

## OVERVIEW OF TRENDS AND DEVELOPMENTS IN INTERNATIONAL AIR TRANSPORT<sup>1</sup>

(ICAO Secretariat)

### 1. INTRODUCTION

1.1 This paper provides a global overview of regulatory and industry trends and developments of international air transport that have taken place since the mid-1990s, focussing on significant developments for the past five years.

1.2 The overview has two parts. The first part looks at major regulatory movements towards the liberalization of international air transport, including bilateral and regional liberalization, air service negotiations involving a group of States, multilateral initiatives, national liberalization policies, competition, and consumer protection policies. The second part reports on the airline industry's responses to an ever changing and more competitive marketplace, including airline alliances, mergers and acquisitions, privatization, airline business models, and product distribution.

### 2. REGULATORY DEVELOPMENTS

2.1 The liberalization of international air transport regulation continued to evolve at various levels since the 1980s. It is estimated that, in 2009, this involved about 32 per cent of country-pairs with non-stop scheduled passenger air services and about 57 per cent of the frequencies offered, through either bilateral "open skies" air services agreements or regional/plurilateral liberalized agreements and arrangements (compared with about 8 per cent and 38 per cent, respectively, a decade ago, see Figure 1).

2.2 **Bilateral liberalization.** Bilateral air services agreements remain the primary vehicles for liberalizing international air transport services for most States. During the past decade, about one thousand bilateral air services agreements (including amendments and/or memoranda of understanding) were reportedly concluded. Over 70 per cent of these agreements and amendments contained some form of liberalized arrangements, such as expanded traffic rights (covering Third, Fourth and in some cases Fifth Freedom traffic rights), multiple designation with or without route limitations, free determination of capacity, a double disapproval tariff or free pricing regime, and broadened criteria of airline ownership and control. As the airline business evolves, some of the recent bilateral air services agreements have included provisions dealing with computer reservation systems (CRSs), airline codesharing, leasing of aircraft and intermodal transport.

2.3 One notable development is the considerable increase in the number of bilateral "open skies" air services agreements, which provide for full market access without restrictions on Third, Fourth and Fifth Freedom traffic rights, designation, capacity, frequencies, codesharing and tariffs. The first such

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agreement was concluded in 1992 between the Netherlands and the United States. As of August 2010, 171 bilateral “open skies” agreements have been reportedly concluded, involving 103 States (and territories), with the United States being one of the partners in 86 cases. Over 60 per cent of the agreements also grant “Seventh Freedom” traffic rights for all-cargo services (12 agreements granting this right for passenger services, and 10 agreements granting “Eighth Freedom” traffic rights or consecutive cabotage rights for all services, too). About 33 per cent of the bilateral “open skies” agreements concluded by the United States have a transition annex that places limits on or provides for the phase in of, *inter alia*, frequencies, Fifth Freedom traffic rights, Seventh Freedom traffic rights for all-cargo services, codesharing, non-scheduled services, and ground handling, some of which were applied only to airlines of the United States.

2.4 **Regional and plurilateral liberalization.** The adoption of group approaches to liberalization has been an alternative means to regulatory change and adjustment for many States, as attested by the conclusion of a substantial number of agreements and arrangements on a regional basis or in a plurilateral form (i.e. an agreement amongst a few like-minded States but open for others to join). All are at different stages of development and implementation, but have the common objective of liberalizing the market amongst the member States concerned. Some agreements also begin to build legal and institutional regulatory frameworks to govern the group market as a whole.

2.5 At the regional level, the following agreements or arrangements for liberalization of intra-regional air transport services (eight of which provide for instant or phased-in liberalization leading to full market access) are currently in operation:

- a) the Single Aviation Market within the European Union (EU, then European Community) (1987, 27 States)<sup>2</sup>;
- b) the Decision on Integration of Air Transport of the Andean Community (CAN, then Andean Pact) (1991, four States);
- c) the Banjul Accord for an Accelerated Implementation of the Yamoussoukro Declaration (1997, six States; the Multilateral Air Services Agreement for the Banjul Accord Group was signed amongst seven States in 2004);
- d) the Agreement on the Establishment of Sub-regional Air Transport Cooperation among Cambodia, Lao People’s Democratic Republic, Myanmar and Viet Nam (CLMV) (1998; the Multilateral Agreement on Air Services was signed in 2003);
- e) the Multilateral Air Services Agreement (MASA) of the Caribbean Community (CARICOM) (1998, nine States);
- f) the Agreement on Sub-regional Air Services (Fortaleza Agreement) of the Southern Common Market (MERCOSUR) (1999, six States);
- g) the Agreement on Air Transport of the Economic and Monetary Community of Central Africa (CEMAC) (1999, six States);

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<sup>2</sup> The first liberalization package was started in 1987 within 12 member States, followed by the second package in 1990 and the third package in 1993 with a single market completed in 1997. The number of member States increased to 15 in 1995, to 25 in 2004, and to 27 in 2007. The liberalization package has been applied also to three member States of the European Free Trade Association (EFTA) belonging to the European Economic Area (EEA) since 1994 as well as Switzerland through a bilateral agreement on air transport since 2002. The Single Aviation Market was further developed to the European Common Aviation Area (ECAA) involving 35 States in 2006 (see paragraph 2.11).

- h) the Regulations for the implementation of Liberalization of Air Transport Services of the Common Market for Eastern and Southern Africa (COMESA) (1999, 12 States);
- i) the Decision relating to the implementation of the Yamoussoukro Declaration concerning the liberalization of access to air transport markets in Africa (Yamoussoukro II Ministerial Decision) of the African Union (AU) (2000, 52 States);
- j) the Agreement on the Liberalization of Air Transport of the Arab League States (2007, six States; this agreement formalized the Intra-Arab Freedoms of the Air Programme devised in 2000 by the Arab Civil Aviation Commission (ACAC));
- k) the Pacific Islands Air Services Agreement (PIASA) of the Pacific Island Forum (2007, six States); and
- l) the Air Transport Agreement of the Association of Caribbean States (ACS, 2008, seven States and two territories).

2.6 In addition, there are two area specific arrangements on expansion of air linkages, covering the BIMP-East ASEAN Growth Area region in Brunei, Indonesia, Malaysia and Philippines (1995) and the IMT-Growth Triangle region in Indonesia, Malaysia and Thailand (1995).

2.7 Several regional arrangements are also in the process of formal signature and/or ratification: the Common Air Transport Programme amongst eight member States of the Economic and Monetary Union of West Africa (WAEMU, 2002), and the Multilateral Agreements on Air Services and on the Full Liberalisation of Air Freight Services amongst ten member States of the Association of South East Asian Nations (ASEAN, 2008)<sup>3</sup>.

2.8 With respect to plurilateral agreements or arrangements, the Multilateral Agreement on the Liberalization of International Air Transportation (MALIAT), also known as the Kona “open skies” agreement, was concluded in 2000 by five like-minded members of the Asia Pacific Economic Cooperation (APEC) (i.e. Brunei, Chile, New Zealand, Singapore and the United States). MALIAT entered into force in the following year, and subsequently joined by Peru (withdrew in 2005), Samoa, Tonga, Cook Islands, and Mongolia (cargo-only). In 2004, Brunei, Singapore and Thailand concluded two Multilateral Agreements, one on the Full Liberalization of All Cargo Services and the other on the Liberalization of Passenger Air Services. These two agreements, which entered into force in the same year, are open to accession by other member States of ASEAN, and Cambodia subsequently joined in the all-cargo services agreement.

2.9 **Air service negotiations involving a group of States.** Along with the progress of intra-regional liberalization and economic integration, interaction between regions towards further liberalization has also been on the rise. Negotiations involving a group of States (for example, between one or more States on one hand and a group of States on the other; and between two groups of States) and the involvement of regional economic integration organizations in air service negotiations have introduced a new dimension in international air transport regulation.

2.10 In this respect, EU has been the most active as a result of the judgement by the Court of Justice of the European Communities (ECJ). In 2002, ECJ ruled on a case brought in 1998 by the European Commission against eight member States which have concluded or amended bilateral air

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<sup>3</sup> ASEAN has already adopted a cargo-specific arrangement, i.e. Memorandum of Understanding on Air Freight Services (2002, entry into force in 2004).

services agreements (seven of them “open skies” agreements) with the United States. The judgement affirmed the ability of the member States to enter into bilateral air services agreements with third countries to the extent that these do not affect Community rules on air transport, but found that some of the provisions in these agreements infringed the Community’s exclusive external competence, as regards air fares and CRSs. ECJ also found that the clause regarding ownership and control of airlines infringed Community law on freedom of establishment.

2.11 Following the ECJ’s judgement, in 2003, the Council of EU conferred on the European Commission a mandate to negotiate a comprehensive air services agreement on behalf of all member States with the United States for creation of an “open aviation area” (OAA) between the two territories, as well as a so-called “horizontal” mandate to negotiate with third countries to bring certain specific provisions in the existing bilateral air services agreements in line with Community law. The Council subsequently granted additional negotiating mandates to the Commission for creation of a “common aviation area” (the integration of EU’s neighbouring States into the single aviation market) with Morocco (2004), the countries of the Western Balkans (2004), Ukraine (2006), Jordan (2007), Lebanon (2008), Tunisia (2008), Algeria (2008) and Georgia (2009), as well as the creation of an OAA with Canada (2007), Australia (2008) and New Zealand (2008). In addition, the Commission has been asking the Council to grant negotiating mandates for a common aviation area with Israel and Russian Federation, and for OAAs with Brazil, Chile, China and India. The agreements, which have so far been concluded by the Commission under these mandates, are as follows:

- a) the Multilateral Agreement on the Establishment of a European Common Aviation Area (ECAAA) involving 35 States, i.e. all the EU member States, Iceland, Norway and the countries of Western Balkans (initialled in 2005, signed in 2006 and applied provisionally for some States);
- b) the Common Aviation Area Agreement with Georgia (initialled in 2010);
- c) the Euro-Mediterranean Aviation Agreement with Morocco (initialled in 2005, signed and applied provisionally in 2006);
- d) the Euro-Mediterranean Aviation Agreement with Jordan (initialled in 2010);
- e) the Air Transport Agreement with the United States (initialled in 2007, applied provisionally in 2008)<sup>4</sup>;
- f) the Air Transport Agreement with Canada (initialled in 2008, signed and applied provisionally in 2009); and
- g) “horizontal” agreements (initialled or formally signed with 43 States and WAENU comprised of 8 member States since 2004).

2.12 Other regional groups, namely ACAC, AU, the Latin American Civil Aviation Commission (LACAC), have started to respond to these European developments. In 2006, the African Ministers adopted a resolution on a common external air transport policy with interim guidelines for the negotiation of air services agreements between member States of AU and third parties. In 2007, ASEAN and China adopted an Aviation Cooperation Framework with a view to concluding an ASEAN-China Regional Air Services Agreement.

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<sup>4</sup> A draft text of a first-stage comprehensive agreement was agreed to in 2005. An amended text was initialled in 2007 following the United States Department of Transportation (DOT)’s withdrawal of a proposal that would have changed rules governing international investment in U.S. airlines. The first-stage agreement was applied provisionally in March 2008. A second-stage agreement was initialled in March 2010 and officially signed in June 2010.

2.13 **Multilateral initiatives.** Although most international air services operate under bilateral or regional regimes, the International Air Services Transit Agreement (IASTA), which entered into force in 1945, provides for the multilateral exchange of rights of overflight and non-traffic stops for scheduled air services among its Contracting States. The Agreement is a cornerstone of multilateralism in air transport. The number of States which are parties to IASTA was 129 as of August 2010 (112 a decade ago), but about one third of ICAO Contracting States, including several with large land masses, remain outside the Agreement.

2.14 There has been an attempt to liberalize air transport services through the multilateral trading mechanism under the World Trade Organization (WTO). WTO was established in 1995 with a broad mandate to liberalize and expand all service sectors through the General Agreement on Trade in Services (GATS). Trade rules and principles contained in GATS are obligations on most-favoured-nation (MFN) treatment (i.e. the principle of not discriminating between one's trading partners) and transparency, as well as commitments to national treatment (i.e. the principle of giving others the same treatment as one's own nationals) and market access. The Annex on Air Transport Services to GATS applies such rules and principles to three specific air transport activities: aircraft repair and maintenance services; selling and marketing of air transport services; and CRS services. It specifies that GATS shall not apply to measures affecting traffic rights or services directly related to the exercise of traffic rights.

2.15 Pursuant to a ministerial decision, in 2000, WTO launched the first mandatory review of the operation of the Annex covering developments in the air transport sector for the period 1995–2000. During the review, there was some support to extend the Annex to include additional “soft rights” (for example, ground handling) as well as some “hard rights” (for example, air cargo, non-scheduled and intermodal transport), but there was no consensus on whether or how this would be pursued. In 2003, WTO decided to end the first review process with the conclusion that the Annex remains unchanged.

2.16 In 2005, the second mandatory review of the Annex commenced with the assessment of the developments in the air transport sector and the operation of the Annex for the period 2000–2005. Discussions on the second review are ongoing with a view to identifying services that could benefit from a clarification and even extension of the scope of the Annex so that the Annex can accommodate the dynamics of the air transport system.

2.17 **National liberalization policies.** In addition to the progress of liberalization at the bilateral, regional and multilateral levels, there has been a shift of regulatory approach taken at the national level, from detailed regulation of airline operations to relying more on market forces. Liberalization policies and measures adopted by States vary widely in terms of their coverage and application. Recent examples include:

- a) air service negotiations – for example, the Government of Canada announced a new international air policy called “Blue Sky” in 2006, envisaging a change from the previous gradual reduction of restrictions of bilateral air services agreements to negotiations of “open skies” agreements;
- b) market access for foreign airlines – so-called “open skies” policies were adopted on a unilateral basis by Bahrain, Cambodia, Chile, China, Ecuador, Guatemala, Honduras, India, Kuwait, Lebanon, Morocco, Pakistan, Philippines, Sri Lanka, Tunisia, and the United Arab Emirates, some of them are applied only to specific airports and/or for limited durations. In 2007, Japan liberalized foreign airlines’ access to 23 regional airports to strengthen the country’s gateway position;

- c) airline pricing – for example, the United Kingdom Civil Aviation Authority discontinued in 2006 its remaining airfare regulation from all routes other than the routes to the United States on a unilateral basis;
- d) designation of airlines – Bangladesh, India, Kuwait, and Nigeria each allowed privately-owned airlines to operate in certain international markets; and
- e) domestic air transport – further progress of liberalization of the domestic markets was reported in Brazil, China, India, Japan, Indonesia, Mozambique, Saudi Arabia and Thailand.

2.18       **Competition policies.** As liberalization spreads, the question of how to maintain and promote fair competition in air transport is increasingly becoming an issue. One indication is a marked rise in the adoption of competition laws by States. About 90 States now have competition laws of some sort with a number of bilateral antitrust enforcement cooperation agreements particularly between developed countries. The use of competition laws for the air transport sector has occurred not only with more frequency but also has encompassed a variety of issues, ranging from abuse of dominant position such as capacity dumping and predatory pricing, collusive behaviours including price-fixing, inter-airline coordination and alliances (see paragraph 3.6), consolidation through mergers and acquisitions (see paragraph 3.8), vertical business relationships in product distribution (see paragraph 3.22), to State aid<sup>5</sup> (see paragraph 3.18 for start-up aid). One of the fundamental problems here is how to distinguish between unfair and normal competitive behaviours, and reliance has been placed on analyses and development of standards through a case by case approach.

2.19       Unlike most competition laws which are for general application, aviation-specific rules were also developed by some regional groups. In 2004, the European Commission was granted additional authority by two regulations: one is a regulation to extend the Commission's competition law authority to agreements between Community airlines and third country airlines, and the other is a regulation on the protection of Community airlines against subsidization and predatory pricing practices of third country airlines. In the same year, States belonging to COMESA, the East African Community (EAC) and the Southern African Development Community (SADC) adopted a competition regulation specifically applied for the air transport sector, followed by ACAC's adoption of similar rules in 2006. In 2007, AU drafted its common competition rules, including special provisions on air transport, which will be managed by the Executing Agency for the implementation of the Yamoussoukro Decision.

2.20       **Consumer protection policies.** Protection of consumer interests covers many elements, including air passenger rights and the contractual relationship between airlines and their users. There may exist some instances where competition does not necessarily guarantee a minimum level of service levels that customers can expect, mainly because of the lack of information available to them and their weak negotiating position. Certain elements might not even be a matter of competition between airlines. Concerns about the limits of competitive response have induced a number of States to ask the industry to develop voluntary commitments (non-legally binding self-regulation) and/or to take some direct regulatory measures that address consumer interest issues such as denied boarding compensation, flight cancellations and access for incapacitated passengers.

2.21       The voluntary commitments developed by the industry groups include: the Airline Customer Service Commitment by the Air Transport Association (ATA) and its member airlines in 1999

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<sup>5</sup> Many States continue to provide varying forms of State aid to their national airlines facing financial difficulties. Air Jamaica, Air Namibia, Alitalia, Austrian Airlines, BWIA West Indies Airways, Cyprus Airways and Olympic Airlines were a few examples of airlines that have received direct financial assistance for the past few years. Some bankruptcy codes also contain generous provisions (such as exemption from interest and pension fund payment), which act as an indirect form of State assistance for airlines.

(which were incorporated into the contract for carriage in 2001); the Airline Passenger Service Commitment and the Airport Voluntary Commitment on Air Passenger Service by airlines and airports in the member States of the European Civil Aviation Conference (ECAC) in 2002; and a Global Customer Services Framework by the International Air Transport Association (IATA) in 2000. In the United States, some airlines made their voluntary commitments reinforced in 2007 to better respond to weather emergencies resulting in lengthy ground delays aboard aircraft.

2.22 With respect to regulatory measures, although most States apply general consumer protection laws/rules, if any, to airlines' commercial practices, aviation-specific rules/regulations were introduced in some States and regional groups. For example, the United States DOT has adopted rules, *inter alia*, on misleading price advertising, airline oversales, baggage liability limit, a report on consumer-related statistics, and passengers with disabilities, and has been in the rule-making process for long delays since 2007. China, Colombia and Thailand also have specific rules on certain aspects of air passenger rights. At the regional level, EU strengthened air passenger rights by adopting a regulation establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, which became effective in 2005. EU also adopted, in 2006, a regulation concerning the rights of disabled persons and persons with reduced mobility when travelling by air. LACAC adopted a recommendation, in 2000, on a consumer protection code for airlines, while COMESA has been developing policy guidelines on consumer protection.

### 3. INDUSTRY DEVELOPMENTS

3.1 Along with the trend towards liberalization, the airline industry has undergone major structural transformation and continued to adjust to a dynamic marketplace. On the one hand, airline strategy and planning has been focussing more on alliances, consolidation and cross-border equity investments to exploit network-based economies of scale and scope. On the other hand, the full service network model of traditional major airlines has come under scrutiny in an increasingly competitive environment. In addition, e-commerce has become a common facility, which has been used extensively by the industry in marketing and selling its products. For airports and air navigation services providers, the anticipated demand growth and the new types of traffic generated in large part by liberalization increase their business opportunities but require significant investments in an efficient and timely manner. These developments have presented some new challenges to regulatory authorities.

3.2 **Airline alliances.** One of the evolving global phenomena is the formation by airlines of alliances, i.e. voluntary unions of airlines held together by various commercial cooperative arrangements. The expansion of alliances is a consequence of airlines' response to, *inter alia*, perceived regulatory constraints (such as bilateral restrictions on market access, ownership and control), a need to reduce their costs, and economic incentives to restructure into larger networks as markets become more competitive. There are now over 650 alliance agreements in the world, which contain a variety of elements, such as codesharing; blocked space; cooperation in marketing, pricing, inventory control and frequent flyer programmes (FFPs); coordination in scheduling; sharing of offices and airport facilities; joint ventures and revenue sharing; and franchising.

3.3 While numerous agreements concern cooperation on a limited scale (for example, codesharing on certain routes), the number of wide ranging strategic alliances has been on the rise. Most notable was the emergence of three "global alliance" groupings (see Table 1), which carry together over 60 per cent of the worldwide scheduled passenger traffic.

3.4 Each global alliance group remains unstable with partnership relations becoming intertwined and complex. For instance, in 2004, Cathay Pacific Airways (oneworld) acquired a 10 per cent stake in Air China (subsequently joined in Star Alliance) and, in 2006, the two airlines strengthened

their marketing relationship through increased cross-shareholding. In 2007, Varig and Aer Lingus left from Star Alliance and oneworld, respectively. In 2008, Continental Airlines and United Airlines signed an agreement, which will lead to Continental's exit from SkyTeam and entry into Star Alliance. Mexicana withdrew from Star Alliance in 2004 and joined in oneworld in 2009.

3.5 The shifting development and marketing power of global alliances, together with their competitive consequences, including their dominance at major hub airports, have caused concerns to small- and medium-sized airlines regarding their survival and have prompted efforts by these airlines to either develop a particular segment of a market or to compete as low-cost, point-to-point airlines. Some airlines also moved to form regional alliances with neighbouring airlines (for example, Grupo TACA led by TACA International Airlines since the mid-1990s; LAN alliance led by LAN Airlines since the late-1990s; and a pan-Arab alliance Arabesk launched by six Arab airlines in 2006), to become affiliate or regional members of global alliances (for example, Adria Airways, Blue 1 and Croatia Airlines joined in Star Alliance initially as regional members in 2004 before becoming full members in 2010), and to enter into franchise agreements with major airlines (for example, Comair of South Africa has been operating as British Airways' franchise airline since 1996).

3.6 Major alliances and inter-airline activities<sup>6</sup> have been closely monitored and reviewed by relevant regulatory and competition bodies and, in some cases, certain regulatory measures were introduced to ameliorate the potential anti-competitive effects. For example, in 2002, American Airlines and British Airways gave up pursuing antitrust immunity for their comprehensive alliance agreement because of the conditions imposed by the United States DOT including the divestiture of a significant number of slots at London's Heathrow Airport (a final approval was granted in 2010). In 2003, a proposed trans-Tasman alliance agreement between Qantas Airways and Air New Zealand was rejected by both the Australian Competition and Consumer Commission (ACCC) and the New Zealand Commerce Commission (Australian Competition Tribunal overruled a decision of ACCC but the New Zealand High Court rejected it on appeal in 2004; ACCC again tentatively denied a modified agreement in 2006). In 2006, DOT dismissed the original application for antitrust immunity for an alliance agreement amongst six airlines of SkyTeam, and in 2008 approved it under the limitation to transatlantic routes. The European Commission also expressed its concerns that the cooperation of eight airlines of SkyTeam may have a negative impact on competition on several routes, and published in 2007 the commitments submitted by SkyTeam members to obtain approval of their alliance agreement from the Commission.

3.7 **Mergers and acquisitions.** Airlines in many parts of the world have continued the pursuit of the perceived advantages brought by mergers, acquisitions or operational integration under a single holding company. The common motive of this trend is the need to remain competitive. A merger with a competitor may serve to hold and develop the market presence, gain access to new markets, achieve cost savings especially in respond to the sharp increase in fuel prices and low-fare competition,

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<sup>6</sup> Most of the inter-airline activities such as multilateral tariff setting, establishment of agency systems and service standards, and schedule/slot coordination have been traditionally carried out at the industry-wide level through the IATA conference machineries. For about 60 years, the IATA machineries have been functioning despite the uncertainty arising from regulatory requirements, particularly implications of competition laws, and changes in the airlines' operating environment and business practices. However, the scope of the IATA machineries was diminished significantly in some jurisdictions. In 2007, the United States DOT decided to make its show-cause order final, that is, to withdraw its approval of, and antitrust immunity for, IATA's tariff conference discussions and agreements on fares and rates for the United States-EU and the United States-Australia markets. In 2006, the European Commission decided to end the block exemptions granted for IATA's passenger tariff conferences for the intra-EU routes (as well as for slots and scheduling conferences) at the end of 2006 and for the EU-Australian/United States routes in mid-2007. The Commission further decided in 2007 not to renew the block exemptions for all the remaining routes between EU and third countries. In 2006, the Australian Competition and Consumer Commission (ACCC) also issued its final determination, which provided for the phased removal of the current authorization covering most of IATA's activities including the tariff conferences by 2008.



and shield themselves against competition through the reduction of capacity on the overlapping routes, thereby increasing the yield.

3.8 Most mergers or acquisitions have been achieved within the same country (see Table 2). Until the early 2000s, only a smaller number of attempts at cross-border mergers or acquisitions had been achieved owing to the aero-political, economical and regulatory complexity. Even in the successful cases, the control and management of foreign airlines was not financially risk free (for example, Iberia and its then parent company SEPI's majority control of Aerolineas Argentinas, and Air New Zealand's acquisition of Ansett, both of which fell through in 2001). Nevertheless, the opportunity for cross-border mergers and acquisitions has been increasing as the economy becomes globalized and many States adopted new policies or rules on foreign investment and control in national airlines, and relaxed the airline ownership and control conditions in their air services agreements. The notable recent cases are as follows:

- a) Air France and KLM Royal Dutch Airlines created the Air France-KLM Group under a single holding company through a share exchange offer by Air France for KLM's shares in 2004;
- b) Lufthansa took over Swiss in 2005 through AirTrust, in which Lufthansa initially had a 49 per cent shareholding and increased to 100 per cent in 2007. Lufthansa also increased its share in a holding company of bmi British Midland from 30 per cent (less one share) to 80 per cent, acquired a 45 per cent stake in a holding company of Brussels Airlines with an option to acquire the remaining 55 per cent from 2011, and took over up to 100 per cent of the shares in Austrian Airlines through its subsidiary company (all in 2009);
- c) Avianca (Colombia), which was acquired by Synergy Group (Brazil, 75 per cent in 2004 with an increase to 100 per cent in 2005), and TACA (El Salvador) were merged under a single holding company Avianca-TACA Ltd in 2009; and
- d) Air Caribbean (Trinidad and Tobago) acquired Air Jamaica, which was divested by the Government of Jamaica, in 2010.

3.9 In addition, the two mergers are currently proposed: International Airlines Group to be formed by the merger of British Airways and Iberia, and LATAM Airlines Group to be formed by the merger of LAN Airlines and TAM Airlines.

3.10 Cross-border equity investments have been made often as part of a strategy to forge or strengthen alliances and in a limited scale, instead of taking a majority stake or pursuing a full scale merger. As of August 2010, among 1,016 airlines in the world, it is estimated that 74 airlines had shareholdings in foreign airlines, and 291 airlines (about 29 per cent of the world's airlines) had equities owned by foreign investors in various degrees. As shown in Figure 2, foreign shareholdings in airlines have been most prevalent in EU (about 37 per cent of the airlines), followed by Asia (32 per cent) and Latin America (30 per cent), but less common in non-EU member States in Europe (13 per cent).

3.11 **Privatization.** Privatization of government-owned airlines has been one of the pre-eminent transformations in air transport. The motives for privatization have been highly diverse, ranging from purely economic considerations, to try to improve operating efficiency and competitiveness, to a more pragmatic desire to reduce the heavy financial burden for governments for financing capital investment in new equipment. Whatever the reasons, the privatization of government-owned airlines has accompanied a more commercially oriented outlook within a liberalized competitive environment.

3.12 For the past three decades, it is reported that about 135 States announced privatization plans or expressed their intentions of privatization for over 200 government-owned airlines. During this period, 134 of these targeted airlines have achieved privatization aims to some extent. Reduced government ownership since 2004 has taken place in Aer Lingus, Air Arabia, Air China, Air France-KLM, Air Lithuania, Alitalia, China Eastern Airlines, China United Airlines, El Al, FlyLal, Kyrgyzstan Airlines, Malev Hungarian Airlines, Mexicana, Novosibirsk Air Enterprise, Olympic Air, Royal Jordanian, Sudan Airways, THY Turkish Airlines, and UTair Aviation. As of August 2010, about 29 per cent of the world's airlines had governmental shareholdings, including direct holdings by national, local or municipal governments and indirect holdings through their agencies or government-owned companies. However, the spread of governmental shareholdings in airlines varies greatly by region, from about 6 per cent of the airlines in North America to about 56 per cent of the airlines in Middle East (see Figure 2).

3.13 It should be noted that achievement of privatization has not been easy. Many of the initial privatization plans had to be deferred or postponed because of the complexities encountered in the process or the economic condition of the airlines concerned, or local circumstances, although in most such cases the intention to privatize remains. The uncertainties surrounding the privatization process are also illustrated by a small counter trend of renewal, usually as a temporary measure, of government ownership as a national interest response to the potential demise of a privatized airline. Aerolineas Argentina, Air Jamaica, Air Mauritius, Air Tanzania, BWIA West Indies Airways, LIAT, and Pluna Líneas Aéreas Uruguayas are examples of privatized airlines, in which the governments raised their shareholdings since 2004.

3.14 Some States established new national airlines, which replaced debt-ridden government-owned incumbents, often in partnership with foreign investors. The examples of these airlines are Ghana International Airlines (2004, a replacement to Ghana Airways with the government having 70 per cent and the consortium led by investors of the United States 30 per cent), Virgin Nigeria Airways (2004, a replacement to Nigeria Airways with Nigerian Institutional Investors having 51 per cent and Virgin Atlantic Airways 49 per cent), Air Gabon International (2006, a replacement to Air Gabon with the government having 80 per cent and Royal Air Maroc 51 per cent), Caribbean Airlines (2006, a fully government-owned replacement to BWIA West Indies Airways), and Mauritania Airways (2007, a replacement to Air Mauritanie with the government having 10 per cent, domestic private interests 39 per cent and Tunisair 51 per cent).

3.15 **Airline business models.** In recent years, successful low-cost carriers (LCCs) have been challenging the full service network model of traditional major airlines as well as the holiday package business of charter airlines. The common features of the business model of LCCs are, with some variations: point-to-point network focussing on short-haul routes, high frequencies, simple low fare structures, high-density single class with no seat assignment, simple in-flight services, staffing flexibility and minimal overheads, and intensive use of electronic commerce (e-commerce) for marketing and distribution. To sustain low-cost structures, these airlines usually operate a single aircraft type with higher daily aircraft utilization. They also use less-congested secondary airports to ensure short turn-rounds and high punctuality and to save airport related costs. It is the low operating costs that enable LCCs to allocate a large portion of their seats to low fares.

3.16 This low-cost formula is not new but has been adopted by many new entrants in the United States following domestic deregulation in 1978. Although only few of the earlier entrants survived, successful LCCs have established sustainable significant cost advantages, and grown rapidly not only at the national level (for example, Southwest Airlines, jetBlue Airways and Virgin America in the United States, Westjet in Canada, GOL in Brazil, Virgin Blue Airlines in Australia, Skymark Airlines in Japan, Spring Airlines in China, IndiGo and SpiceJet in India, Nas Air and Sama in Saudi Arabia, and 1Time in South Africa) but increasingly internationally (for example, Ryanair and easyJet in Europe, AirAsia in South East Asia, and Air Arabia and Jazeera Airways in Middle East). The low-cost

phenomenon has been spreading quickly with some successful LCCs investing in airlines in neighbouring countries. For example, AirAsia established its affiliate airlines in Indonesia and Thailand, while Virgin Blue Airlines established Pacific Blue Airlines (New Zealand) and Polynesian Blue Airlines (Samoa).

3.17 Facing growing cost and competitive pressures, major network airlines and charter airlines have been forced to change their business priorities towards redesigning their business concepts and developing alternative models for their operations. One of the models chosen by the major network airlines is to set up separate organizations or subsidiaries to handle operations on short-haul routes to be able to compete with LCCs and to avoid the potential threat of new entrants (see Table 3 for such airlines). This low-cost “airline within an airline” strategy, despite limited success of earlier attempts, tries to combine key ingredients of LCCs’ approach with the reputation and quality of their own brand. Again, an “airline within an airline” is a formula that is developed mainly for domestic services but is also extended to international services.

3.18 The emergence and growth of LCCs prompted mixed regulatory reactions among States. In 2005, the Government of Indonesia announced that it would limit foreign LCCs’ landing rights at four major airports. In the same year, the Government of China adopted more flexible regulatory measures in treating service provisions and pricing for newly-established domestic LCCs. The European Commission adopted in 2005 guidelines on financing of airports and start-up aid to airlines, especially LCCs, departing from regional airports where the public authorities do not act as would a private investor working in a market economy. The guidelines reflect the Commission’s decision of February 2004 on the establishment of Ryanair at Charleroi Airport (Belgium).

3.19 **Product distribution.** The CRS industry has experienced concentration, expansion, changes in ownership structure, technological developments, and challenges from online sales of air transport services to consumers and business transactions via the internet. The three major global CRS vendors (Amadeus, Sabre and Travelport (including Galileo and Worldspan)) have seen themselves as global distribution systems (GDSs), and actively acquired stakes in regional CRS vendors, set up joint ventures and concluded partnership agreements with local interests to expand their business overseas.

3.20 Airlines no longer own the majority of the shares of any global CRS. Sabre has been a publicly listed company since 2000 and was acquired by Silver Lake Partners and Texas Pacific Group in 2007. Galileo became a subsidiary of Cendant Corporation (now Travelport) in 2001. Worldspan was sold in 2003 by its three airline owners to private equity funds led by Citygroup Ventures Capital. In 2007, Galileo’s parent Travelport acquired Worldspan. Amadeus has been majority-owned by non-airline interests since 2005 with Air France, Iberia and Lufthansa keeping 46.7 per cent of the shares.

3.21 CRS vendors have pursued e-commerce businesses aggressively with the acquisition of online travel agencies, while a large number of third party service providers have been entering into the market<sup>7</sup>. The majority of airline ticket sales are still being made by traditional travel agents, but online sales through airlines’ websites and online travel agencies (such as Expedia, Travelocity and Orbitz) have increased significantly. For LCCs, ticket sales are primarily being made online through their own websites, bypassing CRSs and travel agents. Major airlines have also been attempting to save booking fees charged by CRSs, to reduce or eliminate travel agency commissions, and to impose service fees for tickets issued through their reservation call centres and ticketing counters, by attracting more customers to their websites, concluding preferred channel agreements with CRS vendors and using new e-commerce technologies of third party providers.

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<sup>7</sup> There is a development in so-called GDS New Entrants (GNEs) such as Farelogix, G2 SwitchWorks and ITA Software, which provide a cheaper alternative to CRSs and have the potential to significantly reduce distribution costs for major airlines. For example, in 2005, Star Alliance concluded “alternative content access platforms” contracts with G2 SwitchWorks and ITA Software in an effort to reduce the \$2 billion which the member airlines spend annually on CRS fees.

3.22 Because of the rapid changes in airline product distribution, the necessity and effectiveness of existing CRS rules/regulations have been questioned. A number of original regulatory concerns with CRSs have diminished as ownership has moved away from airlines and alternative distribution channels have gained a competitive edge. In the United States, DOT lifted its CRS rules with two phases in 2004. The Government of Canada amended its regulations on CRS in 2004, moving to a more deregulated system with certain safeguards. The European Commission followed suit in 2009 by simplifying its CRS regulation with the objective of reducing booking costs and increasing travel choices for consumers and travel agents while maintaining basic safeguards.

3.23 Another aspect of product distribution is the switch from paper ticket to electronic ticket or e-ticketing (i.e. a paperless method for documenting and distributing airline ticket coupons). In an era of increased competition, electronic ticketing offers considerable cost savings for airlines and travel agents (estimated \$3 billion per year) and provides convenience to consumers. The first electronic ticket was issued for the U.S. domestic travel in 1993, and 25 per cent of tickets sold by member airlines of IATA were issued electronically by the end of 2004. IATA declared at its Annual General Meeting in 2004 that the elimination of paper tickets and 100 per cent implementation of electronic ticketing worldwide would be achieved by the end of 2007. This deadline was extended to May 2008 in order to allow airlines behind schedule, due to late starts, system enhancements and regulatory limitations (for example, it was in 2007 that the Government of Russian Federation removed legal restrictions requiring a paper coupon as proof of payment), more time to complete their electronic ticketing projects. On 1 June 2008, IATA stopped issuing paper ticket stock with the achievement of the 100 per cent target.

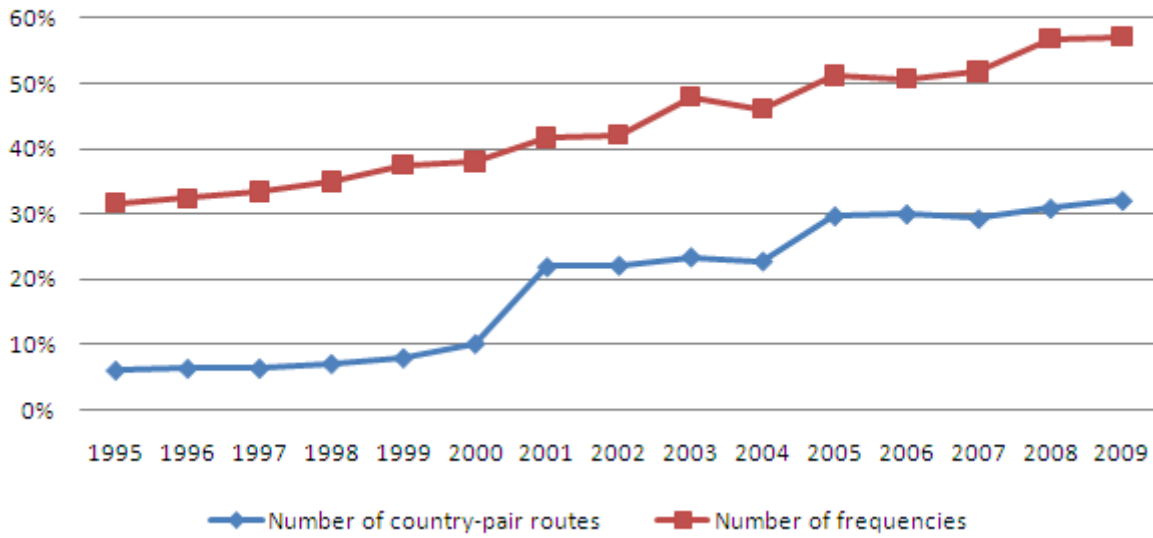
#### 4. CONCLUSION

4.1 The adoption of liberalization programmes and measures by States to open up the air transport sector has been transforming the operating environment for international airlines, while the industry's strategic responses to constantly changing and often uncertain economic and commercial opportunities have been the major driving force for regulatory changes and adjustments. The spread of liberalization and the emergence of new business practices in the aviation marketplace would continue to interact and have implications on each other.

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**Figure 1.**

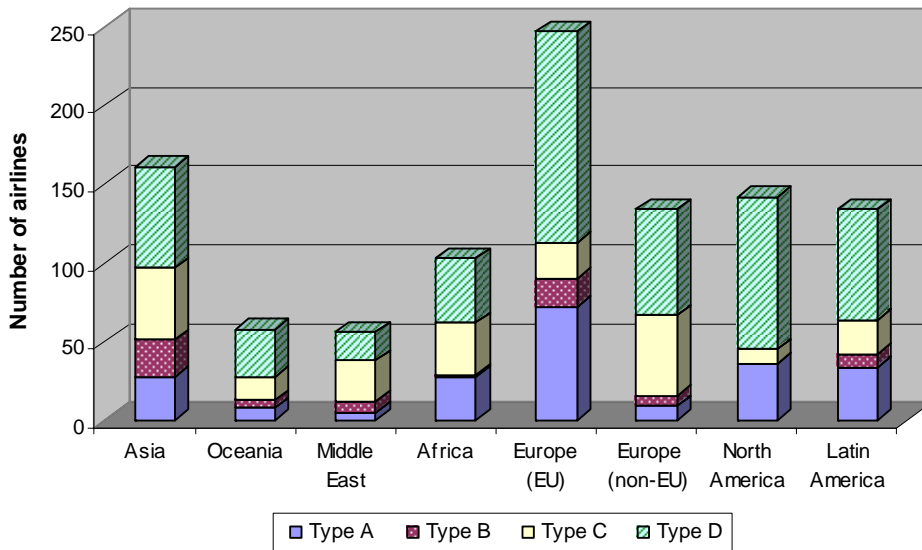
### Air Transport Conducted under Liberal Arrangements (as a percentage of international scheduled passenger services)



Source: ICAO Air Transport Bureau

**Figure 2.**

### Ownership Structures of Airlines



Type A: airline with all or part of its shares owned by one or more foreign shareholders but with no governmental shareholding  
 Type B: airline with all or part of its shares owned by one or more foreign shareholders and governmental shareholders  
 Type C: airline with all or part of its shares owned by one or more governmental shareholders but with no foreign shareholding  
 Type D: airline with all shares owned by one or more domestic private shareholders

**Table 1. Global Alliances**

Alliance	Date	Members
Star Alliance	May 1997	<b>Air Canada</b> (May 1997), <b>Lufthansa</b> (May 1997), <b>SAS</b> (May 1997), <b>Thai Airways International</b> (May 1997), and <b>United Airlines</b> (May 1997), Varig (October 1997, withdrew in January 2007), Ansett Australia (March 1999, but ceased operations in September 2001), <b>Air New Zealand</b> (March 1999), <b>All Nippon Airways</b> (October 1999), <b>Austrian Airlines</b> (with Lauda Air and Tyrolean Airways, March 2000), <b>Singapore Airlines</b> (April 2000), <b>bmi British Midland</b> (July 2000), Mexicana (July 2000, withdrew in March 2004), <b>Asiana Airlines</b> (March 2003), <b>Spanair</b> (April 2003), <b>LOT Polish Airlines</b> (October 2003), <b>US Airways</b> (May 2004), <b>Blue1</b> (November 2004*), <b>Adria Airways</b> (December 2004*), <b>Croatia Airlines</b> (December 2004*), <b>TAP Portugal</b> (March 2005), <b>Swiss</b> (April 2006), and <b>South African Airways</b> (April 2006), Shanghai Airlines (December 2007, to withdraw in October 2010), <b>Air China</b> (December 2007), <b>Turkish Airlines</b> (April 2008), <b>EgyptAir</b> (July 2008), <b>Continental Airlines</b> (October 2009), <b>Brussels Airlines</b> (December 2009), <b>TAM Airlines</b> (May 2010), <b>Aegean Airlines</b> (June 2010); To be joined by Air India; * Changed from regional members to full member in January 2010
oneworld	September 1998	<b>American Airlines</b> (September 1998), <b>British Airways</b> (September 1998), Canadian Airlines (September 1998, withdrew in June 2000), <b>Cathay Pacific Airways</b> (September 1998), <b>Qantas</b> (September 1998), <b>Iberia</b> (September 1999), <b>Finnair</b> (September 1999), <b>Lan Airlines</b> (June 2000), Aer Lingus (June 2000, withdrew in April 2007), <b>Malev</b> (April 2007), <b>Royal Jordanian</b> (April 2007), <b>Japan Airlines</b> (April 2007) and <b>Mexicana</b> (November 2009); To be joined by S7 Airlines, Kingfisher Airlines and Air Berlin
SkyTeam	June 2000	<b>AeroMexico</b> (June 2000), <b>Air France</b> (June 2000), <b>Delta Air Lines</b> (June 2000), <b>Korean Air</b> (June 2000), <b>CSA Czech Airlines</b> (April 2001), <b>Alitalia</b> (July 2001), Continental Airlines (September 2004, withdrew in October 2009), <b>KLM Royal Dutch Airlines</b> (September 2004), Northwest Airlines (September 2004, merged into Delta Air Lines in December 2009), <b>Aeroflot</b> (April 2006), <b>Air Europa</b> (September 2007**), <b>Copa Airlines</b> (September 2007**, withdrew in October 2009), <b>Kenya Airways</b> (September 2007**), <b>China Southern Airlines</b> (November 2007), <b>Vietnam Airlines</b> (June 2010), and <b>Tarom</b> (June 2010**); To be joined by China Eastern Airlines; ** Changed from associate members to full members in June 2010

Source: Web sites and aviation press

**Table 2. Domestic Merger and Acquisition: Major Cases since 2000**

2000	Air Canada's acquisition of Canadian Airlines
2001	American Airlines' bankruptcy buyout of Trans World Airlines
2002	Alianza Summa established by Avianca and Aces (dismantled in 2003)
2002	Japan Airlines Corporation established by Japan Airlines and Japan Air System
2002-2005	the creation of three Chinese airline groups headed by Air China, China Eastern Airlines and China Southern Airlines through mergers with other smaller State-owned airlines
2005	the merger of SN Brussels Airlines and Virgin Express under common ownership (became Brussels Airlines in 2006)
2005	America West Airlines' acquisition of US Airways (operating under the US Airways name)
2006	Air Berlin's acquisition of dba
2007	the merger of Air India and Indian Airlines under National Aviation Company of India
2008	the merger of Delta Air Lines and Northwest Airlines (operating under the Delta name, completed in 2010)
2009	the merger of Vueling Airlines and Clickair (operating under the Vueling name)
2010	the merger of China Eastern Airlines and Shanghai Airlines under common ownership
2010	the creation of the world's largest airline through the merger of Continental Airlines and United Airlines (operating under the United name, subject to approval)
2011	the merger of Olympic Air and Aegan Airlines (subject to approval)

Source: ICAO Air Transport Bureau

**Table 3. Low-Cost "Airline within an Airline"**

Network Airlines (parent)	LCCs (subsidiary)	Year
Air France-KLM	Transavia.com	2005
bmi British Midland	bmibaby	2002
Iberia	Vueling Airlines*	2004
SAS	Blue 1	2004
Royal Air Maroc	Atlas Blue	2004
Comair	Kulula.com	2001
South African Airways	Mango	2006
Singapore Airlines	Tiger Airways*	2003
Air India	Air India Express	2004
Garuda Indonesia	Citilink	2001
Korean Air	Jin Air	2008
Philippine Airlines	PAL Express	2008
Vietnam Airlines	Jetstar Pacific	2009
Thai Airways International	Nok Air*	2004
Qantas Airways	Jetstar	2003
	Jetstar Asia*	2004
	Valuair*	2003
	Jetstar Pacific*	2008
Mexicana	Click Mexicana	2005

Note: \* denotes minority shareholding

Source: ICAO Air Transport Bureau