Thus, under reasonably stable overall market conditions, *the stimulative effect of liberalisation should at least match or exceed that of the new agreement on the North Atlantic.*

While certain liberalising steps clearly have taken place in recent years, regulatory constraints continue to exist in a number of areas. These affect Brazilian as much as EU carriers.

- *Route rights:* Typically Brazil’s agreements limit the number of points to be served, especially in third countries (5th freedom). While such 5th freedom rights may not currently enjoy great attractiveness in passenger service, they are highly relevant for all-cargo services.

- *Capacity:* All agreements with Brazil limit the number of flights that can be offered. While the authorities have on the whole made timely efforts to adjust supply periodically to anticipated demand, the simple existence of such capacity controls exerts a serious dampening effect on potential new entry.
- *Pricing:* While Brazilian authorities are becoming far more flexible in permitting price competition, entrepreneurial freedom to market new products and offer innovative pricing for travel originating in Brazil has been constrained in the past.
- *Network development:* Code sharing rights have often been limited to specific numbers of points. In the all-cargo and express area, Brazil-EU agreements in general lack provisions for intermodal rights.
- *Ownership:* While there are signs of interest in liberalising rights of foreign investors, Brazilian law at present limits foreign ownership to minority participation.
- *User charges and taxes:* Market growth will also be constrained by regulation if governments increase the costs of doing business by imposing non-cost related charges on industry.

Economic Benefits of Opening Aviation Markets between the EU and Brazil

The potential economic benefits estimated to result from the liberalisation of the EU- Brazil air transport market are summarised in the table below. These estimates do not, and cannot, capture all potential benefits. Furthermore, they are calculated on the basis of one year only. Liberalisation can give rise to benefits for many years.

	Estimated benefit	Lower bound	Upper bound
Traffic stimulated (passengers)	335,000	300,000	460,000
Consumer surplus (€)	327,000,000	298,000,000	460,000,000
Direct tourism expenditure (€)	145,000,000	130,000,000	203,000,000

Table 1: Summary of Quantified Economic Benefits for First Year of Liberalisation

Traffic Growth

Taking account of the current uptake of capacity rights, we have modelled the markets where output is supplied at its agreed capacity limit as likely to experience growth at a higher rate upon liberalisation, compared with markets where capacity limits are not reached and, as such, a lower rate of growth is expected. We use two case studies to provide range: an upper bound based upon the Morocco experience, and a more conservative lower bound based upon the EU : US experience to date. Note that these rates of growth assume full liberalisation. If the agreement reached with Brazil was less open, it is likely that a lower level of benefits will be obtained. The benefits of liberalising the cargo market have not been calculated separately, but would also be expected to grow significantly, with benefits for trade and thus for the economy as a whole.

On this basis, traffic growth is estimated at **335,000** extra passengers, with an estimated range of **300,000 to 460,000** extra passengers in the Brazil - EU market in the first effective year of liberalisation. In the absence of negative shocks to the market, this may be expected to

continue year on year for a number of years, as more airlines take up the opportunity to supply this market.

Consumer Surplus

Liberalisation is estimated to produce 327 million euros consumer surplus, with a lower bound of 298 and an upper bound of 460 million euros. The majority of this consumer surplus accrues to existing passengers who benefit from reduced fares. Consumer surplus does not fully capture all the benefits to consumers. In addition to consumer surplus, depending on the state of the market and the strategic decisions of the airlines, quality of the service may improve. More direct flights may decrease journey times and increase convenience for many travellers. The value to consumers of these quality and convenience factors is clearly positive, but has not been quantified.

Tourism

As Brazil’s economy grows in global importance and per capita wealth of this population increases (and especially in light of cultural ties to Europe) a rising level of travel to the EU from Brazil may also be confidently anticipated. Using Eurostat figures on expenditure, the direct expenditure due to the increased number of visitors in both Brazil and the EU is estimated at 145 million euros:

	Brazil	EU	Total	Lower bound total	Upper bound total
Direct income from tourism spend (€)	86,000,000	59,000,000	145,000,000	130,000,000	203,000,000

Table 2: Direct Tourism Spend

This figure represents direct spend only, i.e. the money that the visitor spends in-country on hotels and restaurants etc, and is a fraction of the total economic impact of tourism.

OVERVIEW OF BRAZILIAN AIR TRANSPORT POLICY AND REGULATION

International policy

The Brazilian government has shown sensitivity to the importance of air transport in international relations and has acted as a leader both in the South American region and globally (as a permanent Member of the ICAO Council). Brazil has also moved to strengthen intercontinental air transport links, notably with North America and Europe. This said, market access continues to be regulated by a network of some 70 bilateral air services agreements with national governments of which 15 are with Member States of the European Union.² Direct services presently exist in 9 markets: Belgium, France, Germany, Italy, Luxembourg, Netherlands, Portugal, Spain and the UK.

The significant number of very recent agreements and/or far reaching negotiations that Brazil has been conducting with EU Member States reflect the conscious if not systematic efforts of Brazilian authorities to create new trans-Atlantic context and development of air transport services.

² Austria, Belgium, Denmark, France, Germany, Greece, Hungary, Italy, Luxembourg, Netherlands, Poland, Portugal, Spain, Sweden and the United Kingdom.

Air Transport Law and Policy in Brazil – General Findings

The institutional framework is marked by a strong presence of ANAC, the principal aviation authority, in the Ministry of Defence. Generally, civil aviation seems to be strongly marked by the presence and the influence of the Brazilian state bodies generally and the military in particular.

On the economic regulatory side, the principle of reciprocity shows up in all levels of regulation in Brazil: in a general fashion in the Constitution, in the Aviation Code and in special regulations on ground handling and hiring of foreign crew. In such cases, reference is made to bilateral agreements as the legal instrument for securing reciprocity.

Pricing of air services is subject to governmental control and fees for infrastructure services (while logically subject to governmental review to control against abuse of monopoly provider power) are not always clearly related to the costs of providing services.

In general, the safety and reliability of the air transportation and its infrastructure (airports and ATM) as well as the scope of its services attract a high level of public and political attention in Brazil for economic, social and national security reasons. Desired improvements are being pursued.

Passenger protection is increasingly looked at. Recent flight delays call for government intervention and protection of passenger rights. Otherwise there is a solid body of civil law laying down rights for consumers.

Labour arrangements look relatively protective for workers in civil aviation. Their rights seem well secured in acts and collective agreements.

Summary Views on the Degree of Regulatory Convergence between the EU and Brazil

Brazilian aviation law and policy reflect conscious and comprehensive concern with respect to public interest, corporate responsibility, social rights and the level playing field. Similarly the government of Brazil has played a leadership role at the regional and global level (e.g. at ICAO) in the development of aviation standards and will be a key partner in developing global policies aimed at creating sustainable growth that are efficient and progressive in areas such as environmental protection.

It can be concluded that a clear basis for dialogue among experts as well as general policymakers exists; and there is a considerable interest and need for further dialogue on a range of important practical as well as general issues between the EU and Brazil.

Industry stakeholders in the EU endorse and even attach priority to a dialogue with Brazil aimed at establishing more open, efficient and predictable market access conditions, lowering costs of doing business and creating greater regulatory efficiency. As Brazil continues to expand its role in global trade, new investment opportunities seem likely to emerge. Liberalisation of restrictions on foreign investment in airlines is under discussion in Brazil as is expanded participation of private capital in airport development.

The Brazilian authorities are trying to tackle the major new issues on the horizon such as environmental protection. It is also clear that Brazilian operators, from their perspective,

look increasingly to the European market as a whole and no longer so much to its individual national parts.

DEVELOPING THE EU-BRAZIL MARKET

Brazil is the most important market in Latin America. In recent years its international trade has grown significantly. There is general agreement that the Brazilian economy embodies enormous potential and that relations with Europe should play a critical role. Air transport services – which should include much stronger development of air freight and air express networks as well as passenger services – will be an essential element of underpinning of general economic relations.

Liberalisation of market access and removal of formal constraints embodied in current air services agreements between Brazil and EU Member States will in future be a vital element in enabling sound and efficient market expansion. During the current period of softened demand, quantitative controls on capacity will play a less dampening role. However, the situation argues for taking a strategic view and organising now for the longer term as well confronting any urgent issues.

For the Brazilian side it may be important to consider that the still-weak position of Brazilian operators in terms of international market share pre-dates the current crisis. That is, events such as the deterioration of Varig were not prevented by the classical regulatory arrangements intended to strengthen the position of national flag carriers. Rather than more of the same, the industry requires a new regulatory context that enables operators to be more competitive and efficient.

Even the most established airlines have associated themselves in very recent initiatives to urge governments to permit greater market access in such areas as liberalisation of investment and freedom to develop global networks.³ A considerable and general concern is that the industry needs more business certainty, regulatory efficiency and reduction of charges and user fees, wherever possible.

Air carriers have expressed concern about issues such as high user fees or monopoly provider pricing of jet fuel that raise their operating costs and undermine their competitive position. Perhaps also as a consequence of the high priority of aviation in Brazil transactional costs for airlines in dealing with a range of political and bureaucratic requirements are relatively high. Both Brazilian and European stakeholders see a need to make regulation transparent and efficient, assure adequate, affordable infrastructure and to provide business certainty to attract and facilitate investment as well as opening dynamic perspectives.

CONTEXT FOR THE FUTURE EU-BRAZIL RELATIONSHIP

Brazil is an increasingly important player, and there is an important recent history of EU cooperation with Brazil. As a meaningful participant in global civil aerospace, Brazilian industry has a growing interest in closer cooperation with the EU in the definition of technical standards. An EU-Brazil Aviation Safety Agreement is under preparation with the objective of concluding negotiations in 2010. On the economic side, Brazilian authorities

accept the logic of the Community airline designation clause, and a so-called “Horizontal” Agreement is expected to be concluded very soon between Brazil and the Community.

ILLUSTRATIVE ISSUES TO BE ADDRESSED

In a complex, inter-continental relationship with a major player such as Brazil, certain issues may have particular importance and/or can be dealt with most efficiently at the Community-Brazil level. Illustratively, an EU-Brazil Aviation Agreement could seek to address current issues in the following nine areas:

- **Progressive expansion of market access**
- **Addressing the environmental impact of aviation**
- **Safety coordination and air navigation procedures**
- **Security and facilitation**
- **Airport access issues**
- **Efficient operating and marketing framework for all-cargo services, including inter-modal rights and 5th freedom rights**
- **Code-sharing liberalisation to expand market access and benefit competition**
- **Marketing freedom and consumer protection**
- **First and second freedom rights**

FINAL OBSERVATIONS

The long term strategic interests of the EU and of its air transport industry require establishing deepened relations with Brazil at Community level. There is no question that Brazil will be one of the EU’s most important future markets, just as we believe that strengthened relations with Europe are in the profound national interest of Brazil.

Though global recession in 2009 has temporarily dampened growth of air traffic, the Brazil-EU market should recover faster than average. We believe that under conditions of open market access and efficient regulation European and Brazilian airlines should enjoy excellent growth opportunities.

The coordination and convergence of regulatory positions and policies in key areas must be a high priority in the EU-Brazil relationship. This view is advocated also by industry stakeholders who place a general priority on achieving greater regulatory efficiency and lowered costs in the provision of infrastructure.

Finally, liberalisation of opportunities to establish networks through greater freedom to invest as well as tools such as code-sharing and removal of restrictions on route development, marketing and pricing can stimulate both new entry and the efficiency of current operations.