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Mozambican Air Transport Liberalisation
A Discussion Document

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# Mozambican air transport liberalisation report

# A discussion document

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# Acronyms

| Description   |
|---|
| Air Liberalisation Index  |
|   |
| Air Service Agreement   |
| Air Transport Action Group  |
| Civil Aeronautics Board   |
| Communauté Économique et Monétaire de l'Afrique Centrale  |
| Common Market for Eastern and Southern Africa   |
| European Union  |
| (The) General Agreement on Trade and Services   |
| (The) General Agreement on Tariffs and Trade  |
| Gross Domestic Product  |
| Instituto de Aviação Civil de Moçambique  |
| International Air Transport Agency  |
| International Civil Aviation Organisation   |
| International Chamber of Commerce   |
| Instituto de Gestão das Participações do Estado (Institute for the Management of State Shares)              |
| Junta de Aeronáutica Civil de Chile   |
| Linhas Áeras de Moçambique  |
| Organisation for Economic Cooperation and Development   |
| Southern African Development Community  |
| South African Airways   |
| Sub Saharan Africa  |
| United States of America  |
| United Nations Conference on Trade and Development  |
| Unidade Technical para a Reestruturação das Empresas do Estado (Technical Unit for State Enterprise Reform) |
| West African Economic and Monetary Union  |
| World Trade Organisation  |
| World Travel and Tourism Council  |
| Yamoussoukro Decision   |
|   |

# **Executive summary**

Air transport is an important economic sector with large growth generating effects. Its output is substantial: internationally, the industry "generates at least US\$1.4 trillion [a year]". Notably, "[a]viation alone could be contributing as much as eight percent of global GDP [or Gross Domestic Product]." The sector has been critical to the development of the tourist industry in many parts of the world and to the international expansion of tourism. Air transport has allowed large revenue transfers to and job creation in developing countries through tourism.

Africa's air transport sector relative to that elsewhere is comparatively small: Africa accounts for less than four percent of international air passenger traffic. Major constraints to an expansion of air transport in sub-Saharan Africa (SSA) are the presence of relatively heavily protected, inefficient airlines and inadequate regulatory air transport frameworks.

Many SSA countries have begun restructuring their national airlines and liberalising their air transport sectors. Yet, much still needs to be done in order for the returns from air transport to be secured across the continent. Commitments by most SSA nations to follow the Yamoussoukro II Decision – a plurilateral air transport agreement – are set to address some of the problems which plaque the air transport sector in SSA.

There is a window of opportunity available to launch properly a programme of liberalisation as per the Yamoussoukro Decision's steps and objectives, but the Mozambican authorities have decided to delay their participation in the Yamoussoukro liberalisation process. It is a decision that affects the country's ability to tap into a relatively wealthy and large tourist market located in neighbouring South Africa. Numerous studies have suggested that a large traffic and growth expansion would result from a reduction of the barriers to entry into the Mozambican air transport market.

In this report, the meaning of liberalisation in the air transport sector is discussed and the difference between deregulation and liberalisation is highlighted. Liberalisation entails a progressive opening up of a market with state control enacted over the process, while some amount of regulation may be required to ensure that market forces operate effectively and that some rules are followed in the process of air transport. The government has a key role to play in developing and implementing a transparent, non-discriminatory framework that facilitates competition, expands airport capacity and contains anti-trust laws.

A hurdle to liberalisation in the air transport sector may be with the exclusion of large segments of air transport from the ambit of multilateral trade negotiations, through the General Agreement on Trade in Services (GATS). The exclusion applies to air traffic rights for cargo, passengers and mail.

With access negotiated typically on a bilateral or plurilateral basis, large scale liberalisation progress may be limited. Bilateral liberalisation (involving government to government negotiations) has only been notable when large countries have engaged in such efforts and required access from their partners. The United States of America (USA), which introduced competition via deregulation, typifies that approach. Plurilateral deals generally overlap with the broader economic cooperation arrangements, as was the case for the European Union (EU).

There are mixed opinions on the merits of the bilateral option as opposed to other liberalisation options. Some argue, for instance, that bilateral air transport arrangements have allowed liberalisation to progress. Plurilateral deals, which are larger in scope, may be superior in their effects, yet many such deals have not been ratified or enacted. Moreover, such deals are more difficult for governments to alter and less predictable than other types of arrangements.

The restrictions against air transport are specified for ownership, designation and withholding, tariffs, capacity as well as in terms of air traffic rights.

Methodologically, the nature of the air transport context invites assessments of the removal of such barriers which rely on a case study approach. Noting that there are methodological limitations with the case study approach, the report presents some general arguments in favour of air transport liberalisation and discusses some case studies from developed and developing contexts.

In terms of the impact of air transport liberalisation, it seems that a developing or developed country distinction is not of great relevance to the discussion of the Mozambican sector's liberalisation. Firstly, in a context with a great variety of air transport regimes, it is not easy to identify cross-regional differences. Secondly, large volumes of passenger air traffic in developing countries originate from the USA and the EU; two particularly liberal regions in the air transport industry.

Some positive effects have been observed as competition was introduced into air transport sectors in a range of countries:

A 12%-35% increase in passenger air traffic occurred as fares dropped. Though fares on some routes increased when cross-subsidisation disappeared (as in the USA), the number of discount fare travellers grew notably in all cases.

New entrants, including low cost carriers (in the USA, India, Brazil and the EU), entered the market. Such carriers developed operational, service and overhead savings advantages over the traditional air carriers.

Greater competition translated into greater fare diversity, flight frequencies and a range of destinations on offer. New airports were set up following liberalisation (as was the case for the UK). New hubs, including in new regions, were established.

The following were secured through enhanced competition:

- Improved efficiency and enhanced productivity (including via innovations) although the magnitude of the effects varied according to the availability, size and efficiency of airports as well as with the efficiency of individual air companies.
- An expansion of revenues, triggered by the removal of large explicit and implicit subsidies, correlated with a substantial growth of (passenger) traffic and an expansion of services at new or improved airports.
- Employment expanded.
- Economic integration was enhanced.

The link between tourism and air transport suggests that an expanding number of air passengers travelling for touristic reasons is linked to the expansion of low cost airlines. More liberal air transport conditions increase or are projected to increase growth, employment and government revenues.

Specific case studies are also discussed in the report. Some of the impacts of the rapid deregulation of air transport in the USA are noted. While a range of positive changes occurred through deregulation, including declines in fares, an expansion of traffic, the emergence of new air routes and innovation, some negative effects also emerged such as the disappearance of some airlines, an oligopolistic industry structure and some deterioration in the quality of services to the consumers. In the EU, where a more progressive process of air transport liberalisation was pursued, the changes were positive across many dimensions. Deteriorations of fares in the business and normal economy segments were noted exceptions.

Not only has the successful introduction of competition in the air transport sectors in the EU and the USA generated momentum for liberalisation in other countries and regions, those liberalisation processes were supported by progressive, well defined steps. The early EU position is similar to the present one for the Southern African Development Community (SADC) wherein national airlines dominate and some liberalisation is already in place.

A quite complex, occasionally heavily guided process of liberalisation and deregulation was adopted in countries such as Mexico, Malaysia and Thailand. Deregulation and liberalisation only occurred once the economic context became favourable in the case of Mexico. For Costa Rica, liberalisation took place in combination with other forces as well as from specific demands from partners. In the case of Chile, where a heavy regulatory environment created major problems, liberalisation occurred quite rapidly. In Chile, the maintenance of the national carrier was costly to that society. All of the case studies discussed in this report point to widely favourable liberalisation or deregulation effects: new airlines sprung up and traffic increased. As for the national carriers, these were generally, but not always, sold to private companies.

Some problems are raised in the literature about the opening up of the air transport market. These range from support to the national carrier(s) through to more general sectoral problems. Issues specific to the expansion of low cost carriers are highlighted in the discussion. Significantly, some political concerns might be valid in relation to the role of national carriers in the air transport sector. For instance, the protection of a national carrier could have positive (cultural) externalities and might justify governmental support. In turn, national carriers can perform last resort supplier functions. Governments may also need to step in if the disappearance of particular routes is not socially acceptable or has developmental repercussions. However, it is important to distinguish between political and lobbying arguments. The costs of such interventions need to be transparent. With regard to issues of deteriorating quality of services, congestion, poor labour practices and concentration, these do not belong to the liberalisation realm but pertain, instead, to the regulatory domain.

Two main options are available to policy makers: that of maintaining the national carrier as a monopoly or that of an engagement with gradual liberalisation. With regard to the option of dismantling the monopoly national carrier, a great number of considerations need to be taken into account to ensure that liberalisation progresses well and is managed effectively. Particular attention needs to be given to signalling, competition policy issues and country specificities. Services changes to particular air routes also need to be assessed from the outset.

The report also discusses the Yamoussoukro Decision (YD), a plurilateral air transport agreement that spans the whole of SSA. Its implications for Mozambique are explored. The YD envisages a "single African airspace" and a key role for the private sector. It also opens up air transport in SSA; calls for a removal of restrictions on traffic rights, including against the fifth freedom, free pricing, as well as the removal of restrictions on capacity and on multiple designations; and for the creation of standards on safety and security. The YD suggests that African states have decided to open up intra-Africa air transport.

The YD has not been followed fully in spite of it generating a plethora of sub-regional plurilateral arrangements and air transport liberalisation initiatives (as in the SADC). The implementation of the YD was supposed to have taken place from 2002 onwards but little progress has been made. Only a subgroup of countries - Kenya, Uganda and Tanzania - has announced, in 2005, that its bilateral air service agreements are aligned to the provisions of YD. South Africa, Zambia and Zimbabwe are in an in-between stage, having opted for a somewhat lighter form of liberalisation, but have agreed to unlimited flights with multiple designations of airlines permitted between one country and another.

The case of Mozambique is different even though other SADC ministers have approved a roadmap for the implementation of the YD by 1 January 2009. A (confidential) briefing note indicates that in May 2005 Mozambique joined Angola and Mauritius in expressing its desire to delay participation in the implementation of the YD. Mozambique has undertaken some air transport reforms since the end of the 1990s, but its air transport market remains relatively heavily protected. Limited information is available about the air transport situation in the country yet it is known that the authorities have generally (but not fully) granted the fifth

freedom to partners while standard restrictions on international and regional air traffic are applied. In parallel, Linhas Áeras de Moçambique or LAM, the national flag carrier, has experienced financial losses and shown little interest in international expansion. Mozambique's regulatory context is inadequate. The national civil aviation institute makes policy for the sector but should, in fact, be the regulator.

There are recent indications that the Mozambican authorities are seeking to invest in the national carrier. The timing is interesting because the authorities are experiencing pressures to move the YD's implementation forward. As far as options are concerned, the Mozambican authorities should follow the YD and minimise the delays in participating in the YD process. There are important issues linked to the current timetable of action around the YD and some prerequisites need to be met by the country before it engages with liberalisation.

Currently, Mozambique's air transport sector is not reaching its fullest potential. Mozambican and foreign consumers are penalised by the current air transport situation. Changes are clearly required for lowering the barriers to entry; it is an issue addressed in the YD. Given the least developed country status held by Mozambique, and the problems of access in its hinterland, there are large consumer stakes in a decline in fares. An expansion of air services (in terms of economies of scale and scope) and a relaxation of fares are needed. The latter objectives are also part of the YD.

Commitments have been made already by Africa's civil aviation ministers to engage with intra-Africa air transport liberalisation. Implementation is required at this point in time. Unfortunately, it is unclear exactly what Mozambique's problem is currently with the YD except that the authorities seem to be seeking more time to prepare the national carrier to adjust to liberalisation. More time might be needed by the authorities when considering the key issues that make liberalisation effective and politically acceptable in Mozambique.

Given that air transport is excluded largely from the multilateral arena, negotiations have to be conducted at the bilateral and/or plurilateral level. Market access on a grand scale is better guaranteed by plurilateral liberalisation progress, an aspect which the YD can offer. While the Mozambican authorities might push for improved market access bilaterally, as with South Africa, the authorities have improved chances of securing access to a larger market by aligning themselves with other African countries. Mozambique displays a relatively closed air transport market and can tap into the YD to secure access to other, more restrictive markets in Africa.

In order to remain competitive worldwide, African airlines will have to compete with other airlines. Those that do not implement changes (as specified by the YD) will find it difficult to engage in those steps needed to enhance their efficiency and to adjust to those changes at a later stage. Given the African focus embedded in the YD, there is scope for air transport expansion that is tailored to local circumstances. Generally, the YD offers a set of intermediary air transport liberalisation targets. Across Africa, the YD is seen as a phased approach towards the creation of a more liberal air transport environment.

As has been observed the world over, the large size of a SSA airline (e.g. SAA) does not preclude the setting up and expansion of an airline from another SSA country. Efficiency improvements and the government's ability to ensure that the supporting infrastructure is in place are key variables in that process.

Governments have to assess the costs of their interventions. The YD has acted as a catalyst for the authorities to attend to the opportunity costs associated with state interference in the sector. The YD has also helped governments recognise the role played by air transport in particular sectors of the economy, especially for trade and tourism. Nevertheless, the main issues hindering the implementation of the YD lie with the legal and institutional frameworks and, specifically, a lack of a clear harmonisation of competition rules, dispute resolution mechanisms and an executing agency. Importantly, no additional capacity and funding are offered by the YD. The remaining issues will need to be addressed if the YD is to be widely effective and attractive in Africa

# 1. Introduction

"Today, the forces of globalization have posed significant challenges for airlines as the world moves towards greater liberalization of the world economy. With the emergence of powerful trading blocks such as the European Union, the North American Free Trade Association and by extension, the Free Trade Area of the Americas as well other regional economic groupings, there has been an increasing reliance on international air transport as *an instrument of economic and social development particularly in developing countries*" (Position of Jamaica in Association of Caribbean States, 2004a:1; emphasis added)

.....

The air transport industry is an important economic sector. As an industry, it has large growth generating effects and is shaped by and contributes to deepening globalisation. Air transport supports the movement of goods and people and reduces transaction costs. The sector has been critical to the development of a tourist industry in many parts of the world and to the international expansion of tourism. Such shifts have been associated with large revenue transfers to and with job creation in developing countries. Consequently, the airline industry is a large direct and indirect employment sector. Internationally, the industry (including tourism) employs an estimated 28 million people. The industry is a growth sector: at the end of the 1990s and in the early 2000s, air transport grew at 5%-10% per annum. Air traffic levels have doubled every 10 years. The sector's output is substantial. Internationally, it "generates at least [United States dollars] US\$1.4 trillion [a year]". Moreover, it was suggested that "[a]viation alone could be contributing as much as 8 percent of global GDP [or Gross Domestic Product]."

In contrast to the key role played by the industry in growth and development internationally, air transport is a comparatively small sector in Africa: Africa accounts for less than four percent of international air passenger traffic (as shown in Figure 1); a proportion hardly altered when domestic passengers are included in total passenger air traffic (Air Transport Action Group, 2003:94). The size of the air transport sector is correlated with levels of development, population size and density, yet there are major constraints to the expansion of air transport in Sub Saharan Africa (SSA) which includes the presence of relatively heavily-protected, inefficient airlines and inadequate regulatory air transport frameworks. As will be argued in this report, many SSA countries have restructured their national airlines and are liberalising their air transport sectors. Yet, much still needs to be changed if the returns from air transport are to be delivered to the continent.

<sup>1</sup> With possibly about four million jobs in air transport alone (see World Bank (2004) for alternative data illustrating the importance of the sector).

<sup>&</sup>lt;sup>2</sup> See http://edition.cnn.com/2007/WORLD/asiapcf/11/05/eco.about.planes/index.html. A lower figure of one percent of the world GDP is advanced by the World Bank (World Bank, 2004).

Most SSA nations committed themselves to following the Yamoussoukro II Decision, a plurilateral air transport agreement, in order to address some of the inefficiencies which plague the air transport sector in SSA. There is a window of opportunity available to launch properly a programme of liberalisation, as outlined in the Yamoussoukro's documented steps and objectives, yet a handful of countries - Mauritius, Angola and Mozambique - are resisting the change. In the case of Mozambique, the authorities have decided to delay their participation in the Yamoussoukro liberalisation process despite a relatively wealthy, large tourist market near the country's borders with South Africa. Numerous studies, moreover, have documented the large traffic and growth effects that would result from a reduction of the barriers to entry into the Mozambican air transport market.

This report reviews a small sample of the literature on liberalisation in the air transport sector.<sup>3</sup> Specifically, given that limited information is available on the nature and depth of the barriers to entry into the air transport sector in Mozambique, secondary information and case studies are used to consider some of the costs and benefits entailed in a process of national carrier restructuring and the variants in the methods of air transport liberalisation.

It is argued in this report that a programme of liberalisation, as outlined in the Yamoussoukro Decision, entails some risks, yet remains an interesting option for the Mozambican authorities because:

- Firstly, although (possibly) placing the national airline under severe financial threats, airline liberalisation will generate significant tourist expansion and, in turn, will help secure large tourist revenues. The Yamoussoukro Decision has been ratified by all SSA air transport ministers and reflects a collective acknowledgement that air transport liberalisation is required to enhance development. An expansion of tourism fits this agenda in terms of the development impacts of the sector.
- Secondly, the Decision offers a liberalisation framework for SSA and has particular targets and steps to follow. Coordination provides incentives for large scale action and the Yamoussoukro Decision offers a platform for policy-makers to discuss and negotiate difficulties. Importantly, the Decision seeks to address changes to the existent legal and regulatory frameworks; an important feature given the numerous weaknesses in place in this context and, moreover, that many SSA countries share common economic characteristics. A process of sequenced liberalisation minimises the risks of a late adopter being left behind and facing the typically large costs associated with catching up with its neighbouring competitors.
- Thirdly, the framework for the Yamoussoukro Decision is defined as an African project that supports integration within the continent. It is, thus, in line with a broader pan-African agenda.

<sup>&</sup>lt;sup>3</sup> The focus of this report is with passenger, not cargo, air transport given that the concern is with the impact on tourism of air transport liberalisation. It is worth noting that air freight has a critical role to play in development. As transport times are reduced, trade is facilitated. New markets, for example, in perishable items such as fresh food and flowers, become available. According to the World Bank, 40% by value of all manufactured trade is currently transported by air (e.g. World Bank, 2004). In addition, private air charter is not discussed here. While private air charters relax some of the capacity constraints which confront other types of air transport, the scale of such operations is small and/or typically linked to short, specialist trips.

Fourthly, the Yamoussoukro Decision does not, per se, conflict with a programme of maintaining national carriers.

The above points apply generally as well as specifically to Mozambique. Nevertheless, in the case of Mozambique, there is a threat to the survival of Linhas Aéreas de Moçambique or LAM, the national carrier, when there is a lowering and, in the extreme case, removing of the barriers to entry. From an examination of a series of options available to the survival of a national carrier, the changes should be considered carefully. Specific questions have to be raised and addressed by the authorities before engaging with these changes. Legislative and regulatory changes have to be devised carefully in the process of air transport liberalisation. Gradual liberalisation is essential to ensuring that some of the adverse effects associated with removal of the barriers to entry are avoided. Some amount of governmental intervention could be justified in particular circumstances. The Mozambican authorities might not be in a position to follow rapidly the timetable of air transport liberalisation that is being adopted by a range of other countries. Moreover, the Yamoussoukro Decision only offers a framework; no additional financial support or capacity is provided to engage with the changes.

This report is structured as follows: in addition to this introduction, there are six sections.

Section Two outlines the concept of liberalisation in the air transport sector; clarification of liberalisation principles in the air transport sector is important given the sector's complexity and that liberalisation progresses on many levels. Liberalisation has frequently but incorrectly been confused with deregulation; the latter implies a lack of regulation and a laissez-faire attitude on the part of governmental authorities.

Section Three identifies the various benefits associated with air transport liberalisation.

Notwithstanding the strong evidence in favour of air transport liberalisation, Section Four discusses the specific arguments against it. In spite of typical protectionist interests around the preservation of national carriers, some political considerations might be contradicted by liberalisation; it is, as one observer has characterised it, a conflict between economic and political considerations. This report's perspective is an economic one and it is through this lens that the current, unsustainable situation in Mozambique is considered.

In Section Five, some general options with regard to liberalisation models are described. Great attention is paid onto particular steps which need to be considered by the authorities to ensuring that some adverse effects associated with the opening up of air transport are minimised.

Section Six shifts the discussion to the case for Mozambique to adopt the Yamoussoukro Decision given the nature of its air transport sector which is described in some detail. Most aspects of the Decision make it an interesting model for Mozambique to follow, yet liberalisation should be implemented gradually.

Consequently, the timetable of action presented in the Yamoussoukro II Decision might not be appropriate for Mozambique.

In Section Seven, a set of conclusions and recommendations are offered.

# 2. What does air transport liberalisation entail?

There are two basic approaches to introducing competition into industries: the deregulation approach and the liberalisation one. Briefly, deregulation is the removal of regulation. For example, deregulation of an air transport industry occurred in the United States of America (USA following the introduction of the Airline Deregulation Act of 1978.

Generally, liberalisation entails a relaxation of governmental restrictions. It is the phased opening of a market with state control enacted over that process. Liberalisation may be accompanied by the reintroduction of some amount of regulation to ensure that market forces can operate and that the process is managed properly. In the air transport sector, liberalisation is a complex concept and that complexity cuts across many levels. Firstly, there is complexity about what constitutes the air transport sector; secondly, clarification is needed about how the barriers to entry in the sector are managed and negotiated; thirdly, in terms of a limited number of truly liberal air transport cases, it is the case that even the more liberalised, "open sky"-type of agreement contains some barriers to entry; and fourthly, liberalisation cannot be equated with the absence of governmental interference: even in a liberalised market a government needs to adopt a vigorous role in areas such as developing and implementing a transparent, non-discriminatory framework to facilitate competition, anti-trust laws and airport capacity expansion. A failure by government to fulfil this role can lead to negative developments such as congestion and a concentration of power through mergers.

In its simplest form, air transport liberalisation means that a set of strict, arcane rules are replaced by the market. Thus, in the extreme, a liberal air transport system is one devoid of governmental interventions in access, pricing and services. The introduction of market principles has proven repeatedly to be a decisive influence in expanding the industry and making its benefits available to more people; liberal air transport arrangements are scarce though. As such, and given that even those arrangements currently considered among the most liberal were previously relatively restrictive, liberalisation progress is a key dimension to consider.

Liberalisation implies that a particular type of change occurs over various dimensions; that makes liberalisation something which is difficult to assess. It is challenging to rank and select liberalisation alternatives. When limited information is available about an initial set of air transport restrictions, it complicates an assessment even further; such is the case for Mozambique.

Noting that, there are specific difficulties around liberalisation progress in the air transport sector. One particular hurdle is associated with the exclusion of large segments of air transport from the ambit of

multilateral trade negotiations, under the General Agreement on Trade in Services (GATS). It is to that issue which this report's discussion now turns.

## 2.1 Air transport services and the GATS

In the World Trade Organisation's (WTO) standard services classification, there are five main sub-sectors in the air transport services: passenger transportation, freight transportation, rental of aircraft with crew, maintenance and repair of aircraft, and supporting services for air transport. (The latter has been added relatively recently to the classification.) Only the "repair and maintenance" and "activities related to sales (including computer reservation system services)" sectors are subject to GATS and, thus, to multilateral liberalisation negotiations. The GATS' Annex, which "applies to measures affecting trade in air transport services ..., and ancillary services", also specifies that a large number of air transport segments fall outside the GATS, including: "(a) traffic rights, however granted; or (b) services directly related to the exercise of traffic rights" (see paragraphs one and two in WTO, 2008).<sup>4</sup>

The details of the GATS' Annex are important for many reasons. Generally, with the GATS not applying to air traffic rights or those services directly related to such traffic, the scope for liberalisation progress is defined in other arenas: access to major segments of the air transport sector can only be tackled within a bilateral (between governments) and/or a plurilateral context<sup>5</sup>, rather than within an international or multilateral one. This feature limits the scope for large-scale liberalisation progress. (It also relies on the country which initiates the liberalisation process to have a large traffic volume if the impacts are to be garnered.) In turn, the exclusion of large transport sub-sectors from GATS might have impacted adversely on the sky access of those airlines that have been recently established and those in developing countries created or expanded at a later stage if the relevant authorities decided that such airlines needed to be protected in order to expand.

The International Air Transport Agency<sup>6</sup> or IATA (1999) has a somewhat different stance from the GATS' one. The current air traffic context is characterised by a proliferation of bilateral agreements: internationally, about 3,000 bilateral agreements (with other estimates suggesting it is 3,500) have been identified as managed by the International Civil Aviation Organisation (ICAO).<sup>7</sup> According to IATA (1999) and the United

<sup>&</sup>lt;sup>4</sup> The Annex defines "traffic rights" as "the right for scheduled and non-scheduled services to operate and/or to carry passengers, cargo and mail for remuneration or hire from, to, within, or over the territory of a Member, including points to be served, routes to be operated, types of traffic to be carried, capacity to be provided, tariffs to be charged and their conditions, and criteria for designation of airlines, including such criteria as number, ownership, and control" (WTO, 2008).

<sup>&</sup>lt;sup>5</sup> Though the term "plurilateral" refers frequently to regional, plurilateral arrangements can span regions across continents. Plurilateral deals entail typically that a common set of civil aviation rules is adhered to. Such deals are distinct from multilateral arrangements in that their scope is more limited and the negotiation models are distinct and involve less stringent participation.

<sup>&</sup>lt;sup>6</sup> The IATA represents the industry's trade interests towards governments.

<sup>&</sup>lt;sup>7</sup> The ICAO is a (post World War II) United Nations (UN) agency that deals with international air transport and, more specifically, with air transport cooperation. Though it has both a planning and sector development role, its core focus has been with the adoption of common procedures, principles and standards in the sector. ICAO's role was, in the

Nations Conference on Trade and Development or UNCTAD (1999), it is because of the prevalence of bilateral agreements that large segments of air transport have been excluded from the GATS.<sup>8</sup> The preference for bilateral deals is associated with the perception that negotiations are more easily instigated under bilateral rather than under other types of arrangement.

While there is an ongoing debate over whether bilateral or multilateral negotiations should be pursued, the sector has been affected by a wide range of plurilateral arrangements, as is summarised in Figure 1. These are comparatively large in scope – in terms of the number of countries involved and the fact that a little over 23% of international traffic would be subject to plurilateral agreements – and overlap with the 3,000 bilateral deals that are in place. Only limited comments are made in the literature about the benefits of a plurilateral versus a bilateral approach because a number of such deals have not been ratified or enacted, as is the case for the Yamoussoukro Decision, and because plurilateral deals appear superior to bilateral arrangements on the basis of their scope. The former are difficult for governments to alter, are less predictable than other types of arrangements and entail more complex regulatory framework issues (IATA, 1999).

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organisation's early years, articulated around the interests of specific geographical areas or regions in line with the recognition of distinct regional dynamics. Its current objectives are safety, security, environmental protection, efficiency, continuity and the rule of law.

<sup>&</sup>lt;sup>8</sup> Other reasons raised by IATA (1999) about the difficulties of integrating air transport within GATS lie with the specific nature of the air transport sector, the fact that the most favoured nation principle, which underlies GATT/WTO trade negotiations, was seen as a threat by countries which were seeking rapid liberalisation progress as well as with the threat that air transport liberalisation would become linked to the negotiations of other trade interests.

Stylised map of plerilateral Air Services Agreements

Amount a Bons And Bons A Bons A

Figure 1: Plurilateral air services agreements (stylised representation)

Note: \* denotes countries which are also parties to IATA44.

Source: WTO (2007: 12, Figure 1)

## 2.2 Barriers to entry into the air transport sector

A key issue in the liberalisation of air transport pertains to what it is that is to be liberalised. As this particular question is rarely laid out in the literature advocating liberalisation, it is worth noting that the most frequent restrictions to air transport operations are:

- Ownership and/or designation-withholding restrictions. These refer to the extent to which air traffic rights and related services may be "substantially owned" or -controlled by nationals;
- Tariffs specifications e.g. dual approval which means that both governments need to approve fares and tariffs versus a free pricing approach;

- Capacity specifications (e.g. whether predetermination or capacity control is applied as opposed to the free determination of frequency or aircraft capacity); and
- Traffic rights restrictions which refer to specific freedoms of the air (see Annex).

While all of the above affects entry to an extent determined by the details of the arrangements, a different classification of the barriers to entry distinguishes between soft and hard rights. Soft rights refer to barriers affecting air transport or air services operations (e.g. the rules on the import of aircraft parts or taxation) while hard rights refer to the conditions applying to the freedoms in operating (e.g. the number of designated carriers, traffic levels allowed, conditions governing access to routes). These are areas for which an authorisation needs to be secured before the air transport service is supplied.

# 2.3 Assessing liberalisation progress and restrictions: methodologies

Theoretically, liberalisation has deep and varied impacts on the implementing country but there are comparatively few quantitative (and econometric) exercises carried out to determine the impact of airline regulations or air transport restrictions (and the removal thereof). Only a small number of partial assessments have been carried out to determine the extent to which the air transport industry is restricted as well as the actual impact of the removal of those particular restrictions. As pointed out by WTO (2006a:10; emphasis added), the "[c]urrent literature on air transport contains no comprehensive analysis of the degree of liberalisation of bilateral Air Services Agreements."

Evidence to support the claim that air transport liberalisation is generally positive relies on a dominant methodology: the literature presents the impacts of air transport liberalisation on a case by case basis; once the assessment is made for a group of countries, a general picture is obtained. This means that the determination of whether liberalisation is overwhelmingly positive or negative draws heavily on collections of case studies. The case study approach dominates for two reasons: firstly, air traffic is managed in complex, multi-layered ways and secondly, discrepancies and gaps in reported and collected information (see WTO, 2006a and WTO, 2006b for a discussion of this issue). The sectoral complexity and the data discrepancies are minimised (but not eradicated) with the use of the case study approach.

In terms of details, changes are assessed in many ways. The literature refers to assessments comparing pre- and post-liberalisation data; extrapolating and comparing pre- and post-liberalisation trends; and comparing the situation in more liberal cases vis-à-vis more restricted situations. (The latter can be done within a particular country, such as in the USA which had some regulated or protected routes while other routes were not.) The time series and cross-section data are applied to a series of variables and are used,

 $<sup>^{9}</sup>$  These are the major restrictions reported. See WTO (2006a) and WTO (2007) for some other restrictions.

for instance, to analyse passenger and price, cost or investment changes. Yet, in some cases, these are inadequate. At least, as was noted by an informant in Viscusi, Vernon and Harrington (2000:562), "[t]he essence of the case for competition is the impossibility of predicting most of its consequences."

<sup>10</sup> The emergence of hub-and-spoke systems has been one instance of an unpredicted outcome of competition. We describe these systems subsequently in this report.

# 3. The case for air transport liberalisation

The case for air transport liberalisation is based on evidence that it has delivered many positive effects including these:

- The consumer's ability to choose airlines, routes, schedules, frequencies and airports is enhanced as air transport is liberalised. Liberalisation has, by and large, translated into enhanced consumer choice;
- Greater consumer surplus has arisen by allowing lower transport fares to become available;
- Economic growth has been accelerated by providing additional tourism jobs and receipts.

In this section, the broad link between liberalisation and economic growth is explored. The section's discussion also explores the impact of air transport liberalisation on tourism and the gains experienced for selected developed and developing countries.

## 3.1 Liberalisation and economic growth

Data difficulties notwithstanding, the WTO's Council of Trade in Services, which is in charge of providing air transport reviews, <sup>11</sup> has attempted recently to establish the scale of restrictions within the sector. <sup>12</sup> Stressing that the exercise is complex, the approach adopted in a review conducted for 2005 resulted in the creation of air liberalisation indices. Among these is the standard air liberalisation index (ALI), where higher figures (of up to 50 points) reflect less restrictive regimes. (A methodological discussion is presented in the Annex.)

The WTO review's main findings on the various air transport agreements in place were, among others, that:

Passenger traffic is concentrated: two-thirds of all World Air Services Agreement (WASA) traffic, as specified by the ICAO, involves 50 parties and 100 air service agreements (ASAs).

The reviews aim to assess whether excluded air transport services could become incorporated into GATS. These are to be conducted on a regular basis: every five years. More specifically, the 2005/06 review consisted of an evaluation of the extent to which the sector is restrictive.

<sup>&</sup>lt;sup>12</sup> The 2005/06 WTO review of air transport used data from the IACO (the World Air Services Agreement or WASA database) and from the International Air Transport Association (the IATA). Since WASA provides only bilateral information, data have been manipulated to obtain quantitative information on plurilateral arrangements. Each pluritateral deal has been directly and specifically scrutinised to refine the information and guide the analysis of the extent to which the sector is restricted.

- The existent bilateral agreements regulating air transport are overly complicated: given the prevalence of common points across the bilateral agreements, there are seven main types of agreements (or sets of provisions). There is, thus, great scope for streamlining the agreements.<sup>13</sup>
- Important liberalisation impacts would be achieved by relaxing the barriers to market access contained within plurilateral agreements given that a high portion of air traffic (equivalent to 23% of total air passenger traffic) is managed by such deals. However, many such agreements have not been ratified.
- One in six and one in three passengers travels under liberal and semi-liberal conditions, respectively.<sup>14</sup> This reflects the fact that some high air traffic areas have applied liberal air travel provisions.

Three important points arise from the above findings. Firstly, noting that some large, developed markets, such as the USA and the European Union (EU), have undertaken substantial efforts to enhance competition in the sector, there is a diversity of bilateral agreements that are similarly restrictive. Secondly, an assessment of the impact of air liberalisation relies on an understanding of the current restrictions. A related issue here is the extent to which air traffic is undertaken with restrictive partners and how that traffic is curtailed by restrictive practices. Thirdly, WTO (2006a) considers restrictions at the level of regions and finds comparatively limited cross-regional differences. This is because there are relatively wide disparities in air transport agreements within any given region. Furthermore, a large volume of passenger air traffic from any given country is with the EU and the USA. Thus, the distinction between a developing and a developed pattern of liberalisation appears somewhat unhelpful when considering the extent to which air transport has been liberalised or is still restrictive.

In an examination of a set of five, mixed case studies of country-pairs, InterVISTAS-ga (2006) finds that liberalisation has been associated with a substantial increase in passenger traffic and economic growth: post-liberalisation traffic growth tended to exceed pre-liberalisation growth levels by 12%-35%, rising up to 50% in some instances. The growth rates vary depending on the periods considered as well as on the size and level of development of the economies examined. Though focusing specifically on the deregulation case of the USA, Viscussi, Vernon and Harrington (2000) report that fare declines were not observed consistently across routes, however; some fare increases occurred as low density air routes were cross-subsidised by high density air route traffic. In spite of this, these authors concur with others that a growth of discount fare passengers occurs as discount fare levels decline following the introduction of competition in the countries considered.

Table 1 illustrates the variety of effects associated with growing air transport competition for specific cases.

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<sup>&</sup>lt;sup>13</sup> One shortcoming in terms of the bilateral analysis is that intra-EU ASAs have not been excluded whilst liberal conditions apply to intra-EU air traffic. This biases many ALIs downward.

<sup>&</sup>lt;sup>14</sup> The WTO defines this over the characteristics of the agreements and ALI ranges.

The first impact that can be noted from the table is for new entrants. New firms are able to enter the market as supply-side constraints are removed. While the information reported in the table is far from comprehensive, it emphasises that low cost carriers are set up as competition is introduced. This has been reported by InterVISTAS-ga (2006) for the USA (following the 1978 deregulation decision), India, Brazil and the EU (as more liberal rules were adopted across Member States under the single European market). This is as was expected. Such carriers develop operational, service and overhead savings over the traditional air carriers. In order to reduce operating costs airlines have to fly as frequently as possible; the crafts have to be filled with as many passengers and have as many seats on board as possible. Although there is some uncertainty about the sustainability of the low cost model, consumers have benefited from these low cost airlines in terms of greater competition, greater fare diversity, greater flight frequencies and a greater range of destinations on offer (ICAO, 2003a). New airports have also been established, tapping on the proximity of a consumer platform and following the infrastructural constraints associated with the expansion of air transport, as is the case for the United Kingdom (UK).

The second impact to note is the emergence of hubs-and-spokes which increase flight frequency. (This first occurred during the deregulation of air transport in the USA.) The main virtue of a hub-and-spoke system is that it rationalises air traffic (Viscusi, Vernon and Harrington, 2000): the system entails airlines using a major city as a centre for its operations. Airlines stop at this centre and use it as a hub from which to serve other destinations. New services have been promoted through air transport services liberalisation. Moreover, new, natural hubs can emerge in new regions, as occurred in Dubai in the United Arab Emirates (UAE).

Table 1: Effects associated with specific air transport deregulation and liberalisation events

| Event  | Results   |
|--|---|
| U.S. deregulation, 1978                                | Emergence of hub and spoke systems, low cost carriers with<br>nationwide route networks, new entrants and integrated cargo<br>carriers. |
| U.K Liberalization of Secondary Airports               | Growth of international services to Manchester, Birmingham,<br>Glasgow, etc.  |
| Open Skies Agreements for United Arab<br>Emirates      | Growth of Dubai as major international hub.   |
| Domestic deregulation in India                         | Development of low cost carriers and aggressive, expansion-<br>oriented airlines.   |
| U.K-India Bilateral and Creation of New<br>Frequencies | Growth of capacity, new gateways and additional carriers<br>operating U.KIndia service.   |
| Domestic deregulation in Brazil                        | Growth of low cost carrier Gol and others.  |
| Single European Market                                 | Growth of low cost carriers. Ryanair, Easyjet, etc. New services, traffic growth, new gateways throughout European Union.               |

Source: InterVISTAS-ga (2006, Table ES-1:7).

Air transport liberalisation impacts positively on economic growth via a range of effects.

As inefficient air transport systems are dismantled and inefficient airlines are subjected to market forces, liberalisation brings about improved efficiency and enhanced productivity (including via innovations). Nevertheless, the magnitude of overall efficiency improvements are determined by some key dimensions:

the availability, size and efficiency of the airports as well as the efficiency of individual air companies serving that region.

With efficiency improvements, revenues expand. This is triggered by the removal of large, explicit or implicit subsidies which are granted to ensure the survival of the national carriers and by a substantial growth of (passenger) traffic. As passenger volumes increase and as new airlines are set up (or as operating airlines expand), an expansion of existing or new airports can take place and increased employment and generated revenues at airports occurs.<sup>15</sup>

Expanded employment in the medium- to long-term can result from and feed into economic growth. Air transport liberalisation creates jobs directly (e.g. air crews, ground staff, airport staff) as well as indirectly (through tourism, by enhancing economic growth, etc.).

Air transport liberalisation impacts on growth by enhancing the integration of the economy and of economies. At the regional level, the difficulty of access can be a major barrier to development, particularly for landlocked economies. This feature is a well established finding of the economic geography literature.

Much of the discussion on the positive impacts of air transport liberalisation revolves around reduced fares and greater air transport consumption and supply, yet the causal relationship between air services liberalisation and economic growth is complex. InterVISTAS-ga (2006:6) depicts a particular type of link between liberalisation and economic growth (and eventually job growth); as is shown in Figure 1, particular elements have to be in place if liberalisation is to be translated into growth. InterVISTAS-ga argues that while bilateral agreements allow better services, the link between better services (where they occur) and traffic growth is much stronger if airlines change their routes to match the market's requirements. Importantly, there is adaptation in a more liberalised environment. Figure 2 illustrates that new and better services stimulate traffic growth. Where traffic growth has been stimulated, a positive link with economic growth emerges (InterVISTAS-ga, 2006).

Figure 2: The link between liberalisation and economic growth



Source: InterVISTAS-ga (2006, Figure ES-1:6).

<sup>15</sup> The main sources of these are with expanded services to consumers (advertising, shopping, car rentals, parking, banks, restaurants, bars, transport, etc.).

## 3.2 Tourism and air transport

Liberalisation stimulates the creation and growth of low cost airlines. That segment of the air transport industry is important: in the EU, low cost airlines, which were set up progressively, now account for 24% of the scheduled intra-European air traffic. Low cost airlines creation was also observed in the USA's air transport deregulation case. Low cost airlines enter a market as fares restrictions are removed.

Statistics indicate that the growth of low cost airlines is not due to poaching from traditional airlines but rather because of the presence of passengers who would not have travelled by air or who would not have travelled at all had the fares not dropped. Internationally, passenger numbers for the traditional airlines have increased, yet the growth of such traffic has been below that observed for low costs airlines. That trend is indicative of a growth of passengers motivated by tourist visits. Indeed, business and "wealthy" travellers have a relatively low sensitivity to the price of air travel; they form the core market of the national airlines. In contrast, passengers attracted by low fare airlines in liberalised or more liberal air travel markets are highly sensitive to the price of air travel.<sup>16</sup>

It is argued consistently in the literature that there is a link between lower air fares and greater tourist passenger traffic, but tourism is constrained in many SSA countries because of the high cost of air transport and by poor intra-Africa connectivity. That does not imply that no tourism potential exists. Tourism has a huge potential in Africa generally and in Mozambique in particular. Presently, it is difficult to secure flights to Mozambique and the cost of those air tickets is high.<sup>17</sup>

Evidence suggests repeatedly that liberalisation leads to a rapid expansion in the tourist industry. In addition to the massive increase in tourism, three specific benefits of liberalisation to the tourist industry have been identified in the EU (European Low Fares Airlines Association, 2004):

- A substantial increase in the number of tourist destinations accessible by air;
- A more even traffic distribution throughout the year; and
- The mid-week holiday travel option has become popular.

<sup>&</sup>lt;sup>16</sup> A study in the EU (European Low Fares Airlines Association, 2004) indicated that 59% of passengers for low cost airlines are passengers that would otherwise not have traveled or would have traveled by car, rail etc. (See Viscusi, Vernon and Harrington (2000) for a more detailed discussion.)

<sup>&</sup>lt;sup>17</sup> In spite of the fact, for instance, that Maputo and Durban are almost equidistant from Johannesburg, excluding airport taxes, ComMark (2006) indicates that a return fare to Maputo is 163% more expensive than to Durban. The difference is, by and large, not explained by difference in taxes but by constraints on capacity. Genesis Analytics (2007) suggests that fares could drop by about 30% if the access restrictions to Maputo were removed.

Liberalisation is expected to have a large impact on tourism growth, on revenues earned and on GDP. Substantial work has been carried out by ComMark for Africa in this regard. For the Southern African Development Community (SADC) region, ComMark (2006) argues that liberalisation would lead to:

- A 20 % increase in air travel;
- An increase of 500,000 foreign tourists annually;
- An annual increase in tourist spending of US\$500 million;
- An annual increase in the SADC's GDP of US\$1,5-bn; and
- The creation of 35,000 new jobs in the tourist industry with a further 37,000 new jobs in the wider SADC economy.

ComMark (2006) projects that the liberalisation of the Mozambican air traffic would lead to:

- A 37% increase in tourist arrivals in Mozambique;
- An associated increase in tourist spending by US\$5m;
- An additional US\$9m contribution to Mozambique's GDP; and
- The creation of 1,000 new jobs in the tourist industry with about 2,000 new jobs in the wider economy.

In specific and more general cases, the expansion is based on both lower ticket prices and improved accessibility. The cuts to fares, through the liberalisation of air transport, are estimated to range between 30%-45% (ComMark, 2006 and Genesis Analytics, 2007). Tourism in Mozambique would benefit from such fares declines and ComMark (2006:23) states that for the SADC, airfares are 18% lower on liberalised routes compared with non-liberalised ones, adding that "the presence of a low cost airline on a given route has reduced prices by an average of 40 percent."

### 3.3 Developed countries evidence: the USA and the EU

The experiences of the USA and the EU have been influential on international efforts to stimulate competition in air transport via liberalisation and deregulation. The substantial progress made by the USA and the EU offers two broad models for dismantling air traffic restrictions: the former used a bilateral approach that promoted open skies strategies with its partners;<sup>18</sup> the latter used a plurilateral approach but liberalisation

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<sup>&</sup>lt;sup>18</sup> The USA's deregulation strategy was adopted subsequently by Canada and Australia.

was extended through a particular air transport agreement being imposed on new members joining the Union. These two experiences are discussed in some detail here.

#### 3.3.1 The case of the USA: deregulation interventions

The USA was a pioneer which introduced air transport competition through a process of deregulation. Deregulation of the airline industry was initiated with the introduction of the Airline Deregulation Act (ADA) in 1978. Previously, in terms of the Civil Aeronautics Act of 1938, the USA's Civil Aeronautics Board (CAB) was in charge and had three main functions: awarding routes to airlines, limiting the entry of air carriers into new markets and regulating fares for passengers.

The Airline Deregulation Act of 1978 led to the disbanding of the CAB. Competition resulted from airlines being allowed to enter the air transport market or to expand their routes as they saw fit. Airlines also had full freedom to set their fares.

In 1983, further changes were implemented when USA-based airlines were allowed to determine autonomously the routes, destinations, frequencies and airfares on their domestic flights, while new firms were free to enter the market.

The resulting competition stimulated over the medium- and longer term efficiency and innovation<sup>19</sup> within the airline sector; lower fares and doubled demand.

#### 3.3.2 The case of the EU

The USA favoured the deregulation approach, leaving everything to the market, whereas the EU favoured liberalisation with state control over the process.

Liberalisation in the EU started with the opening of certain routes between Ireland and the UK, a change which enabled the establishment of Ryanair, the low fares airline. Liberalisation of the EU's air transport was progressive, spanning a period of 10 years, and framed by the adoption of "packages" or a set of rules which Member States had to adopt.

In a first package, adopted in December 1987, two main changes were introduced. These were in terms of fares being made more flexible (which resulted in reduced fares) and capacity restrictions being relaxed through changes made to the designation provisions for instance.

<sup>&</sup>lt;sup>19</sup> The large companies which survived the deregulation process developed an extensive hub-and-spoke network as well as their own computer reservation system. These computer systems help enhance the cost structure and induce efficiency in the system as they had large capacities and were able to handle a complex fare structure.

The second package, adopted in June 1990, was more complex and involved the following additional improvements on the first package: (i) all European airlines were allowed to carry passengers to and from other EU countries; (ii) increased rights were awarded to stop over at third countries and pick-up or drop off passengers; and (iii) fare restrictions were reduced further.

A third package was adopted in January 1993 and formed the basis of the EU's open sky agreement. This package allowed (i) all carriers holding an EU licence to serve any international route within the EU and (ii) the abolition of almost all fare restrictions.

It was not until 1997 that all carriers holding an EU licence had the right of cabotage or the right to operate on all domestic routes within the EU. New members of the EU applied these liberalisation rules from 1 May 2004.

Currently, the EU's air transport market is characterised by, among others, an absence of cabotage restrictions, limited tariff controls and the freedom of establishment.<sup>20</sup> Further changes were underway in 2006 when the EU Commission proposed an update of the third package including a proposal that "remaining restrictions from existing bilateral agreements between Member States will be lifted, permitting the free code sharing on routes to third countries and the free price setting on routes to third countries with an intermediate stop in another Member State".<sup>21</sup>, <sup>22</sup>

#### 3.3.3 Impacts of introducing competition in the USA and the EU

The short term results of the deregulation undertaken in the USA were:

- Changes in routes: many airlines abandoned less profitable routes that took passengers to smaller cities. Huband-spoke routes grew as the major airlines selected key cities as centres for their operations. Stops at the hub cities, though, lengthened the time spent by many travellers in the air; and
- New routes were opened up.

<sup>&</sup>lt;sup>20</sup> According to the European Cockpit Association, the EU currently has regulations on the following aviation related matters which apply to all Member States. These are in the following areas: employment and labour; competition law; security and safety; environment; passenger rights and protection; the Single European aviation market; air traffic management (including the Single European Sky regulations).

<sup>&</sup>lt;sup>21</sup> See <a href="http://ec.europa.eu/transport/air">http://ec.europa.eu/transport/air</a> portal/competition/doc/acte en.pdf.

<sup>&</sup>lt;sup>22</sup> A story somewhat similar to that of the EU can be identified for Australia and New Zealand. While the first steps towards air transport liberalisation between Australia and New Zealand can be traced to 1966 when the New Zealand and Australia Free Trade Agreement was signed, in 1999, the Single Aviation Market was established. Full open skies access was set up in 2000. The effects associated with the changes were, by and large, positive for the two countries: by 2005 Australia-New Zealand traffic was 56% higher than it would have been in the absence of any liberalisation; according to a model, each nation gained more than 20,600 full time positions from the liberalisation and the ensuing traffic increase; the GDP of each country grew by US\$726m (See InterVISTAS-ga, 2006).

There is evidence that deregulation has stimulated traffic in a range of countries over a longer time horizon. The information from Table 2 illustrates this point for a range of city-pairs in the USA (as well as those outside of the USA).

Table 2: Growth in passenger traffic between from the USA and partner following specific liberalisation events

|                                | Passengers/Year               |                            |          |          |        |
|--------------------------------|-------------------------------|----------------------------|----------|----------|--------|
| City-Pair                      | Service                       | Liberalization Event       | Before   | After    | Gain   |
| Vancouver-Phoenix              | America West                  | 1995 Canada-U.S. Bilateral | 31,216*  | 76,910   | 146.4% |
| Toronto-Minneapolis            | Air Canada 1995,<br>Northwest | 1995 Canada-U.S. Bilateral | 53,020   | 82,320   | 55.3%  |
| Toronto-New Orleans            | Air Canada 1998               | 1995 Canada-U.S. Bilateral | 31,390   | 44,320   | 41.2%  |
| Ottawa-Chicago                 | Air Canada/ American<br>1996  | 1995 Canada-U.S. Bilateral | 14,720   | 30,870   | 109.7% |
| Montreal-Atlanta               | Delta 1995                    | 1995 Canada-U.S. Bilateral | 39,690   | 61,730   | 55.5%  |
| Atlanta-San Jose CR            | Delta 1998                    | 1997 U.SCosta Rica         | -        | -        | 118.5% |
| Dallas/Fort Worth-<br>Santiago | American 1996                 |                            | -        | -        | 336.6% |
| Chicago-Hong Kong              | United 1996 (not daily)       | U.SHong Kong Bilateral     | -        | -        | 21.1%  |
| Chicago-London                 | United 1995                   | U.SU.K Mini Deal, 1995     | 545,152+ | 774,504+ | 42.1%  |
| Chicago-Sao Paulo              | United 1997                   |                            | -        | -        | 80.4%  |
| Chicago-Buenos Aires           | United 1998                   |                            | -        | -        | 41.1%  |
| Houston-Sao Paulo              | Continental 1999              |                            | -        | -        | 120.5% |
| Atlanta-Guadalajara            | Delta 1999                    |                            | -        | -        | 169.5% |
| Washington-Buenos<br>Aires     | United 2002                   | Reassignment of routes     | -        | -        | 208.7% |
| Washington-Sao Paulo           | United 2002                   | Reassignment of routes     | -        | -        | 88.4%  |
| Detroit-Beijing                | Northwest 1996                |                            | -        | -        | 174.3% |
| Dallas/Fort Worth-Lima         | American 1996                 |                            | -        | -        | 482.0% |
| Houston-Tokyo                  | Continental 1998              | 1998 U.SJapan              | -        | -        | 116.6% |
| Atlanta-Rome                   | Delta 1999                    | 1998 U.SItaly              | -        | -        | 110.8% |
| Dallas/Fort Worth-<br>Zurich   | American 2000                 | 1995 Open Skies            | -        | -        | 115.3% |

Sources: United States Department of Transportation Databases 1B and 28IS: Statistics Canada Report 51-205. "Air Passenger Origin and Destination, Canada-United States Report." The U.S. Department of Transport provides public disclosure of raw international origin-destination traffic statistics. Some city-pairs shown have a significant foreign airline presence. The DOT databases do not include traffic volumes submitted by foreign airlines.

Source: InterVISTAS-ga (2006, Table ES-2:8).

Other rapid effects associated with deregulation were that:

- New airlines entered the market and undertook decisions independent from those practiced by the larger established airlines;
- Increased frequency, generally improved fares and a better mix of connections and better safety records are documented by Viscusi, Vernon and Harrington (2000).

Many airlines recorded difficulties from as early as 1981, with contributing factors being overexpansion, fuel costs, economic recession and an air controllers' strike. In turn, a number of airlines became bankrupt, e.g. Braniff, American, TWA and Pan Am.

Includes charter traffic Onboard traffic

Deregulation favoured smaller airlines because entry into the industry was easier and they were able to take over the shorter routes that were no longer profitable for the bigger carriers. Major airlines suffered mostly from the negative consequences of deregulation. With the disappearance of several airline companies as competition rose, the market structure became oligopolistic. Moreover, though passengers generally gained, congestion in the air and at airports increased. Viscusi, Vernon and Harrington (2000) report that travellers have had to confront more stringent restrictions on their travel arrangements, a higher load factor and a worsening of their welfare associated with a growing number of connections and travelling time.

The EU's position is interesting. Its position, before the coordinated EU liberalisation process began, was similar to the present position of the SADC where national airlines dominate but some liberalisation is already in place. The European air transport sector's liberalisation is, in turn, important for another reason: the arrangements were changed after careful consideration; workable measures involved years of negotiation. Numerous issues were of concern in the early phase of the EU's negotiations. These related to the survival of national flag carriers; ensuring that airlines would target profitable routes while essential but uneconomic services could be lost; concerns that new entrants might focus on international routes which may lead to less development of regional routes and compromised safety and security standards.

Evidence suggests that liberalisation has been beneficial overall (ICAO, 2003b). Table 3 illustrates that the changes have been positive across a wide range of dimensions and that the concerns expressed early in the negotiations did not materialise. Table 3 also reveals that fares have evolved in favour of the promotional segment but against business travellers and the normal economy segment.

Table 3: Key indicators of air transport liberalisation's impact in the EU

|   | Pre-         | Current | Change   | Source |
|---|--------------|---------|----------|--------|
| Li  | beralization | (a)     |          |        |
|   |              |         |          |        |
| Number of EU Scheduled Airlines                                   | 124          | 131     | 6%       | AEA1   |
| Number of EU domestic city-pair routes                            | 813          | 910     | 12%      | EU2    |
| Number of domestic routes with more than one carrier              | 106          | 199     | 88%      | EU2    |
| Weekly Seats on EU domestic routes (in thousands)                 | 2,891        | 4,084   | 41%      | EU2    |
| Yearly ASKs on EU domestic routes (in billions)                   | 73           | 105     | 44%      | EU2    |
| Yearly Flights on EU domestic routes (in thousands)               | 1,486        | 2,220   | 49%      | EU2    |
| Share of EU domestic ASKs on routes with more than one carrier    | 34%          | 68%     | +34 ppts | EU2    |
| Number of Intra-EU (international) city-pair routes               | 692          | 1,202   | 74%      | EU2    |
| Number of Intra-EU routes with more than two carriers             | 61           | 217     | 256%     | EU2    |
| Weekly Seats on Intra-EU routes (in thousands)                    | 2,231        | 4,571   | 105%     | EU2    |
| Yearly ASKs on Intra-EU routes (in billions)                      | 102          | 243     | 138%     | EU2    |
| Yearly Flights on Intra-EU routes (in thousands)                  | 1,109        | 2,080   | 88%      | EU2    |
| Share of Intra-EU ASKs on routes with more than two carriers      | 42%          | 52%     | +10ppts  | EU2    |
| No-Frills Airline share of total EU domestic ASKs                 | 0.0%         | 3.9%    | +4ppts   | EU3    |
| No-Frills Airline share of total Intra-EU ASKs                    | 0.6%         | 12.9%   | +12ppts  | EU3    |
| I   |              |         |          |        |
| Change in Business Class Fares on routes within the EEA (nominal) | €242         | €350    | 45%      | EUI    |
| Change in Normal Economy Fares on routes within the EEA (nomin    | al) €213     | €243    | 14%      | EU1    |
| Change in Promotional Fares on routes within the EEA (nominal)    | €147         | €125    | -15%     | EU1    |
| Change in AEA Average Yield (cents/RPK in US dollars at 2001 ER   | ) 14.48      | 14.63   | 196      | AEA2   |
| European Inflation (1992 = 100)                                   | 100          | 119     | 19%      | EUI    |

Notes: ASK: available seat kilometres (kms); RPK: revenue passenger kms.

Source: ICAO (2003b, Table 1:7-8).

In 2003, the following conclusion was reached about the overall impact of liberalisation in the EU:

"Some of the effects of liberalization are readily apparent, although not knowing what would have happened in the absence of liberalization makes it difficult to assess the impact of the single aviation market in Europe with any precision. But the new regulatory environment certainly has fostered innovation and enterprise, resulting in more routes served and greater competition on many existing routes. The emergence of no-frills carriers...has necessitated a competitive response from their longer-standing rivals. Consumers have benefited from a wider range of choice... The evidence on fares is mixed... As a general observation, for many - though certainly not all - users there is a wider range of fares and services available than previously. By contrast,

liberalization has had only limited impact on the basic structure of the airline sector, almost

certainly because this is influenced to such a key extent by the traditional international regulatory framework, which is outside the direct control of any one country or even group of countries" (ICAO, 2003b:9).

.....

The positive developments associated with growing air transport competition have paved the way for liberalisation to be initiated in other regions as per the regional and progressive line adopted by the EU. For instance, IATA (1999) comments that the regional approach to air transport liberalisation is the model that has been adopted by many regions, such as by the Common Market for Eastern and Southern Africa or COMESA. Other specific lessons have been drawn from the USA's and the EU's experiences. Firstly, a pragmatic approach was followed by both the USA and the EU (IATA, 1999:10). Secondly, liberalisation progress was sustained by taking into account aviation-specific features.

Some barriers still remain in the EU's and the USA's air transport sectors. The International Chamber of Commerce (the ICC) identified problems pertaining to divergences in competition policies and clarifications (and consistency) in definitions of who has competence over aviation rights; it was a problem that the EU had to address in the past. Though substantial progress was made towards the removal of barriers to entry, further progress can still be made on the limits on foreign investment in air transport (which are quite stringent in the USA and a hurdle for non-EU companies in the EU), in air transport infrastructure (for instance, when a monopoly is involved with ground-handling) and in the application of cross-subsidies (ICC, 2005).

## 3.4 Developing country evidence

The argument is made occasionally that only developed countries have gained or would gain from air transport liberalisation. There is no easily identifiable pattern of restrictions of air transport in developing countries; hence, it is essential to acknowledge that many developing countries have secured important economic gains from the liberalisation of their air transport sectors. Evidence from some case studies, from different continents, is presented here.<sup>23</sup>

#### 3.4.1 The Latin American experience

#### Mexico

The transport and communication sector (including aviation) plays a major role in the Mexican economy, accounting for approximately 10.5% of the Mexican GDP (IATA, 2007). International air transport in Mexico has supported growth in the tourism sector. Moreover, in terms of Mexico's domestic market, air transport is

 $<sup>^{23}</sup>$  This is also the main finding of ComMark (2005b:14) which examined case studies.

essential for 85m of its 108m inhabitants who live outside of the capital-city's region. In parallel, air transport has promoted economic growth and the distribution of wider economic benefits beyond Mexico City.

IATA (2007a) notes that Mexico is the eighth most popular tourist destination in the world and the most popular in Latin America, with approximately four times as many tourists as that for Brazil. In 2006, air transport accounted for 40% of international tourist arrivals in Mexico.

A key question is how did Mexico develop its air transport industry?

In the early 1970s, two airlines, Mexicana and AeroMexico, competed with each other and dominated Mexico's air transport scene. In the early 1980s, as Mexico experienced an economic crisis, the government took control of the two airlines to prevent them for going bankrupt and ensuring that the air transport sector would not be compromised. The Mexican view was that private investment was important; a holding company, Cintra, was set up in the mid-1990s with the main aim of making both operators financially stable, private companies. As economic conditions were still difficult, it was only in 2005 that Cintra published a tender to privatise the two airlines. Mexicana was sold; in 2006, it was announced that AeroMexico would possibly be put up for sale in 2007 (Oklahoma Department of Commerce (2006); it is not clear whether this has happened). The fact that AeroMexico was not sold when Mexicana was suggests that AeroMexico did not attract the minimum selling price which the government was seeking initially.

In the early 1990s, private investment was also permitted in the Mexican air transport sector. A number of airlines started operating and tried to compete with Cintra. However, because Cintra was government-owned and initially highly subsidised, competition was difficult. Smaller airlines did not receive any subsidies from the Mexican government, while on routes where a private operator became successful the major airlines would target it through predatory pricing (Oklahoma Department of Commerce, 2006).

In 2005, when Mexicana was sold, the Mexican government agreed to grant free competition through the elimination of subsidies. It also stated emphatically that AeroMexico would be privatised at some point.

According to the Oklahoma Department of Transport (2006), average growth in passenger transportation was recorded at 6.2% per year from 2000 onwards. The development of new, low cost airlines, it said, could raise passenger growth rates to 7.8% for 2006, which is equivalent to 493m passengers. The rise in low cost airlines occurred mainly because of a series of regulatory changes that encouraged private participation in the airline sector (although, of course, the privatisation of the largest airlines was a major contributor). Details about the regulatory changes could not be found in the literature, however.

#### Chile

The Junta de Aeronáutica Civil de Chile (JAC), the air transport regulator in Chile, regulated strictly its air transport sector until 1977. The JAC perceived its main duty as the protection of Lan Chile, the state air company.

Lan Chile controlled all domestic and international passenger and freight traffic in Chile. So, when a foreign airline wanted to operate in Santiago, it had to reach an agreement with Lan Chile, normally in the form of a revenue-sharing mechanism. Once the approval was given, both airlines would approach the IATA for a recommendation on air fares. JAC would then approve and control strictly the air fares.

In the case of new national airlines, a similar procedure was followed, with more emphasis placed on the ownership structure of the new airline. Wisecarver (1985) makes the point that control by the JAC was so strict that any deviation from air fares (e.g. a discount) would result in severe fines for the offending airline. The result of this strict regulation of the air transport market was that the service was expensive and, specifically in the case of freight, very slow.<sup>24</sup>

The liberalisation process commenced in the late 1970s and the first step was to institute an open skies policy that included the following provisions:

- Free entry into markets: Chilean and foreign airlines can participate freely in the market provided they comply with insurance and safety or technical requirements;<sup>25</sup>
- Freedom of prices: airlines are free to determine their prices. They are only required to register these with the JAC: <sup>26</sup> and
- Minimum intervention by the JAC.

At the time of writing his report, Wisecarver (1985) noted that the results of the open sky policy included the formation of three new Chilean airlines, the expansion of foreign airlines services, the take-over of Lan Chile (immediately in 1979) by private sector Chilean companies for passengers and cargo on domestic flights, a significant increase in the air-taxi service (94% in 1979, 64% in 1980 and 37% in 1981) and an abrupt decrease in average international airfares.

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<sup>&</sup>lt;sup>24</sup> Wiscarver (1985) illustrates the delay by describing a case of cargo remaining in a New York warehouse for a year before being transported. Also, *Lan* took six months to send some equipment for the president of the JAC. The author notes that it was such delays that led to the deregulation of the Chilean air transport sector.

<sup>&</sup>lt;sup>25</sup> However, there are some cases when the JAC can apply restrictions, including where a country applies restrictions against Chilean airlines (bilateral reciprocity) and for national security reasons.

<sup>&</sup>lt;sup>26</sup> Again, there are a few exceptions such as where another country does not accept the freedom of tariffs. This has not happened so far.

Table 4, extracted from Wisecarver (1985), shows that during the four years prior to 1979, Lan Chile cost Chile US\$9.7m, though it made a profit in 1978. It can be seen that net profits – that is profits net of state transfer - fell to US\$219 in 1979 before continuing on towards incurring substantial losses. The point made by Wisecarver (1985) is that even though Lan Chile was protected during the period of closed skies that did not help it achieve profitability.

Table 4: Lan Chile's financial results: 1975-1982 (US\$000)

|      | (1)<br>Profits | (2)<br>Transfer from<br>Treasury | (3)<br>Total benefit<br>[(1) - (2)] |
|------|----------------|----------------------------------|-------------------------------------|
| 1975 | - 1.997,7      | 1.413,1                          | - 3.410,8                           |
| 1976 | - 1.508,6      | 238,0                            | - 1.746,6                           |
| 1977 | 17.091,0       | 23.124,0                         | - 6.033,0                           |
| 1978 | 3.120,3        | 1.662,3                          | 1.458,0                             |
| 1979 | 223,0          | 4,0                              | 219,0                               |
| 1980 | - 1.900,5      |                                  | - 1.990,5                           |
| 1981 | -34.592,6      |                                  | - 34.592,6                          |
| 1982 | n/a            | 42.500,0                         | -42.500,0                           |

Source: Wisecarver (1985, Table 4:25).

A report by the IATA (IATA, 2007b) finds that the overall experience and impact of air transport liberalisation in Chile has been positive: air traffic has increased at rates well above regional and world average ones, with the original national carrier, LAN (formerly LAN Chile), maintaining and, for many city-pairs, increasing its market share. Over the past 20 years, arrivals of non-resident visitors by air in Chile have increased at an average annual rate of 8%, with tourism receipts in US dollars rising at a greater rate for most years.

Domestically, passenger traffic grew from 800,000 in 1989 to 2,9m in 2002 (an annual growth rate of about 10%). International traffic increased from 957,000 passengers in 1989 to almost 3.1m in 2002 (equivalent to an annual growth rate of nine percent).<sup>27</sup>

Transport (including air transport) and tourism have played a significant role in supporting Chile's average annual GDP growth of over six percent for the period 1990-2005. (This growth was higher than that of other major Latin American economies.)

Air transport is very important for Chile because of its geographical location and relative isolation from global markets in North America, Europe and Asia. Air transport provides a crucial link between Chile and the global economy for its trade. A survey of Chilean firms found that 28% of sales were directly dependent on

<sup>&</sup>lt;sup>27</sup> Domestic air cargo increased by 225% in the period (translating into an annual growth rate of 10%). International air cargo has increased by 207% between 1989 and 2002 (i.e. a nine percent annual growth rate) (ICAO, 2003d).

good air transport links, while 70% of Chilean firms found air transport important for their ability to serve a larger potential market (IATA, 2007).

In terms of its spin-off effects, air transport played a significant role in the demand-side component in Chile. It allowed value-adding and supply chain developments and has been very important for trade facilitation and the tourism industry's development (IATA, 2007b).

#### Costa Rica

The process of air transport liberalisation in Costa Rica was shaped by international tourist demand and particular developmental circumstances within the country. The awarding of the 1989 Nobel peace prize to ex-president Oscar Arias Sanchez marked an important historical moment in the development of its tourist industry and turned the "eyes of the world" on Costa Rica. Liberalisation in Costa Rica also happened in parallel with the global deregulation promoted in the USA during President Jimmy Carter's administration. It was a period of growing demand, internationally, for tourism.

The opening of the air transport market was bilateral: it coincided with a 1979 agreement with the USA which became effective in 1983. It consisted of multiple designations, had full third, fourth and fifth freedoms, no capacity restrictions and dual disapproval with regard to tariffs.

No reciprocity was allowed in Costa Rica by virtue of the fact that the route network was restricted to two fixed points and three additional variable points in comparison to the very open routes that were given to the USA.

Much later, in 1997, the USA and Costa Rica signed an open skies agreement which became effective from 1999. In 1999, with effect two years later, an agreement was signed with Chile. The agreement with Chile was distinct from that with the USA in that Costa Rica gave Chile open sky access to its market. Moreover, following requests from Chile, the seventh freedom was granted to it in 2003.

The Costa Rican air market is now characterised by a policy of open skies with reciprocity extended to other countries, fifth freedom rights to EU operators via Miami (so as to tap into Miami as a tourist hub) and the presence of airlines from third countries through alliances or code sharing. In parallel, the country developed its airport and tourism infrastructure.

Table 5 illustrates Costa Rica's experience before and after liberalisation. Overall, the impact of the liberalisation process was positive. Positive effects included a greater number of flights, more destinations, new airlines competing in the international market and a sharp decline in air fares.

Table 5: Pre- and post liberalisation effects in air transport in Costa Rica

|                              | Before liberalisation | After liberalisation        |
|------------------------------|-----------------------|-----------------------------|
| Passengers transported       | 576,547               | 2.4m                        |
| International airlines       | 9                     | 26 (20 regular, 6 charters) |
| USA airlines                 | 1 (Pan Am)            | 11 (6 regular, 5 charters)  |
| Points of entry into the USA | 1 (Miami)             | 12                          |
| Cargo                        | 25,166 tonnes         | 77,958 tonnes               |

Source: Association of Caribbean States (2004b)

#### 3.4.2 The Southeast Asian experience

#### Malaysia and Thailand

An original air transport agreement between the governments of Malaysia and Thailand was signed in 1969. The agreement type, Bermuda I<sup>28</sup>, offered substantially less benefits than an open skies agreement but it did allow for new services to be introduced into the market. A Memoranda of Understanding was signed subsequently and increased the degree of liberalisation in the aviation market. The direct and indirect effects of liberalisation caused a market expansion of over 37%. The increased traffic demand on Thailand and Malaysia has generated an additional combined 8,600 full time positions and added over US\$228m to the GDPs of Malaysia and Thailand (InterVISTAS-ga, 2006).

#### 3.4.3 Other developing regions and countries' experience

#### Kenya

Kenya Airways, Kenya's national flag carrier, was established in 1976 as an airline wholly owned by the Kenyan government. Political interference and mismanagement led to a dire financial situation (involving debt arrears and penalties because of accumulated losses over a period of 17 years) for Kenya Airways by the early 1990s. A process of restructuring Kenya Airways commenced in 1993 (Goldstein, 1999) whereby the whole board of Kenya Airways was overhauled and a partly foreign management team was brought in.

<sup>&</sup>lt;sup>28</sup> It provides for tariffs to be set by airlines but subject to bilateral approval. Capacity under this type of agreement is revised *ex-post*. According to Intervista-ga (2006) this agreement still defines bilateral relationships globally.

Rationalisation of routes, fares and the fleet took place together with a training programme for staff employed by the airline (with the focus being on customer satisfaction and financial prudence). The government subsumed Kenya Airways' debt arrears and converted its bridging finance loans to equity. Although, ultimately, Kenya Airways was to be privatised, Goldstein (1999) reports that a complex restructuring took place over an 18-months period to deal with, inter alia, debt and obtain the necessary approvals for foreign shareholding. In January 1996, Royal Dutch Airlines or KLM bought 26% of Kenya Airways at a price of US\$26m; it was three times the book value of the airline. A comprehensive cooperation agreement was signed between the two parties regarding corporate governance and management and to ensure that KLM would deliver US\$3m worth of goods and services as required by Kenya Airways to operate effectively.

The next privatisation phase involved 20% of Kenya Airways being sold to the Kenyan public and 14% of it to other Kenyan and foreign institutional investors.

One of the reasons why the privatisation of Kenyan Airways has been successful in SSA is because fiscal issues were addressed while strong management guided the changes that were required. The links between the airline's chairman and top government officials were also important in the transition period. The shift has been associated with increases in profits and the opening up of new regional routes. The airline planned to expand its international routes.

Having noted these successes, it is important to recognise that in 1998, the privatisation process seemed to lose momentum and the international investors pulled out because of a deteriorating political climate. Some routes were abandoned by Kenya Airways subsequently; in an attempt to boost tourism, East African Safari Air, a company controlled by both local and European investors, was awarded a licence for those routes.<sup>29</sup>

# 3.5 Summary

When examining several developing countries cases, a complex, sometimes heavily guided process of liberalisation and deregulation (in the cases of Mexico, Malaysia and Thailand) can be observed. Deregulation and liberalisation only occurred once the economic context became favourable in the case of Mexico. For Costa Rica, liberalisation took place in a context of a combination of forces as well as from specific demands being made from its partners. In the case of Chile, where a heavily regulated environment created major problems, liberalisation occurred quite rapidly. In turn, the discussion of air transport in Chile highlights the point that the maintenance of the national carriers was costly to society. All case studies point to the presence of favourable liberalisation or deregulation effects: new airlines sprung up and traffic increased. As for the national carriers, these were generally, but not always, sold to private companies.

<sup>&</sup>lt;sup>29</sup> The authorities have tried to revoke that licence by citing that it has not completely withdrawn from those routes but at the time of the Goldstein report (Goldstein, 1999) the matter was still being dealt with in the courts.

# 4. Specific arguments against air traffic liberalisation

There are a number of negative consequences associated with the liberalisation of air transport. These can be grouped into two categories: a first set involves political and country-specific considerations; a second set is more general in nature but includes liberalisation risks paving the way towards the expansion of low cost airlines. There is a view that issues associated with low cost airlines demand entry restrictions. In this section of the report, the various cases against liberalisation are raised along with the recognition that many of the problems raised can be addressed by a regulator.

# 4.1 National airlines: prestige, capacity and political will

"Within [the] new political and economic landscape, there is the increased threat of marginalization of developing states. Therefore, in order to protect the interests of developing states such as Jamaica, there must be the establishment of safeguards and safety nets in the aviation industry so as to enable national airlines to have sustained participation in international air transportation and to have access to the global market place" (Position of Jamaica in Association of Caribbean States, 2004a:1-2).

Based on economic considerations, such as overall employment and economic growth, the case for liberalisation seems overwhelming, but political considerations must also be taken into account. How these are articulated vary. In some cases, as for Jamaica whose position is reported above, a qualified pattern of liberalisation is set forth. In other instances, as for Mozambique, the authorities have not articulated a consistent, clear-cut set of commitments to liberalise progressively the airline sector.

The identification of the political foundations for the support of national airlines is a difficult task: national airlines and their employees have considerable political influence; capacity might be lacking which (further) favours the status quo. It is not easy to distinguish a true political concern from other dynamics. Whatever the truth, the elements of the conflict between liberalisation and the interests around national airlines and their employees are multi-dimensional and range from the issue of national prestige to that of a supplier of

last resort. The case against liberalisation also occasionally relies on the infant industry argument (as it was in the US's air transport history, initially) as relevant to the air transport sector.<sup>30</sup>

Discussions about the prestige of a national airline are associated typically with a national airline being a symbol of a country's national identity. This social dimension typically entails a case for large<sup>31</sup> subsidies to be deployed to ensure such airlines' survival (as is the case offered for LAM).

The value of the national prestige associated with having a national airline is difficult to quantify but is real and might simply reflect the fact that a specific set of cultural (and social) objectives are of high value in a particular country. As such, the logic is economic. In turn, governments might argue that the demise of a national airline may threaten small markets where there is little or no competition between private airlines. The latter position, occasionally raised for national carriers to be supported as suppliers of last resort, is also an economic case supported by specific developmental and political priorities.

Other politically-framed positions are underpinned by economics and are linked to a belief that consumer benefits will not be realised as air transport is liberalised: national airlines and authorities fear that foreign airlines may engage in predatory pricing, implying that they will lower the fares to eliminate competition and then increase fares subsequently, once a near or total monopoly has been established. This is an argument set forth in favour of retaining a national carrier. In turn, governments do not trust the argument made that liberalisation has positive job creation effects. Generally, the problem seems to be that whereas existing jobs in the national airlines are tangible, some find it difficult to believe that future employment in other industries (such as in tourism) could be created.

Uncertainty about the outcome of a process of air transport liberalisation has real foundations; transparency and careful consideration of the alternatives are key dimensions of the air transport liberalisation challenge. While the aforementioned arguments favour the maintenance of a national airline, much of the uncertainty appears to be unfounded. Fundamentally, the costs involved in the protection of an airline or air transport market need to be established and made transparent: financial support emanates from taxpayers and there are high opportunity costs of protectionist strategies if enacted in poor economies. Moreover, transparency is critical for identifying the presence of vested interests. The lobbying context clearly matters: national carriers and their employees are frequently well organised; they wield a strong political influence and often tend to resist change. In contrast, consumer interests are poorly organised or absent. Consumer gains are dispersed, too: small per consumer but sizeable across a large number of people.

<sup>&</sup>lt;sup>30</sup> The argument by some developing countries, that they could be marginalised if they do not join the worldwide trend of liberalisation, is in line with the view that important investments are required to catch up with the more modern, competitive airlines. It pertains to the infant industry line of arguments.

<sup>&</sup>lt;sup>31</sup> The extent to which a national airline is subsidised varies depending on the case being considered. However, the point is that national airlines are frequently in financial difficulties and, moreover, these difficulties span a long period of time.

# 4.2 General problems associated with air transport liberalisation

# 4.2.1 Deterioration of customer service, congestion and poor labour practices

The quality of consumer services (including on board services; the load factor or the proportion of seats occupied by passengers in a flight; safety) is an important component in welfare analyses of the impact of liberalisation. Air traffic liberalisation is often linked to bad customer service. As noted earlier, customer quality spans many dimensions and while liberalisation has, in fact, been accompanied by higher levels of punctuality as well as lower rates of cancellations, denied boardings, lost bags and customer complaints, it has been reported that some aspects of customer care, such as increased travelling time, have worsened.

Customer service deterioration has often been linked to specific liberalisation outcomes. Firstly, increased passenger traffic has led to congestion, as was observed in many countries (e.g. in the US following deregulation). Secondly, it has been associated with poor service provision from airlines and airport staff, particularly by low cost airlines, ascribed to a management's strategy of minimising variable costs. The latter argument is, in turn, frequently bundled up with employees of national airlines having more job protection (through unionisation or by virtue of being state employees) than for employees of low cost airlines.

While greater job protection has not been observed in African state-owned airlines compared to other airlines (see Essenbert, 2005), there is, at least, evidence that employees of low cost airlines have to work harder than other employees: The EU's statistics indicate that the ratio of passengers per employee in low cost airlines is roughly six times higher than that for traditional airlines; in Asia, the ratio of staff per passenger for protected, loss-making state-controlled, long-haul airlines (e.g. Air India) was half of that observed for the more efficient, private, southeast Asian airlines.

Governments concerned with the conditions affecting the labour force argue that some foreign labour practices are imported into their countries, as foreign airlines gain ground and use these practices to put themselves at a competitive advantage. While such strong commitments to labour conditions by governments in the air transport sector can be debated, the point remains that employment conditions cannot always be negotiated between parties within an air transport agreement.

Counterarguments to the above positions do exist. On the issue of congestion, the problem does not lie with air transport liberalisation per se. Instead, it lies with the unrealistic schedules for arrivals and departures at peak periods at the major airports. The congestion problem is a warning against a laissez faire approach to liberalisation, which confuses liberalisation with deregulation. In fact, strict regulation is often necessary to ensure the proper benefits of liberalisation. (The EU, for instance, has strict regulations on air traffic management, including the Single European Sky regulations, and these are binding on all of its member states.)

Generally, the best safeguard against declining customer service standards is an effective independent regulator, while the argument of poor labour practices needs to account for the fact that employees who are paid less than others also frequently receive incentives based on the number of flights or are able to earn commission for on-board sales.

#### 4.2.2 Concentration

In order to compete in liberalised markets, airlines often engage in mergers,<sup>32</sup> thus reducing the benefits of competition at home and abroad (through enacting market power). Mergers could, over the long run, be associated with the development of private monopolies. Mergers have come about as the result of unrealistic pricing (below cost), predatory pricing and cross-subsidisation.

Concentration can also lead to a situation of economic instability where a concentration of airlines occurs on profitable, thick routes. The issue of concentration is, in a way, linked to the risk of destructive competition where airlines cut costs on a variety of items so as to become one of the lowest priced airlines and, therefore, able to attract customers. In cutting costs, airlines might compromise some operational aspects, such as safety and maintenance, which could have a negative effect on the economic stability of the air transport industry.

Though mergers (and concentration) can become a problem, they are not a threat associated with liberalisation per se. Mergers should be controlled by the authorities in order to prevent the formation of dominant firms; reckless or abusive pricing should also be monitored and, if necessary, regulated through minimum pricing levels. Inherently, non-competitive airlines cannot be protected, though.

# 4.2.3 Destructive competition

Destructive competition relates to the fear that once the air transport market is liberalised, large airlines may use predatory pricing to undercut local, smaller airlines with the intention of driving them out of the market. Once they are out of the market, the large airlines may increase their prices again to a sustainable level. Large airlines can engage in predatory pricing practices through their ability to cross-subsidise their operations.

Another example of destructive competition occurs when a developing country, for example, permits a weak airline to avoid paying certain fees which consequently keeps its air fares artificially low. A major bone of contention in this regard is with the EU where hidden subsidies are deployed to the national carriers.

<sup>&</sup>lt;sup>32</sup> Numerous mergers have been observed as the air transport market opens up. For instance, Air France and KLM; Lufthansa bought Swissair; in the US, Delta and Northwest merged and there are ongoing talks on the mergers involving other airlines (e.g. Continental, United).

#### 4.2.4 Loss of service

Air transport liberalisation can lead to airlines ceasing operation on thin, less profitable air routes. This has a negative effect on those passengers who did, at some point, make use of such routes. In regulated regimes, such routes are identified and efforts to sustain them are made through subsidisation or coupling the route with more profitable ones. United Airlines is a case in point having supplied air transport services to Bakersfield (consisting of approximately 225,000 people) in California until 1978. Post-deregulation, United withdraw its air transport services in Bakersfield. Flights to bigger cities (such as San Francisco or Las Vegas) ceased from that city. While it is difficult to prove that a loss of service is permanent, there might be a case for policy interventions for the maintenance of particular routes if there are specific supply-side failures which matter to government and/or to society.

#### 4.3 Low cost versus other carriers

## 4.3.1 Safety

The view that liberalisation leads to lower safety standards as air companies seek to lower costs is widespread and associated typically with low cost airlines. (Consider, for example, the recent events involving Nationwide Airlines in South Africa.)

There are a series of counterarguments to that claim. On the one hand, low cost airlines point out that they operate under the same safety rules as do the national airlines. (Safety standards are dealt with internationally by the ICAO.) On the other hand, national airlines have, themselves, been found to be in breach of safety standards (both internationally or as pertain to particular countries or regions). This has been the case of LAM: it was on the French list of blacklisted airlines in the late 1990s (Knorr, 2006).

A link is also made between poor safety records and low levels of development. In spite of Africa's poor performance on safety, including by its state owned airlines, the problem relates to a lack of investment: on average, African aircraft are about 18 years old though safety records have improved markedly in the recent past across the continent (Essenbert, 2005).

#### 4.3.2 Environment

Air transport liberalisation leads to increased air traffic. Damage to the environment can occur directly from the airplanes and indirectly through the proliferation of airports and the extensions of existing airports. Pollution increases with air transport liberalisation and is one of the major contributors to climate change.

The situation is serious, yet governments do not constrain (and have not constrained) entry and operations on the basis of global environmental considerations. There are, moreover, marginal environmental benefits associated with the expansion of low cost airlines as opposed to others:

- More modern aircraft are used (mainly the New Generation Boeing 737, but also the Airbus A-319 and A-320) which are less polluting than the older aircrafts;
- More efficient seat configuration and lower fuel consumption are associated with the newer aircrafts purchased by the more recently established, lower cost carriers. It is reported that increased seating decreases the average energy use per passenger by approximately 25%;
- Decreased noise emission due to more modern airplanes;
- Direct services lead to fewer connecting flights; and
- Reduced waste because there are less frills on offer (e.g. waste from "free" newspapers, meals and drinks).

In other words, pollution per passenger can be lowered through the use of more modern planes and with different seat configurations.

The links between air transport liberalisation and environmental degradation are complex. The problem is real but a commitment to combating climate change and an internalisation of the problem is the solution; not protectionism.

# 5. General options available for air transport liberalisation

Liberalisation options for the air transport industry are typically very thinly documented. Governments, though, do require information about alternative strategies for liberalisation as well as guidance around a particular sequencing of actions. This section contains a general description of the different options available for opening up air transport markets. The strategies range from a strong protectionist approach to complete liberalisation and deregulation. After outlining the available strategies, the specific case of LAM is discussed at greater length.

# 5.1 Protection of the national airline as a monopoly

Protecting the national airline without opening the market is an approach involving shielding the national airline from competition through strong governmental control. While the degree of control or regulation varies across countries, this option refers mainly to the control of market access (i.e. the points served, traffic rights, frequency and capacity), the control of market entry (i.e. the designation of airlines and ownership) and the control of pricing and services. The authorities might even opt to restrict participation in domestic and international alliances. Historically, the national airline as a monopoly was labelled a "flag carrier" if the nationally owned airline basically had a de facto monopoly on the domestic and international routes serviced.

As the national airline is shielded from competitive pressures it tends to develop strategies that are characterised by high operating costs, a high quality of service and relatively limited output growth. Low load factors, low aircraft capacity utilisation rates and high wages for employees (relative to what prevails in a competitive environment) are characteristic among the cases of a national airline as a monopoly (Gönenç and Nicoletti, 2001). Protected airlines would also normally be prevented from making commercial decisions without instructions from the government.

That model of air transport impacts on an airline's viability and its operations, at least because of performance monitoring issues, information asymmetries and related incentives inadequacies; typically, high amounts of financial support have been deployed by the government to ensure that the airline's activities are possible. 33 34

<sup>&</sup>lt;sup>33</sup> Principal agent problems would affect the performance of national carriers. However, there are some debates in the literature as to what type of ownership model is superior (e.g. fully statal, fully private or mixed).

<sup>&</sup>lt;sup>34</sup> In 1994, for example, European governments injected more than US\$7bn worth of various forms of aid into national airlines (ICC, 1995).

Consider, for example, some of the conventional reasons advanced for the state protecting specific airlines. According to the ICC (1995), one argument is that a national airline is a public utility and should be run by government. The argument also suggests that if a privatised airline were to go bankrupt, the country could lose out on foreign exchange in the absence of an alternative carrier.

As was noted earlier, and as a counterpoint to that argument, multi-national and private airlines have been successful in insuring that no tourism revenues are lost. As for the public utility claim, it is a complex one in the case of air transport.

In the past, specifically in developed countries, the presence of a public utility was equated with a natural monopoly; however, more recently, it has been associated with more distinctive features. Debate surrounds the whole issue of what can be construed as public utilities. For the purpose of illustration, according to Kahn (1988) and Howard (2001), public utilities involve a fixed network being in place for supply. This is not the case for air transport. Public utilities provide outputs or services which are critical to other industries and development. They also contribute to a large proportion of the country's GDP. Air transport is a sector that is critical for development and growth; it requires large (sunk) capital investments but the substantial investments are directed into the facilities on the ground rather than with the aircraft per se.

On the matter of competition leading possibly to an undersupply of services, hence, justifying a public utility, this was not substantiated by the experiences of various liberalisation cases. It would seem to invalidate a particular dimension of air transport as a public utility, but there remain questions about ensuring that particular air routes, especially domestic routes, are catered for by private airlines.

Another argument offered in support of a public utility is that it helps avoid the duplication of infrastructure that would have resulted from competition. This is not the case for air transport. Furthermore, claims that competition delivers adverse effects (e.g. it increases prices via cost increases), thereby justifying a public utility, have not typically been observed for the air transport industry.

A further motive against intervention can be identified in the post-1970s context. Since the late 1970s, as more liberalisation, including deregulation, was pursued, the problem has arisen to ensure that participants in the air transport market are subjected to identical commercial pressures. This is difficult to achieve if governmental support applies in a market.

The concept of the national airline appears to be eroding as the aviation industry globalises. Airlines from different countries and regions are becoming more inter-dependent on each other; consequently, it is not possible to claim that competitive practices in one region do not impact on other airlines in other regions. Issues such as subsidies, market access, pricing and capacity have repercussions far beyond national and regional borders (ICC, 1995).

#### 5.2 Gradual liberalisation

The gradual liberalisation option involves engaging with market reforms. Three reasons can be identified for why reform is important: to ensure better quality of service, better access to the service and/or to improve a government's fiscal position. Yet market reforms have political dimensions. Market reforms affect employment, the environment and the dependence on foreign supply. Importantly, specific interests might be vested in the process (e.g. by trade unions) and may translate into oppositions to the intention to reform a market. These need to be borne in mind so that they are addressed appropriately and adequately.

Generally, if a market is opened up and more competitors enter it on a level playing field, then there is a tendency for prices to go down: allocative, productive and dynamic efficiencies come into play in a process of competition. However, the effects are progressive and a series of steps need to be devised to minimise the disruptions and enhance the gains offered by liberalisation. Authorities, when considering a process of opening up the sector gradually, will need to decide upon the following in a sequence:

- The market's structure: This requires that a clear policy framework be designed that envisages the desired air transport industry and what should be achieved by it through the initiated reforms. The authorities need to consider how liberalisation will be carried out and how far to proceed with it, including what type and level of access should be given to private players in the market as well as the degree of competition that will be allowed.
- The regulatory framework: The second important issue is designing the appropriate regulatory framework. A framework should create an environment of regulatory credibility, stability and predictability for investors.
- The nature of national airline restructuring: If there is a national airline, careful consideration to its restructuring should be made.

Obviously, the sequence of liberalisation requires careful planning.

Focusing on the details of the process, Johnston and Trembath (2005) propose that the following questions about routes and services be dealt with by policy makers:

- What routes should be serviced? Is there scope for regular passenger transport services on a route or network? These questions help determine what are the thick and thin routes that need servicing and contribute towards strategising a regulatory framework for the services.
- Is the route or network economically viable for one operator? This is an important question. If the route is deemed to be unviable, the government may wish to provide a service that would otherwise not have existed. Alternatively, it could opt to subsidise the service through a competitive tender process. It is a situation which may provide a case for shielding the incumbent airline on specific routes. Yet, it is important to keep in mind that a contestable market (or one that works and is efficient in spite of a limited number of players because of

the threat of competition) contains cost pressures and may prevent unnecessarily higher costs being passed on to the customers.

- Is the route or network economically viable for more than one operator? If the answer to this question is affirmative, then unrestricted competition should be considered.
- Is there a chance that competition on the route or network could lead eventually to the failure of the incumbent firm and/or new entrant(s)? If the answer to this question is affirmative, it is possible that governmental intervention will be in the public interest. Importantly, answering that particular question is difficult.<sup>35</sup>
- Do the benefits of the stability of the service, as guaranteed by a national carrier, outweigh the costs of eliminating the prospect for competition? A positive answer to this particular question still needs to be juxtaposed against the costs of an intervention. It is, for efficiency purposes, preferable to pursue a competitive tendering model that gives an exclusive license to the bidder with the optimal price.

These issues are discussed in more detail.

#### 5.2.1 Consideration one: the market structure

Determining the market structure is the first step required to establish an adequate legislative framework.

This phase is important because the only way in which private investors or participants will be attracted to that market is if they are comfortable with the governance of the industry. Governance relates to the commercial risk which commercial participants will face when operating in a specific environment. This phase should also ensure that the market structure takes the country's and the sector's specific characteristics into account. This phase, together with considerations of the regulatory body that will implement the relevant policy, should precede any restructuring phase.

There are many types of market structures that can be followed. One option is for the national airline to be a government-owned entity. In this scenario, it is important to prepare the national airline for the advent of (possibly fierce) competition. The authorities will need to decide upon what restructuring tactics to use for that purpose (e.g. how much capitalisation is required, how to consolidate the airline, what alliances to form, among others). Once the national airline becomes part of the competitive scenario, it should be prevented from being bailed out financially by the government. It is within this framework that decisions regarding recapitalisation or partial privatisation come into play. If the national airline is small in comparison to other, potential, foreign competitors, then predatory pricing or other kinds of anti-competitive strategies (used by

<sup>&</sup>lt;sup>35</sup> Africa's and Australia's regional aviation history have, for instance, been marked by instances of carriers that have exited the market. But new firms have then re-entered the market. The problem is one of assessing when new entrants might not come in.

larger enterprises) will have to be considered as features of that market. This feature re-emphasises the importance of having a clear regulatory framework and competition policy.

The market model is another option to follow and raises complex issues about whether the government maintains a link with the national carrier and how this link is established. The link with and the transfer of a state owned airline has many nuances. Successful cases of a change of the ownership structures have been documented, including, for example, of EgyptAir and of Kenya Airways in Africa.

EgyptAir: Egypt adopted more liberal air transport policies in the 1970s and 1980s to exploit its tourist attractions (ComMark, 2006). The country, which has experienced an eight percent growth of international air passenger traffic over the last 20 years, has followed a particular model of national airline management: "EgyptAir is a state owned company with special legislation permitting the management to operate as if the company were privately owned without any interference from the government. The company is self-financing without any financial backing by the Egyptian government" (Wikipedia, 2008). The airline, which has been profitable under that model, operates under legislation that prefers governmental interference.

Kenya Airways: In Kenya, the national airway was privatised in 1996 when its shares were floated to the public. Since then it has gone from strength to strength. Kenya Airways has won the "African Airway of the Year" award five times out of seven years and its profits have increased to a record US\$54m for 2005-2006 and its passenger numbers for 2006-2007 reached a record of 2,6m.

# 5.2.2 Consideration two: the regulatory framework

Once a decision on the market structure has been taken, it is important to establish a coherent regulatory framework. If the decision, for example, is to retain the national carrier and a monopolistic situation, then a separate regulatory function is not crucial.

However, if the decision is to open up the market, then this will require a separate regulatory function from the government. The regulatory body will still be linked to the government since it will have to be accountable to it and will have to implement the government's policies. In order to provide an open environment it is important to make the regulatory environment stable, credible and predictable so that potential competitors have incentives to enter into the air transport market. The regulatory framework should guarantee fair competition, transparency of access to the market and consumer protection. Where there is a national airline and other competitors, the playing field should be levelled and the national airline should not be able to tap into the government's financial backing in order to undercut other airlines.

## 5.2.3 Consideration three: the process of phasing in liberalisation

This phase relates to the sequencing of those market reforms which involve strategic and tactical moves pertaining to the market structure, the regulatory framework, the restructuring of the national airline and finally, the opening up of the market.

Liberalisation in air transport services can be enacted over a wide range of dimensions: the removal of barriers to entry and the dismantling of restrictions on fares and service levels. In practice, liberalisation can either be done in a phased manner or via a "big bang" approach. Typically, the former is more acceptable to a government but, specifically for developing countries, another dimension comes into play: liberalisation is considered if it is a fair and equal opportunity for all players to compete on a level playing field. Those supporting liberalisation need to recognise that there are great disparities in the sizes of countries, the levels of economic development, technology, financial resources and the sizes of airlines. These issues should be taken into account when deciding on the phasing in of liberalisation.

Global reform in the air transport industry has generally centred on the potential for free competition. This was the case in the deregulation drive in the USA in 1978, in the Australia-New Zealand Common Aviation area of 1992 and in the European Single Aviation Market of 1997. These countries' and regions' previously protected national, regional and bilateral markets were opened up to competition and there were new entrants on fares, frequency of flights and so on. Liberalisation has involved some amount of restructuring of the form of privatisation and the formation of alliances; new practices (around pricing and the distribution of air services) have also been implemented.

In order to implement liberalisation effectively, UNECA (2001) suggests that the following pragmatic issues be considered:

- Commitments and internalisation or understanding the benefits of liberalisation: it is unnecessary to liberalise for the sake of liberalisation and the government needs to understand what will be achieved and what needs to be achieved:
- The continued presence of particular barriers to liberalisation, for example: divergences in terms of access to skilled personnel (visa restrictions, work permits, etc.);
- The lack of competition policies and institutional capacity, including policies to protect the interests of consumers. These relate to the decisions about market structures and regulatory frameworks;
- Deficiencies in the area of infrastructure, safety and security needed to support air transport liberalisation;
- The lack of or poor quality of follow-up mechanisms required to manage the liberalisation process;
- The terms for coordination and harmonisation. Such terms help manage sub-regional initiatives and avoid a duplication of efforts;

Any amendment to relevant bilateral agreements as is needed to cater for the changes.

## 5.2.4 The ultimate stage: full liberalisation and deregulation

When all of the restrictions and most of the regulations, except for safety regulations, are removed in the air transport market, it can be said that the air transport market competes in an unregulated environment.

This is a complex model which has partially worked. For instance, in the US, deregulation has caused airlines to abandon unprofitable routes, to adopt innovative systems, like the hub-and-spokes system, and has allowed for new start-up airlines to enter the market. Although fares have dropped dramatically, the environment became unstable temporarily and some airlines ended up bankrupt. Nevertheless, essentially, while there are gains and losses associated with deregulation, it is still the case that customers are better off in a deregulated environment.

# 6. The case for Yamoussoukro

The Yamoussoukro II Agreement is an agreement that is of great relevance to SSA and Mozambique. This section defends the case for Mozambique to follow its Yamoussoukro Decision (YD) commitments.

This section of the report is structured as follows: a first sub-section presents briefly some key information about air transport and tourism in Africa. Significantly, it is noted that there is a dominance of a few airports and airlines on the continent. The discussion then shifts to the details of the Yamoussoukro Agreement. Air transport in Mozambique is described, too. A final sub-section outlines the case in favour of the Yamoussoukro Decision and builds on the points raised in the preceding sections. Of importance is the recommendation that the authorities have to address the questions and aspects raised in the preceding section to ensure that the benefits associated with the Decision are maximised in Mozambique.

# 6.1 Air transport and tourism in Africa

Africa's market share of the total world air passenger traffic is in the order of three percent (see Annex Figure 1). Although air services are vital to facilitating the development of a more diversified export base and tourism, the African share reflects the lack of development of aviation across the continent. Africa has air infrastructure shortages and limited competition in the air market which makes access both difficult and expensive. The development of charter flights to destinations in Africa is still in its infancy. The safety of airlines, airports and air routes in Africa remains a major source of concern and is an obstacle to the development of tourism on the continent. <sup>36</sup>

As with many other aspects of the continent's economic performance, relatively few countries account for most air traffic flows. According to Oxford Economic Forecasting (ATAG, 2003), in 2001, Africa's 10 biggest markets accounted for 70% of the total number of passengers travelling by air and 90% of all cargo flights. The biggest African markets for passengers travelling by air are South Africa (with 160,000 passenger flights in 2001, of which 19% were international), Egypt (with 53,300, of which 51% were international) and Morocco (with 40,800 flights, of which 54% were international). This concentration is one of the largest air transport issues affecting Africa, along with the poor state of its air transport infrastructure. The high level of concentration in traffic flows is indicative of the need to improve air services and airport infrastructure across the continent (ATAG, 2003:17).<sup>37</sup>

<sup>&</sup>lt;sup>36</sup> In 1999, only five African states – Egypt, Ethiopia, Ghana, Morocco and South Africa – met the ICAO's safety standards because insufficient investment had been made into other airports and airways (OECD, 1999:21).

<sup>&</sup>lt;sup>37</sup> According to ATAG (2003:21), air trade among African countries was estimated at 66,000 tonnes in 2001; only 6.4% of the overall African cargo market. According to Business Day (2008), Africa only contributes to about 1% of international air freight. The figures reflect both an underdeveloped intra-regional trade pattern and deficiencies in infrastructure.

The air transport industry can play a constructive role in the alleviation of poverty but the concentration of air traffic flows in Africa does not facilitate that. The potential of air transport is not exploited to its fullest, particularly in relation to the positive impact that the tourism industry can have on poor economies. Tourism can help reduce poverty through growth as well as by generating additional employment, increasing tax collection and fostering the development and conservation of protected areas and the environment (ATAG, 2003:37). Unfortunately, Africa has one of the lowest shares of the global tourism market. In 2000, tourism represented, on average, 3.4% of Africa's GDP, nearly half of that recorded for Latin America and the Caribbean.

A related problem for Africa is that tourist arrivals are concentrated in a handful of countries: South Africa, Egypt, Tunisia, Morocco and Zimbabwe had nearly 70% of the total of all international arrivals during 2000. The top 10 destinations (when Nigeria, Kenya, Mauritius, Botswana and Tanzania are added to the aforementioned list) received more than 80% of the tourist arrivals in that same year. And tourist spending is even more concentrated than tourist arrivals: the top five countries accounted for 75% of the African total during 2000 while the top 10 had 85%. In terms of intra-regional tourism, 46.3% of international tourist arrivals in 2000 (by any means of transport) had other African countries as their origins (ATAG, 2003:40). A substantial proportion of tourists, when all modes of transport are considered, are from Africa. When attention is shifted to air transport, the bulk of tourists originate from Europe: Europe had a proportion of 65% of revenue passenger kilometres, as shown in Table 6, compared with 15% for Africa. In other words, air transport in Africa displays a limited intra-Africa dimension.

Table 6: Air traffic by regions and within regions in Africa: 1985-1996

|  | 1985 19 | 1990   | 1996   | 1996    | 1998/2007<br>(Annual growth rate) |        |
|--|---------|--------|--------|---------|-----------------------------------|--------|
|  |         |        |        |         | Boeing                            | Airbus |
| Revenue passenger-kilometres (RPK) in millions |         |        |        |         |                                   |        |
| Mrica-Africa                                   | 13 540  | 14 689 | 14 775 | 15 335  | 6.7                               | 4.0    |
| Mrica-China                                    | 181     | 311    | 1 274  | 1 834   | 5.8                               | 7.1    |
| Africa-Europe                                  | 43 037  | 47 732 | 57 178 | 66 897  | 5.5                               | 4.5    |
| Mrica-Middle East                              | 5 156   | 7 394  | 6.479  | 6 973   | 6.1                               | 4.5    |
| Mrica-North America                            | 1 220   | 1 298  | 2 640  | 3 052   | 6.9                               | 5.2    |
| Africa-Oceania                                 | 354     | 686    | 1 192  | 1 633   | 5.8                               | 6.2    |
| Mrica-South America                            | 985     | 1 000  | 1 373  | 1 765   | 8.2                               | 5.7    |
| Mrica-Southeast Asia                           | 280     | 909    | 3 226  | 3 623   | 5.8                               | 5.1    |
| Mrica-Southwest Asia                           | 751     | 918    | 1 025  | 1 585   | 5.8                               | 5.1    |
| Total from Africa                              | 65 504  | 74 837 | 89 162 | 102 697 |                                   |        |
| As a percentage of world total                 | 4.16    | 3.43   | 3.44   | 3.71    | -                                 |        |
| As a percentage of each region's total         |         |        |        |         |                                   |        |
| Mrica-Africa                                   | 20.67   | 19.63  | 16.57  | 14.93   |                                   |        |
| Central America-Central America                | 16.58   | 13.10  | 13.25  | 10.66   |                                   |        |
| Mrica-Europe                                   | 65.70   | 63.78  | 64.13  | 65.14   |                                   |        |
| Central America-North America                  | 56.06   | 58.36  | 51.58  | 43.34   |                                   |        |

Source: Airbus (1998), Global Market Forecast 1998-2027 and Boeing (1998), Current Market Outlook.

Source: OECD (1999, Table 1:18)

From Table 7, which ranks the busiest airlines in SSA in decreasing order of importance on the basis of passenger carriers, it is clear that South African Airways (SAA) is a dominant airline. It carried, by the end of the 1990s, 5.5 times more passengers (and 1.6 times more cargo) than the second largest airline, Air Afrique (see the Annexure section 3 of this report for a discussion of this airline). Also of interest in Table 7 is the

high rank of a developed country's air transport company, namely Comair, which is part of British Airways. LAM, for the purpose of comparison, carried about 96% fewer passengers (and 97% less cargo) than SAA did in the late 1990s.

Table 7: Airlines in Africa

| Arine                      | Passengers Carried | Freight Tonnes<br>Carried | Revenue Passenger<br>Kris (000) | Available Seat Kms<br>(000) | Load Factor |
|----------------------------|--------------------|---------------------------|---------------------------------|-----------------------------|-------------|
| South African Airways (SA) | 5 214 148          | 74 806                    | 15 089 277                      | 23 490 251                  | 64.23       |
| Air Afrique (RK)           | 940 723            | 47 225                    | 2 664 497                       | 4 274 225                   | 62.33       |
| Comair (BA)                | 876 980            | 1 553                     | 833 480                         | 1 279 983                   | 65.11       |
| Sun Air (BV)               | 814 696            | 0                         | 749 905                         | 1 122 292                   | 66.81       |
| Air Mauritius (MK)         | 794 482            | 24 620                    | 3.875.068                       | 5 642 639                   | 68.67       |
| Kenya Airways (KQ)         | 786 205            | 12 152                    | 1 801 558                       | 2 902 119                   | 62.07       |
| Ethiopian Airlines (ET)    | 772 266            | 35 244                    | 1 965 827                       | 3 229 368                   | 60.87       |
| Air Zimbabwe (UM)          | 608 083            | 11 728                    | 838 212                         | 1 762 865                   | 47.54       |
| Air Madagascar (MD)        | 571 851            | 6.898                     | 760 218                         | 1 154 081                   | 65.87       |
| Air Seychelies (HM)        | 384 777            | 4 432                     | 854 544                         | 1 538 653                   | 55.53       |
| SA Airlink (SA)            | 368 364            | 242                       | 152 489                         | 278 995                     | 54.65       |
| Sudan Airways (SD)         | 333 094            | 15 263                    | 471 228                         | 1 133 030                   | 41.59       |
| Air Namibia (SW)           | 214 486            | 4 765                     | 906 046                         | 1 731 667                   | 52.32       |
| LAM (TM)                   | 188 387            | 2 311                     | 290 691                         | 439 389                     | 66.15       |
| Air Tanzania (TC)          | 187 525            | 2.851                     | 159 438                         | 300 352                     | 53.08       |
| Air Botswana (BP)          | 116 428            | 481                       | 55 043                          | 96 609                      | 56.97       |
| Nigerian Airways (WT)      | 88 411             | 814                       | 111 161                         | 338 929                     | 32.79       |
| Eagle Aviation (Y4)        | 49 450             | 0                         | 22 800                          | 55 720                      | 40.91       |

Source: IATA

Source: OECD (1999, Table 2:19)

In the late 1990s, Maputo had a world ranking of 490 in terms of its passenger numbers compared to a ranking of 91 for Johannesburg. Those figures are listed in Table 8.

Table 8: Busiest airports in SSA in the late 1990s

| Airport (international code) | Country       | World Ranking* |       | Number<br>of passengers | Growth rate<br>(1997 over 1996) |  |
|------------------------------|---------------|----------------|-------|-------------------------|---------------------------------|--|
|                              |               | Passenger      | Cargo |                         |                                 |  |
| Johannesburg (JNB)           | South Africa  | 91             | 53    | 9 722 758               | 13.5                            |  |
| Cape Town (CPT)              | South Africa  | 159            |       | 3 998 316               | 13.8                            |  |
| Nairobi (NBO)                | Kenya         | 214            |       | 2 550 972               | -4.8                            |  |
| Durban (DUR)                 | South Africa  | 222            | 232   | 2 386 247               | 6.8                             |  |
| Lagos (LOS)                  | Nigeria       | 238            | 224   | 2 053 933               | -17.8                           |  |
| Mauritius (MRU)              | Mauritius     | 279            |       | 1 484 263               | 9.9                             |  |
| St Denis (RUN)               | Reunion       | 287            | 206   | 1 399 948               | 9.8                             |  |
| Abidjan (ABJ)                | Côte d'Ivoire | 322            | 222   | 1 057 718               | 11.1                            |  |
| Dakar (DKR)                  | Senegal       | 328            | 190   | 1 014 588               | 14.4                            |  |
| Mombasa (MBA)                | Kenya         | 349            |       | 887 839                 | -4.2                            |  |
| Addis Ababa (ADD)            | Ethiopia      |                | 179   | 863 000                 | 11                              |  |
| Port Elizabeth (PLZ)         | South Africa  | 364            | 269   | 812 601                 | 5.1                             |  |
| Libreville (LBV)             | Gabon         | 374            | 227   | 754 181                 | 17.9                            |  |
| Antananartyo (TNR)           | Madagascar    | 416            | 248   | 581 965                 | 14.1                            |  |
| Abuja (ABV)                  | Nigeria       | 419            |       | 571 849                 | -1.2                            |  |
| Kano (KAN)                   | Nigeria       | 432            |       | 523 617                 | -34.6                           |  |
| Windhook (WDH)               | Namibia       | 449            |       | 429 811                 | 9.3                             |  |
| Entebbe (EB8)                | Uganda        | 454            | 194   | 415 016                 | 9.9                             |  |
| Ilha do Sal (SID)            | Cabo Verde    | 465            | 356   | 392 914                 | 17.3                            |  |
| Lusaka (LUN)                 | Zambia.       | 482            | 251   | 328 132                 | 11.1                            |  |
| Maputo (MPM)                 | Mozambique    | 489            | 338   | 308 500                 | 9.7                             |  |
| Banjul (BJL)                 | Gambia        | 494            | 348   | 292 460                 | 14.3                            |  |
| Conakry (CKY)                | Guinea        | 495            | 323   | 290 582                 | 2.7                             |  |
| Port Harcourt (PHC)          | Nigeria       | 496            |       | 290 578                 | -39.1                           |  |
| Cotonou (COO)                | Benin         | 499            | 344   | 287 954                 | 8.3                             |  |
| Asmora (ASM)                 | Erithrea      | 522            | 358   | 243 732                 | -6.4                            |  |

Note:

World rankings for cargo traffic are preliminary ACI 1996 data.

Source: OECD (1999, Table 3:29)

Generally, the data point to the overwhelming dominance of SAA as an airline and of South African airports (including Johannesburg which acts as a hub for the largest airline) on the continent. With the partial exception of Nigeria, South Africa is a country with a large potential for domestic air transport activities. This characteristic influences the viability of both low cost carriers and regional routes (Essenbert, 2005).

# 6.2 Background to the Yamoussoukro Decision

African ministers responsible for civil aviation have been concerned for quite some time with the potential bottlenecks in air transport development, the poor quality and quantity of services and other issues created by the bilateral agreement structure that governs air transport on the continent. The gap between the conditions of air transport in Africa and those observed elsewhere was large at the end of the 1990s. The Executive Secretary of the Economic Commission for Africa, at the 1999 Conference of African Ministers responsible for Civil Aviation in Yamoussoukro, described the situation this way:

"In 1998, with 540 aircraft, the 33 airlines members of the African Airlines Association (AFRAA) accounted for only 57 million passenger/kilometres. Compare this to the performance of British Airways alone, which – with little more than half the number of Africa's fleet – accounted in 1997

for close to 100 million passenger/kilometres. .... Private sector participation is handicapped by the limited size of markets, inadequate financing and payment risks, and political instability and, most of all, the lack of appropriate regulatory frameworks" (Speech by K. Y. Amoako, www.uneca.org/eca\_resources/Speeches/amoako/99/111399speech\_amoako\_air\_transport.ht m).

.....

By the mid-1980s, the authorities had attempted to overcome some of the aforementioned challenges by signing the Yamoussoukro Agreement.

The Yamoussoukro Agreement is important for Africa. It is a plurilateral ASA covering many countries. More specifically, the whole of SSA and a few North African countries are signatories to this agreement (see Figure 1 for a list).<sup>38</sup> However, given the low levels of intra-SSA trade, the arrangement only applies to about two percent of total international traffic.

Two periods characterise the Yamoussoukro Agreement's history. Yamoussoukro I consisted of a declaration of a new common, competitive African air transport policy. The declaration was framed by the realisation of a need for a continental consensus and collective solutions to the various air transport issues in the region. The Agreement, signed in 1988 by the civil aviation ministers of 52 African countries, was revised in 1994.

Little implementation followed the signing of the Yamoussoukro Declaration; it was endorsed in 1999 and entered into force on 12 August 2000 among 44 African countries.

In 1999, the Yamoussoukro II Ministerial Decision called for a programme of integration of African airlines regarding cooperation. More specifically, it represented a call towards integrating the airspace in Africa. The private sector was seen as having a key role to play in this regard.<sup>39</sup> The vision of a "single African airspace" was meant to have been reached by 2002.

The official title of the Yamoussoukro Decision is the "Decision on the Implementation of the Yamoussoukro Declaration concerning the Liberalisation of Access to Air Transport Markets in Africa". The Decision calls for (ICAO, 2003c):

 The removal of restrictions on traffic rights including the fifth freedom (because qualifications apply on higher freedoms);

<sup>38</sup> Effectively, the geographical scope of the YD means that the deal is relevant to a total of 2,450 traffic relations (WTO, 2006:29).

<sup>&</sup>lt;sup>39</sup> See www.uneca.org/eca\_resources/speeches/amoako/99/111399speech\_amoako\_air\_transport.htm

- The use of free pricing without the requirement for governmental approval but where price increases do need to be notified:<sup>40</sup>
- The removal of restrictions on capacity (free determination) and frequencies between city-pairs;
- The removal of restrictions on multiple designations;
- Specifying the criteria which eligible airlines must comply with as the requirements of the operation; and
- Standards for safety and security.

The Decision should take precedence over any bilateral or multilateral agreement on services.

While limits remain for some provisions listed for the sixth to ninth freedoms and in terms of the community of interest<sup>41</sup> driving withholding of those freedoms, the Yamoussoukro II Decision is a positive arrangement for air transport liberalisation progress in SSA.<sup>42</sup> Although the Decision was ratified, it has so far not yet been applied.

Capacity issues, commitment shortcomings and the loose nature of the 1988 deal were cited as reasons for the lack of action in the post-1988 Yamoussoukro context. Limited progress was achieved in the aftermath of Yamoussoukro II. WTO (2006a) emphasises that when large volumes of air traffic are between the more liberal countries, then liberal requirements are likely to be sought by partners. This dynamic is important for Africa. It hints at the fact that there are policy implications from low intra-regional traffic: limited traffic lowers the stakes in the implementation of a plurilateral agreement. This appears to have been the case for the Yamoussoukro Decision.

In contrast, the 1988 Declaration induced some African regions and sub-regions to undertake some air transport liberalisation. It led to the following initiatives:

The Banjul Accord for an accelerated implementation of the Declaration was created by six African states: Cape Verde, Ghana, Guinea Bissau, Sierra Leone, Nigeria and the Gambia. This accord was concluded in April 1997;

<sup>42</sup> Generally, WTO gives the YD an ALI of 34, a level that is a little below the COMESA arrangement (with an ALI of 38) but above some Asian plurilateral air transport agreements. SSA countries have ALIs roughly between six and 12 points.

<sup>&</sup>lt;sup>40</sup> "In case of tariff increase, there shall be no approval required by the aeronautical authorities of State Parties concerned for tariffs to be charged by the designated airlines of State Parties for the carriage of passenger, cargo and mail. The airlines shall in this case file such tariffs before competent authorities 30 working days before they enter into effect. This provision is not applicable in the case of lowering tariffs which takes immediate effect according to the will of the airline" (UNECA, 1999:4).

<sup>&</sup>lt;sup>41</sup> It is a withholding format that is favourable to regional (Africa) control and ownership.

- The Arab Council on Civil Aviation to end restrictions on the third, fourth and fifth freedom traffic rights for carriers of its member states. Total liberalisation was expected to be achieved by 2005.
- The Communauté Économique et Monétaire de l'Afrique Centrale's (CEMAC's) air agreement (adopted in 1999): it involved full third and fourth freedom traffic rights while designated airlines are allowed to carry 40% of the traffic of the preceding year as fifth freedom rights; there was no capacity restriction and complete liberalisation of non-scheduled services.
- COMESA (as agreed to in 1999) involves 21 states that reached an agreement to phase in the liberalisation of scheduled and non-scheduled air services. A two phased timetable was introduced. The first phase was to be implemented by 2000 and the second by 2001. At a 2003 ICAO seminar (ICAO, 2003c), it was reported that implementation had not been completed but some progress had been made. Where the states had engaged with some parts of the agreement, a positive impact on the air transport industry was evident. Even though the Yamoussoukro Decision provided for a continent-wide aviation agreement to liberalise the African skies by 2002, the main guiding instrument for COMESA was the COMESA Treaty.
- In the West African Economic and Monetary Union (WAEMU), an agreement was reached to achieve liberalisation within two years.
- In turn, some momentum for liberalisation gained ground in the SADC in 2000 when the grouping of 13 states "adopted a liberalisation programme covering a ten year period and according to three applicable classifications for the granting of traffic rights: multilateral intra-SADC, SADC intra-Africa, and SADC ultra-Africa. Intra-SADC objectives included free exchange of third, fourth and fifth freedom scheduled traffic by 2003, non-scheduled third and fourth by 2005 and fifth by 2007, cabotage for scheduled traffic by 2007 and for non-scheduled by 2010. The approach includes multiple designation and free determination of tariffs, capacity and frequency" (ComMark, 2005a:8).
- Progress towards liberalisation has been made at the individual country level by Kenya and Uganda, as per the Yamoussoukro Decision's framework.

# 6.3 Current status of the implementation of the Yamoussoukro Decision

The Yamoussoukro Decision (YD), as agreed to by all African states, was designed to lead to a radical reduction of state control over the aviation industry. In other words, African states decided to liberalise air transport in an intra-Africa context.

Implementation of the YD was supposed to take place within two years but little progress has been made. When the African ministers responsible for air transport met in May 2005, they sought to re-stimulate the process (ComMark, 2005a). Interestingly, the East African Community (of Kenya, Uganda and Tanzania) was the first region to accept the YD's provisions and has aligned its bilateral ASAs to it. South Africa,

Zambia and Zimbabwe have also opted for liberalisation but have agreed to unlimited flights with multiple designations of airlines permitted between one country and another (Janson, 2006).

A (confidential) briefing note indicates that in May 2005, Mozambique joined Angola and Mauritius in expressing the desire to delay participation in the implementation of the YD. Other SADC ministers, meeting in Gaborone, Botswana, in October 2007, have approved a roadmap for the implementation of the YD by 1 January 2009.

The more recent developments signal clearly a willingness by the SADC countries, save a few, to implement the YD. However, although some amount of liberalisation has been accepted, a key concern has been articulated around the protection of flag carriers. This concern emerged with the YD (see UNECA, 2001).

# 6.4 The case of air transport in Mozambique

Mozambique became independent in 1975. The country, with a population of about 20m people, is bordered by Tanzania to the north, Malawi, Zambia and Zimbabwe to the west, and South Africa and Swaziland to the south. Although Mozambique has partially rebuilt itself since the end of the war in 1992, poverty, which afflicts around 50% of its population, remains very high (OECD, 2005). The government is considering how to enhance all areas of the country's potential economic growth. According to ComMark (2006), the Mozambican government has recognised the importance of tourism to the national economy. However, the government is also intent on protecting the national airline by restricting competition on international routes. This reduces tourist numbers in the country.

A description of the air transport sector in Mozambique and the regulatory framework in place in the sector is described here. The findings from USAID (2006) are used as USAID (2006) provides an overview of the air transport market and the policy issues prevalent in Mozambique. Following that, the discussion turns to the merits of the Mozambican authorities adopting the YD principles in its market.

#### 6.4.1 The case of LAM

According to WTO (2006b), the Mozambican air transport context is characterised by: (i) the bulk of passenger traffic granted the fifth freedom; (ii) no cabotage and no seventh freedom; (iii) designation; (iv) substantial ownership; (v) predetermined capacity; and (vi) tariffs restricted at the country of origin of the passenger traffic (which is a semi-liberal tariff specification clause). Generally, the conditions suggest that some amount of restrictions apply to entry into the market. Nevertheless, of the six bilateral ASAs recorded at the ICAO in 2005, which Mozambique has with South Africa (the latest set up in 2002), Zimbabwe, Malawi, Lesotho, Romania and the Russian Federation), the most favourable conditions apply to the agreement with South Africa. (Direct air transport to Tanzania, Portugal, Swaziland and Kenya applies outside a bilateral agreement recorded with the ICAO.)

In terms of infrastructure, Mozambique is equipped with several airports: there are three international ones (at Maputo, Beira and Nampula) and six other airports. The country has a handful of secondary airports and numerous landing strips.

Seven operators perform scheduled services on international, regional and domestic routes (USAID, 2006), as is shown in Table 9.

Table 9: Air operators in Mozambique

| Carrier                     | International | Regional    | Domestic    |
|-----------------------------|---------------|-------------|-------------|
| LAM                         | V             | V           | V           |
| Air Portugal (TAM)          | V             |             |             |
| Air Corridor                |               |             | V           |
| STA                         | <br>          | <br>        | V           |
| South African Airways (SAA) |               | V           |             |
| Pelican Air                 | <br>          | V           | 1           |
| MEX                         | ·<br>         | V           | 1<br>1<br>1 |
| TransAirways                | <br>          | !<br>!<br>! | V           |

Note: Besides regular airlines, private charters operate on internal destinations

Source: USAID (2006:7) and airline-specific documentation

A distinction is made between regular and irregular services, where regular services are conducted mainly by LAM which uses its own aircraft to provide domestic and regional services (largely to South Africa). There is a special arrangement with Air Portugal (TAP) where a code-share flight system between Maputo and Lisbon is used. As for non-regular services, these are supplied on a case-by-case basis. That has a negative effect on tourism as tour operators experience difficulties when requesting special permits for particular flights.

LAM, the oldest airline in Africa, has experienced financial difficulties for quite some time. While not all of the sources consulted concur that the airline has been persistently in deficit, financial weaknesses have been recorded for the 1990-1996 period and parts of the early 2000s (see Essenbert, 2005, Bila et al., 2007 and Engineering News, 2008).

There are many issues pertaining to air transport in Mozambique. Dibben (2006) reports four particular problem areas which emphasise the importance of and need for an effective air transport system in the country. These issues relate to safety and security promotion, the importance of tourism (because of its

effect on the government's budget<sup>43</sup>), the need for fast moving transport to cater for the expanding, perishable goods production and exports sectors<sup>44</sup>, and the need to transport workers and manage evacuation in times of emergency.

The main problem confronting the authorities is the state's involvement in air transport. OECD (2005) notes that the Mozambican authorities have to establish the priority sectors of the economy and the objectives of privatisation over the long term; this does not mean that privatisation has not been considered and undertaken in Mozambique; some restructuring of public firms has occurred.

While external donors (e.g. the World Bank) have played a key role in promoting privatisation agendas in the post-war era, attempts to privatise LAM started in 1997. Bila et al. (2007) reported that a governmental agency – the Unidade Technical para a Reestruturação de Empressas (UTRE) – was involved in rejecting bids in the aviation sector. In 1999, the privatisation move was reinstated. According to USAID (2004), LAM sought exemptions from competition on a series of domestic routes lasting up until 2004. OECD (2005:347) notes that this request was repealed. Air Corridor was allowed to operate in 2004, with the effect that cheaper, non-peak fares became available. Progress on the domestic route front is still undermined because the private airline faces severe growth constraints: they cannot expand their operations.

Bila et al. (2007) report that the Mozambican authorities sought to restructure LAM so that its ownership structure would change: the company was to shift to a limited status so that it could be floated on the stock exchange. While there is some uncertainty on the outcome of this particular decision, the Mozambique's government still owns 80% of the company and the balance is controlled by employees (Engineering News, 2008). In 2002, an agency, dedicated to the transformation of public companies into private firms, was formed: the Institute for the Management of State Shares or IGEPE. Other important reforms occurred in 2004.

In 2004, those reforms included (i) new (airline) entry points; (ii) a new civil aviation policy; (iii) a streamlining of the licences; and (iv) a clarification of aircraft entry procedures. Little information is available on the impact of these reforms, but substantial traffic growth has resulted from the greater number of entry points. Air traffic grew by a substantial 238% following the creation of these points as well as with the entry of the new carrier (Air Corridor). A number of airport workers were also retrenched in the process.

<sup>44</sup> Many farmers have moved from Zimbabwe to Mozambique and, currently, are growing and exporting flowers. Bila et al (2007) document limited international air cargo traffic forthe country.

<sup>&</sup>lt;sup>43</sup> This dimension has been enhanced since the establishment, in 2004, of a strategic plan for the development of tourism. Nevertheless, Bila et al (2007) comment that the continuing absence of a clear-cut policy from government for the sector is a hurdle for liberalisation progress.

### 6.4.2 The regulatory framework for air transport in Mozambique

USAID (2006) states emphatically that the main constraint on the development of the air transport market in Mozambique relates to policy. In terms of governmental policy, LAM is protected from competition by restrictions on entry and operation in the international market and by partial restrictions on entry and operation in the domestic market (USAID, 2006).

The current institutional framework in Mozambique, as sketched by USAID (2006), is reproduced in Figure 3.

Figure 3: Mozambique's institutional framework for air transport



Note: ATC: Air traffic control; ADM: Aeroportos de Mocambique (the airport authority)

Source: USAID (2006, Figure 2.1:4)

Focusing on air transport, the figure captures the key role of one agency, the Instituto de Aviação Civil de Moçambique (IACM) or Civil Aviation Institute, which is responsible for policy-making, technical regulation and accident investigation. It is also involved with the legal framework.

The other main player is LAM.: "in all of its bilateral agreements Mozambique designates LAM as the national flag carrier and the only one entitled to represent the [air transport] interests of the country" (USAID, 2006:4). Although LAM is supposedly independent from government, the IACM determines the status of LAM as a matter of national interest and makes policy that affects it. In other words, the IACM protects LAM and restricts market access for it against potential competitors.

Since the main institutional issues relate to conflicting and overlapping roles, it makes sense for the institutional reforms to separate policy-making from regulation and the investigations of accidents; strengthen technical regulation; and devise a new legal framework that will result in a comprehensive aviation law. In order to solve the current institutional situation, USAID (2006) proposes a new framework which is sketched in Figure 4:

Policymaking Regulation Operation Accidents investigation

Ministry of Transport & Communic.

Civil Aviation Board IACM ADM ADM Airlines Investigation Board

Figure 4: A New institutional framework proposed by USAID (2006) for air transport

Source: USAID (2006, Figure 2.2:6)

USAID (2006) suggests that the Ministry of Transport and Communication, and the Civil Aviation Board that forms part of the Ministry, should be the policy-maker. It should not be the regulator. The Ministry would be involved with issues such as bilateral agreements, tariff regulation and market and route access. The IACM should be the technical regulator and should observe air transport safety standards. Operations should be handled by different entities, as is indicated in Figure 4. Preferably, accidents should be investigated by an independent body that reports to Parliament.

Although the picture is tentative, the new scheme proposed by USAID (2006) appears to be well structured; it prevents conflicts of interest and role overlaps.

In terms of liberalisation, the USAID report (USAID, 2006) proposes that foreign and local carriers be granted additional air transport rights, particularly around the fifth freedom but also in other areas. OECD (2006:A-1) comments that:

"International traffic in Mozambique is restricted to a capacity that is insufficient during peak demand times, and highly priced most of the year. Obscure regulations and arbitrary decisions limit market access and result in high fares on international and domestic routes."

USAID (2006:A-1) also claims that one of the highest priorities for air transport is with removing market access restrictions. In terms of demand, a key point for foreign travellers in Mozambique is reliability; high air fares are currently not a primary concern for foreign travellers given the high value of the services consumed and facilities used. However, fare levels are critical to the highly price-sensitive Mozambican market and the new, potential tourists; a point which the authors of the report seem to ignore.

OECD (2006:15) describes the situation as a vicious circle because the Mozambican "market does not generate enough traffic to make domestic air transport operations profitable". The market is (and remains) "underserved, unreliable and expensive". Moreover, though protected, LAM does not seek to develop the international market.

LAM would have to become competitive in order to survive in a more liberalised environment. USAID (2006) suggests that an important aspect of the change entail the development of a business plan that includes the positioning of LAM in relation to its (potential) competitors. It comments that doing so "will involve reallocation of resources, a marketing strategy, and a comprehensive capacity-building program" (USAID, 2006:16). Alternatives for private sector participation and a change in ownership structure (or, perhaps, a management contract to provide for the competitiveness required) will also have to be examined in the business planning process (Ibid.).

According to Engineering News (2008), LAM is seeking to invest \$150m over the next three years. That investment is to allow the airline to upgrade its services, expand its fleet of aircraft and invest in the training of new pilots and technicians. That might mean that a larger effort is being made to develop the market at this point in time.

#### The way forward 6.5

A well designed aviation policy that includes economic regulation, safety regulation and the operation of airport, air navigation services and the national airline will go a long way towards supporting an efficient air transport sector. Specifically, in the case of Mozambique, changes have been suggested along these lines:

"Liberalizing air transport will help every aspect of the [Mozambican] economy. .... This will allow a greater influx of foreign travellers, business travellers, and tourists, who are most sensitive to flight availability and price. This influx will boost traffic in the domestic network, improving connections for tourists. A better domestic network will ameliorate the welfare of the local residents, who will also be able travel more easily and less expensively for tourism and business purposes. Raising competition and facilitating cross-border investment by lifting all restrictions on ownership and control and market access will cut travel costs, making it affordable for more people." (OECD, 2006:A-1)

As discussed earlier in this report, there are important concerns with the impact of air transport liberalisation in Mozambique. Nevertheless, a programme of dismantling the barriers to entry and operations can, indeed, give rise to some negative developments, yet many of the adverse effects can be dealt with through the

introduction of a sound, independent, well-functioning regulatory framework. The discussion has also highlighted that many adverse impacts cannot be attributed to liberalisation per se.

There are many benefits to be gained from an open air transport market and in spite of ex-ante difficulties in assessing the impact large gains have resulted from the dismantling of miscellaneous barriers. That has been the case for both developed and developing countries.

A gradual process of air transport liberalisation that is tied in with regulatory developments or improvements does not lead systematically to the bankruptcy and/or the disappearance of the national airline. The protection of the national airline, in the form of the maintenance of the status quo, runs counter to the objective of generating private investments. That is because governmental interference inhibits a level playing field.

There are some cases for which governmental intervention is required. Great emphasis is placed on the fact that a range of questions ought to be addressed to ensure that liberalisation is effective. Liberalisation, generally, needs to be well planned and progressive.

Specifically, in the case of Mozambique, limited progress has been made in terms of reducing the protections surrounding LAM. In spite of some attempts to engage with some changes, the government-controlled company has not managed to generate any notable profit for a period of at least more than a decade. In contrast, there are signs that the authorities have, in the last 10 years, considered alternatives to the current situation. LAM is also looking into strengthening its position through new investments. This strengthening is set to take place outside of the YD framework since the authorities have asked for a delay for its particular timetable of commitments.

It seems that the authorities need additional time to engage with the changes.

A particular option is for the Mozambican authorities to (i) follow the YD and (ii) minimise the delay in participating in the YD process.<sup>45</sup> The following dimensions are relevant to that option:

Mozambican and foreign air transport consumers are penalised by the current air transport situation. Changes are required to lower the barriers to entry, particularly those which affect supply. The full granting of the fifth freedom and an expansion of the number of airlines allowed to operate is a feature which is considered important for Mozambique. The dimension is contained in the YD. In turn, given the least developed country status held by Mozambique, and the problems of access into the hinterland, there are considerable consumer stakes in a decline in fares. It can be achieved by both an expansion of air services (to achieve economies of

<sup>&</sup>lt;sup>45</sup> A particular option might even be to go beyond the YD commitments and objectives. This is an extreme option for Mozambique given the current difficulties that the authorities have in articulating more basic improvements. This option is ignored in this report.

scale and scope) and a relaxation of fares. The latter objective is also part of the YD. In turn, the YD seeks to enhance airline safety (and security). That is important given the relatively mediocre performance of African airlines, including LAM, in this regard.<sup>46</sup>

- Commitments have been made already by the air transport ministries to engage with intra-Africa air transport liberalisation. Implementation is pending. It is not clear what Mozambique considers specifically problematic about the YD at this point, yet there are signs that the authorities are seeking more time to prepare the national carrier to adjust. There is a lack of information to assess properly the status of that claim but, given the age of LAM, there is no reason for the authorities to advance the position of infant industry motives for the protection of the national airline.
- Given that air transport is largely excluded from the multilateral arena, negotiations have to be conducted at the bilateral and/or plurilateral level. Market access on a large scale is better guaranteed by plurilateral liberalisation progress, an aspect which the YD can offer. While Mozambican authorities might push for improved market access bilaterally, as with South Africa, the authorities have improved chances of securing access to a larger market by aligning themselves with the demands articulated by other African countries. In turn, although Mozambique displays a relatively closed air transport market, it can tap on the YD to secure access to other more restrictive markets (see Annexure Figure 2). Most SSA countries have adopted already more liberal air transport principles (such as for South Africa as reflected in the standard (weighted) ALIs reported in Annexure Figure 2), and there remains much scope for further progress and negotiations.
- In order to remain competitive internationally African airlines will have to compete against more open (and even liberal) markets elsewhere. Those who do not implement changes (for example, as per the YD) may find it more difficult to compete when other airlines engage in the steps required to enhance their efficiency or to adjust to the changes at a later stage. Given the African focus embedded in the YD, air transport expansion can be undertaken and tailored to local circumstances. Generally, the YD offers a set of intermediary air transport liberalisation targets. In Africa, the YD is seen as a phased approach to a more liberal air transport environment with the aim of benefiting the continent.
- As has been observed the world over, the size of a SSA airline (e.g. SAA) does not preclude the creation and expansion of that particular airline. Efficiency improvements and the ability by governments to ensure that the supporting infrastructure is in place is the key to that process.
- Governments have to assess the costs of their interventions. The YD is a catalyst for the authorities to pay attention to the opportunity costs associated with state interference. It has also helped governments pay attention to the role played by air transport conditions in particular sectors of the economy (e.g. in trade and tourism). The YD does not preclude safeguards for relevant national interests to be preserved. Nevertheless, attention should be drawn to the fact that, as raised at a recent presentation by the African Union at an EU-AU Aviation Seminar in Brussels (held on 13–14 September 2006), the key issues hindering the implementation of

<sup>&</sup>lt;sup>46</sup> A large number of airlines blacklisted in the EU originate from a handful of SSA countries (Knorr, 2006:13).

the YD were the legal and institutional frameworks as well as the lack of a clear harmonisation of competition rules, a dispute resolution mechanism and an executing agency. Also, additional capacity and funding are not offered through the YD. The remaining issues will need to be addressed if the YD is to be effective and more attractive for all.<sup>47</sup>

<sup>&</sup>lt;sup>47</sup> The list is far from exhaustive but seeks to draw attention to a few features of the YD. Others, such as OECD (2006), also make the point that in devising policy reforms, the government of Mozambique should be guided by the protocol of the Declaration of a New African Air Transport Policy of 1988. However, the argument is articulated around the importance of particular sectors and is, thus, not suitable to this report's purpose.

# 7. Conclusions and recommendations

# 7.1 Macro-benefits outweigh national carrier considerations

#### 7.1.1 Conclusion

The international experience shows that macro-benefits far outweigh the considerations for national carriers. However, national carrier considerations are real as well as emotive; hence, a compromise should be sought. In the literature surveyed, no examples were found that suggested that on balance no country had benefited from the liberalisation of its air transport sector.

#### 7.1.2 Recommendation

Where appropriate, consideration should be given to a special position for national carriers as suppliers of last resort. Issues pertaining to concentration require special attention, too. Particular care should be taken to design a sound, independent regulatory framework.

## 7.2 Governmental control

#### 7.2.1 Conclusion

Experience in the USA shows that liberalisation can be followed by congestion at certain airports and on air routes as well as by mergers which could lead to anti-competitive behaviour. It is also necessary for governments to anticipate the increase of traffic following liberalisation and to provide for the necessary infrastructure to ameliorate that.

#### 7.2.2 Recommendations

- Government should monitor and, if necessary, take action to prevent anti-competitive behaviour in a liberalised market.
- Government must provide timeously the necessary infrastructure in anticipation of the increased air traffic that follows liberalisation.

# 7.3 Effect on poverty

#### 7.3.1 Conclusion

Liberalisation of air transport has a particularly noticeable impact in the tourism sector; that has positive consequences because tourism in Africa tends to concentrate in rural areas where poverty is at its worst.

#### 7.3.2 Recommendation

The government and the industry should recognise that liberalisation of air transport will have a positive effect on poverty.

## 7.4 Status of liberalisation

#### 7.4.1 Conclusion

A decision for intra-Africa air transport liberalisation has already been taken and is now a matter for implementation. In addition, in order to remain competitive, African airlines will have to compete in international, liberalised markets. Those countries which do not implement the joint Yamoussoukro Decision may find themselves at a disadvantage. There are large gains to engage in liberalisation as a group but the level of readiness for this varies across countries.

#### 7.4.2 Recommendation

African countries should proceed with liberalising their air transport sector. The Yamoussoukro Decision provides the right objectives and liberalisation is way overdue. However a series of issues deserve careful attention at country specific level in the process of liberalisation – e.g. the setting up of an adequate regulatory framework. Liberalisation of air transport remains the target to reach.

# References

Association of Caribbean States (2004a) "Jamaica's Experience with Air Transport Liberalization", Paper presented by the Jamaican authorities at a Regulatory Policy Seminar on "Liberalization Policy and Implementation", 27-29 April 2004, Port-of-Spain, Trinidad.

www.acs-aec.org/Transport/Projects/ICAO\_Seminar/ICAOSeminar\_eng.htm Consulted April 2008.

Association of Caribbean States (2004b) "Experiencia del Proceso de Liberalizacion en Costa Rica", Paper presented by Costa Rica at a Regulatory Policy Seminar on "Liberalization Policy and Implementation", 27-29 April 2004, Port-of-Spain, Trinidad.

www.acs-aec.org/Transport/Projects/ICAO\_Seminar/ICAOSeminar\_eng.htm Consulted April 2008.

ATAG (2003) "The Contribution of Air Transport to Sustainable Development in Africa", Report prepared by Oxford Economic Forecasting, Final Report on Study for the Air Transport Action Group. www.atag.org Consulted April 2008.

Bila, A.T., Chambal, H. and Tamele V. (2007) "Opportunities and Risks of Liberalizing Trade in Services in Mozambique", ICTSD Programme on Trade in Services, International Centre for Trade and Sustainable Development.

www.ictsd.org/issarea/services/products/Mozambique%20Country%20Study%20on%20Trade%20in%20Services%20-%20Final.pdf Consulted April 2008.

Business Day (2008) "Credit Crisis Slows Air Traffic Growth", by D'angelo, A., 6 March 2008.

ComMark (2005a) "The Air Transport Regulatory Situation in Southern Africa and Practical Aspects of Liberalisation – Headline Report", report prepared by Lyle, C. for ComMark Trust.

ComMark (2005b) "The Economic Benefits of Liberalising Regional Air Transport – A Review of Global Experience", Report prepared by Richman A. and Lyle C. for the ComMark Trust. Johannesburg: ComMark Trust. www.commark.org Consulted March 2008.

ComMark (2006) "Clear Skies over Southern Africa, The Importance of Air Transport Liberalisation for Shared Economic Growth", Report researched and written by A. Myburgh, F. Sheik, F. Fiandeiro and J. Hodge at Genesis Analytics. Johannesburg: ComMark Trust. www.commark.org Consulted March 2008.

Dibben, P, (2006) "Transport for Trade in Mozambique: 'The Golden Highway to Development'?", Discussion Paper No. 2006.01, University of Sheffield, Management School.

www.shef.ac.uk/content/1/c6/05/33/11/2006\_01\_mgt\_shef\_ac\_uk.pdf Consulted March 2008.

Engineering News (2008) "Mozambique to Invest \$150m in National Airline", Engineering News Online, 2 April 2008. www.engineeringnews.co.za/article.php?a\_id=130410 Consulted April 2008.

Essenbert, B. (2005) "The Future of Civil Aviation in Africa: Restructuring and Social Dialogue", Sectoral Activities Programme, WP 21, ILO. Geneva: ILO.

European Low Fares Airlines Association (2004) "Liberalisation of European Air Transport: The Benefits of Low Fares Airlines to Consumers, Airports, Regions and the Environment". www.elfaa.com/documents/ELFAABenefitsofLFAs2004.pdf Consulted March 2008.

Genesis Analytics (2007) "Open Skies over Mozambique: An Assessment of Options for the Deregulation of the Mozambican Air Transport Industry and their Impact on Tourism and the Broader Economy", A study commissioned by the President's International Advisory Board, funded by the ComMark Trust and the Brenthurst Foundation.

Goldstein, A.E. (1999) "Infrastructure Development and Regulatory Reform in Sub-Saharan Africa: The Case of Air Transport", OECD Development Centre Working Paper No. 154, Research Programme on Emerging Africa, CD/DOC(99)11. Paris: OECD.

Gönenç R. and Nicoletti, G. (2001) "Regulation, Market Structure and Performance in Air Passenger Transportation", OECD Economic Studies No. 32, 2001/I. Paris: OECD.

Howard, M. (2001) "Public Sector Economics for developing countries", Canada. University of the West Indies Press.

IATA (1999) "Liberalisation of Air Transport and the GATS", IATA Discussion paper. Geneva: External Relations Division, the IATA.

IATA (2007a) "Economic Benefits from Air Transport in Mexico". www.iata.org Consulted April 2008.

IATA (2007b) "Economic Benefits from Air Transport in Chile". www.iata.org Consulted April 2008.

ICAO (2003a) "The Impact of Low Cost Carriers in Europe". www.icao.int/icao/en/atb/ecp/CaseStudies/Europe\_LowCost\_En.pdf Consulted March 2008.

ICAO (2003b) "European Experience of Air Transport Liberalization". www.icao.int/icao/en/atb/epm/ecp/CaseStudies/EuropeLiberalization En.pdf Consulted March 2008.

ICAO (2003c) "Aviation in Transition: Challenges and Opportunities of Liberalisation", Seminar Prior to the ICAO Worldwide Air Transport Conference, 22-23 March 2003. The COMESA Air Transport Liberalization Experience. Montreal: ICAO.

ICAO (2003d) "The Policy of Open Skies in Chile". www.icao.int/cgi/goto\_m\_atb.pl?icao/en/atb/ecp/Databases.htm Consulted March 2008.

ICC (1995) "State Aid to Airlines", ICC, The World Business Organisation, Policy Statement prepared by the Committee on Air Transport. www.iccwbo.org/policy/transport/id361/index.html Consulted April 2008.

ICC (2005) "The Need for Greater Liberalization of International Air Transport", ICC, The World Business Organisation, Policy Statement prepared by the Committee on Air Transport. www.iccwbo.org/policy/transport/id5272/index.html Consulted April 2008.

InterVISTAS-ga (2006) "The Economic Impact of Air Service Liberalization". www.intervistas.com/4/reports/2006-06-07\_EconomicImpactOfAirServiceLiberalization\_FinalReport.pdf Consulted April 2008.

Janson, M. (2006) "Services Trade Liberalization at the Regional Level: Does Southern and Eastern Africa Stand to Gain from EPA Negotiations?", WTO Economic Research and Statistics Division, Staff Working Paper ERSD-2006-06. Geneva: WTO.

Johnston, A. and Trembath, A. (2005) "Economic Regulation of Intrastate Aviation and the National Competition Policy", National Competition Council, Staff discussion paper. Melbourne.

Kahn, A.E. (1988) "The Economics of Regulation. Principles and Institutions", London. The MIT Press.

Knorr, A. (2006) "Will 'Blacklists' Enhance Airline Safety?", paper presented at the Junior Researchers' Workshop on EU Liberalization of Air Transport, 29 June - 1 July 2006, Amsterdam, Schiphol Airport and Hogeschool van Amsterdam. www.garsonline.de/Downloads/060629/060629.htm Consulted April 2008.

(The) Nation (2005) "Intruders Threaten African Airlines", Nairobi, 6 December 2005.

Nijkamp, P. (1996) "Liberalization of Air Transport in Europe: The survival of the Fittest?", Research Memorandum 1996-1, Serie Research Memoranda. Amsterdam: Vrije Universiteit.

OECD (2005) "Mozambique" in African Economic Outlook 2004/05, AfDB/OECD. www.oecd.org/dev/aeo Consulted March 2008.

Oklahoma Department of Commerce (2006) "Opportunities in Mexico's Aerospace Sector", report prepared by Oklahoma International Trade Office – Mexico.

www.staging.okcommerce.gov/test1/dmdocuments/Opportunities\_in\_Mexicos\_Aerospace\_Sector\_03010720 79.pdf Consulted April 2008.

United Nations Economic Commission for Africa/UNECA (1999) "Decision relating to the Implementation of the Yamoussoukro Declaration concerning the Liberalisation of Access to Air Transport Markets in Africa", ECA/RCID/CM.CIVAC/99/RPT, Annex 1.

www.uneca.org/itca/Yamoussoukro/Yamoussoukro%20Decision-Engl.doc Consulted April 2008.

United Nations Economic Commission for Africa/UNECA (2001) "Liberalization of Air Transport Markets Access in Africa: The Road Forward for the Implementation of the Yamoussoukro Decision", Sub-regional meeting on the implementation of the Yamoussoukro Decision, 12-14 March 2001, Bamako, Mali, ECA/RCID/TPTCOM/MTG/2001/2.

www.uneca.org/itca /Yamoussoukro/Liberalisation %20in%20Africa-eng.doc Consulted April 2008.

USAID (2004) "Removing Obstacles to Economic Growth in Mozambique", A Diagnostic Trade Integration Study, Volume 2, Main Report, Sector Specific Studies, Integrated Framework. www.integratedframework.org/files/Mozambique dtis vol2-dec04.pdf Consulted April 2008.

USAID (2006) "Liberalization of Mozambique's Aviation Policy", A report prepared by Nathan Associates Inc. www.clubofmozambique.com/solutions1/solutions/mozambique/aviation/Liberaization%20in%20Aviation%20 Policy%20Recover%20%5BDec%202005%5D.pdf Consulted April 2008.

Viscusi, W.K., Vernon, J.M. and Harrington, jr., J.E. (2000) Economics of Regulation and Antitrust. Cambridge, Massachusetts: The MIT Press.

Wikipedia (2008) "Egyptair". www.en.wikipedia.org/wiki/EgyptAir Consulted April 2008.

Wisecarver, D. (1985) "Regulation and Deregulation in Chile: September 1973 – 1983", an Essay for the Centro de Estudios Públicos, Chile. www.cepchile.cl/dms/archivo\_1456\_62/22dwisecarrer\_ing.pdf Consulted April 2008.

WTO (2006a) "Second Review of the Air Transport Annex, Developments in the Air Transport Sector, Part two, Quantitative Air Aervices Agreements Review (QUASAR)", Volume I, Note by the Secretariat, Addendum S/C/W/270/Add.1. Geneva: WTO, Council for Trade in Services.

WTO (2006b) "Second Review of the Air Transport Annex, Developments in the Air Transport Sector, Part two, Quantitative Air Aervices Agreements Review (QUASAR)", Volume II, Note by the Secretariat, Addendum S/C/W/270/Add.1. Geneva: WTO, Council for Trade in Services.

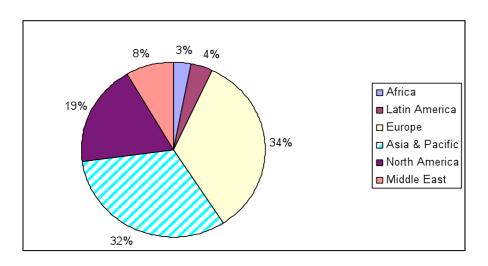
WTO (2007) "Note by the Secretariat, Second Review of the Air Transport Annex, Developments in the Air Transport Sector (Part Three)", S/C/W/270/Add.2. Geneva: WTO, Council for Trade in Services.

WTO (2008) "Annex on air transport services". www.wto.org/english/tratop\_e/serv\_e/9-anats\_e.htm Consulted April 2008.

World Bank (2004) "Why Is Air Transport Important for Social & Economic Development", presentation by Plessis-Fraissard M., Director Transport and Urban Development to the MIT Department of Aeronautics and Astronautics, 1 April 2004.

# **Annexure**

# Annexure Figure 1: Share of passenger market for international flights per distribution by regions



Source: Business Report (2008)

# Restrictions in air transport: the WTO assessment approach

The 2005/2006 WTO review provides indices for the extent to which countries restrict air transport for each other.

Indices, constructed by summing market access points, vary between zero and 50 points, with the highest grade given to the most liberal agreements (or the classical "open sky" where, in the extreme definitions, no control is applied on capacity, routes and tariffs). Weights, when applied, take into account the air traffic between countries and regions.

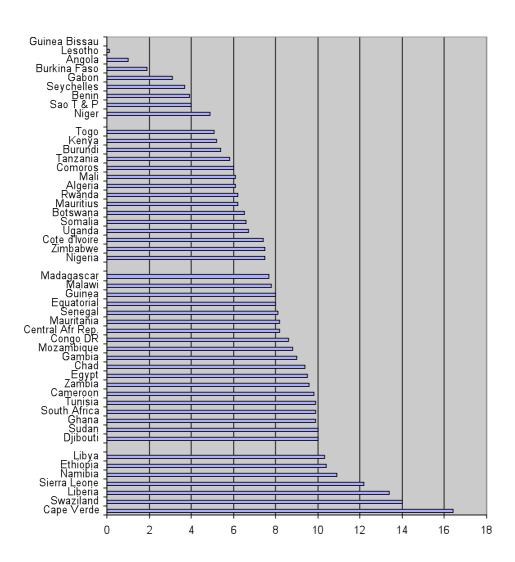
A range of dimensions are considered as relevant to market access and, thus, have been incorporated into the construction of the index. The restrictions taken into account by the WTO are:

- Ownership and/or designation withholding. Though the WTO review experts had no information about the
  extent of foreign ownership and/or designation withholding requirements at their disposal, generally these have
  been found to have been specified across airline arrangements;
- Capacity specifications and tariffs specifications. For the latter, it is important to stress that dual government approval requirements are common; these are difficult to control and monitor;<sup>48</sup>
- Traffic rights. In this regard, only the fifth freedom, that is the ability for connecting flights to operate, the seventh freedom (of relevance to low cost carriers because it involves passenger and cargo movements bypassing one's country for services), the eight and ninth freedom (cabotage and "stand alone cabotage") have been considered explicitly for the index;
- The exchange of statistics. Though these are not compulsory, whether these take place and would allow for capacity and tariff specifications to be relaxed has been considered in the WTO review.<sup>49</sup>

<sup>48</sup> Tariffs are only typically scrutinised when complaints are formally and officially made, a feature which links to the exchange of statistics.

<sup>&</sup>lt;sup>49</sup> These are important since, as commented upon by IATA (1999:10), "ironically, the moral liberal the agreement the greater the detail as to what is agreed, quite the opposite of what one might expect". They also look into whether a cooperative arrangement has been allowed, a feature typical of the US and Canada. That is ignored in this report as it is rare.

#### Annexure Figure 2: Degree of restrictiveness (ALI indicator) across Yamoussoukro signatories



Source: WTO QUASAR country information (WTO, 2006a and 2006b)

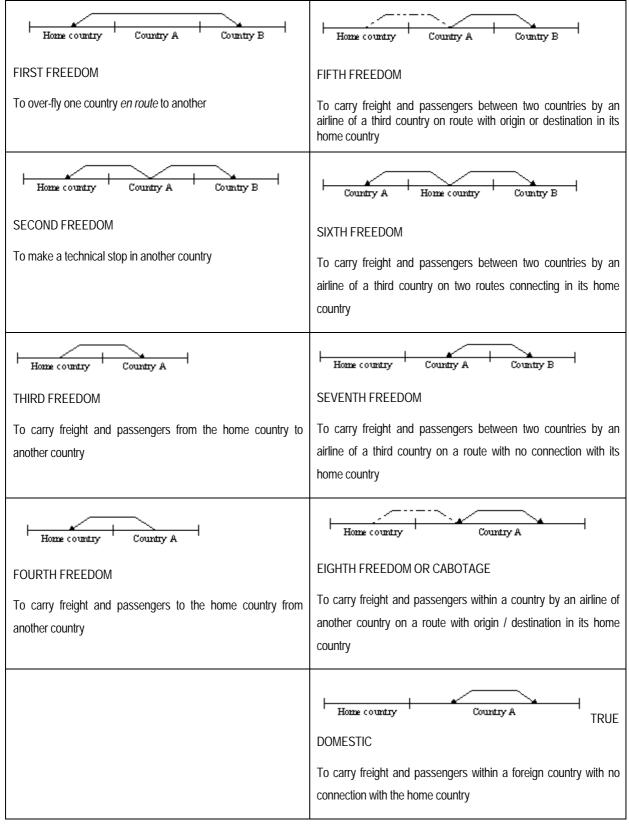
# Freedoms of the air

Countries can give airlines from other countries various forms of freedom of air as set out in the Chicago Convention of 1944. As specified by Nijkamp (1996:5), these freedoms of air include:

- First freedom: The right to fly over the territory of a contracting state without landing;
- Second freedom: The right to land on the territory of a contracting state for non-commercial (technical) reasons;
- Third freedom: The right to transport passengers, cargo and mail from the state of registration of the aircraft to another contracting state;
- Fourth freedom: The right to take on board passengers, cargo and mail in another contracting state, and to transport those to other countries of registration of the aircraft;
- Fifth freedom: The right to transport passengers, cargo and mail between two other states as a continuation of, or a preliminary to, the operation of the third and fourth freedom rights;
- Sixth freedom: The right to take passengers, cargo and mail in one state and to transport them to a third state after a stop-over in the aircraft's state of registration and vice versa;
- Seventh freedom: The right to transport passengers, cargo and mail between other states on a service which does not touch the aircraft's state of registration;
- Eighth freedom: The right to transport passengers, cargo and mail within another state between the airports of that state (or cabotage).

Annexure Figure 3 provides a schematic representation of what is entailed by the various air freedoms:

#### Annexure Figure 3: Stylised representation of the freedoms of the air



Source: WTO (2006a:15-16, Table A2) with information from ICAO Manual of Regulation (2004) and the WTO Secretariat

# History of civil aviation in Africa: the case of Air Afrique

In 1961, 11 African nations (Benin, Burkina, Faso, Cameroon, the Central African Republic, Chad, Congo, Gabon, Ivory Coast, Mauritania, Niger and Senegal) signed the Yaoundé Treaty. The oldest surviving, jointly owned airline, Air Afrique, was established to operate on behalf of the contracting states in order to operate between their territories and from their territories and on to non-contracting states' territories and also to service air routes within the territories of the contracting states. Air Afrique was a consortium, with capital originating from the participating states and from a private foreign airline. Ownership evolved over the airline's history (Goldstein, 1999).

At its inception, two main markets were served by Air Afrique: the North-South Line corresponding to the traffic of Europe-Africa and a South-South line corresponding to inter-state relationships. Goldstein (1999) indicates that air links were created at a later stage from West Africa to New York, Jeddah and Johannesburg. Significant investments were made to acquire planes despite a low cash-flow level; this made the company vulnerable as there was a lack of confidence in the then Chief Executive Officer (CEO) which led to his resignation and the appointment of a new CEO. The latter, Sir Harry Tirvengadum, made some progress towards getting Air Afrique up and running again but he eventually resigned.

Over its life time, Air Afrique has had to deal with a number of challenges such as "high fuel prices, control charges and airport taxes, as well as steep insurance premiums due to inadequate safety, both in the air and on the ground" (Goldstein, 1999). In addition, in order to make up for a shortage of subcontractors the company had to self-supply services such as handling, general sales and catering. Moreover, as with many state-owned carriers around the world, cash-strapped governments were unable to provide adequate financial compensation for its universal service obligations. (Universal service obligations typically refer to requiring the state-owned carrier to operate uneconomical inter-state routes.)

With its heavily bureaucratic structure and weak organisational characteristics, Air Afrique found it difficult to cut costs in order to compete effectively against aggressive carriers that had a strong presence in the West African market (e.g. Sabena), or against others that were expanding (e.g. British Airways and Royal Air Maroc)..

Another variable that harmed Air Afrique's competitiveness was that France became more competitively aggressive in West Africa where previously this was not the case. The main reason for France's increased competition was that it, too, faced an increase in competition in its domestic market and since France represented 40% of Air Afrique's market, it was inevitable that French airlines would have shifted their focus to obtaining some of Air Afrique's market for themselves.

Finally, Goldstein (1999) notes some other problems that are common for a multi-partner carrier: national sensibilities in the appointment of personnel (staff's morale was weakened by the marginalisation of African managers, for example); poor corporate governance; the acquisition of large, top-of-the-range aircraft

instead of turboprop-equipped short-haul planes that are better equipped to operate on regional routes; political considerations that have led to the establishment of multi-stop routes, which are more costly to operate than direct flights (e.g. all member governments wanted a direct liaison with Europe; yet possibly hubs could have been established in Abidjan); some countries started free-riding and opened their markets to charters from Europe which was in contrast to the spirit of the Yaoundé Treaty.

Air Afrique was terminated in 2002. Until its termination, it was constantly under-capitalised and subject to unnecessary governmental interference (ATAG, 2003).