

The changing landscape of Air Service Agreements

30 June 2009

Patrick Jomini, Andreas Chai, Pascal Achard and Judith Rupp¹

International air services are regulated by a complex web of bilateral and reciprocal Air Service Agreements (ASAs), which were designed to protect national carriers, but now limit the ways in which carriers can provide air services.² Some countries have begun to liberalise ASAs, creating opportunities for carriers and users of air services to benefit through improvements in productivity and wellbeing.

ASAs are in part based on Freedoms of the air (Box 1). They can also (WTO 2006):

- restrict the number of airlines servicing a particular route
- limit the number of airports to which foreign carriers have access to
- set quotas on the number of seats that carriers may provide — sometimes by specifying the aircraft type allowed to service a route
- limit the frequency of flights on a weekly or monthly basis
- require the carriers to agree on uniform airfares
- enable governments to veto proposed changes in airfares
- require carriers to be substantially owned and effectively controlled by the country or the nationals of that country
- limit the operation of non-scheduled services, such as chartered flights.

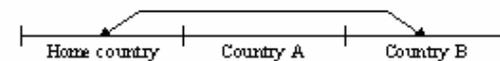
¹ Achard and Rupp are Research Assistants at GEM. Jomini is Assistant Commissioner at the Productivity Commission in Australia and Visiting Professor at the Groupe d'Economie Mondiale (GEM) at Sciences Po in Paris. Chai is Research Economist at the Productivity Commission. The views expressed in this paper are those of the authors and do not necessarily reflect those of the Productivity Commission. The authors wish to thank Pierre Latrille and Antonia Carzaniga at the World Trade Organization for their support in making this paper possible.

² About 4000 bilateral ASAs probably exist. The ICAO's 2005 database on ASAs only covers 2200 ASAs amongst 184 States. It is likely that there are many more (see de Mestral 2005).

The WTO Secretariat has developed a scoring mechanism to measure the degree of restrictiveness (or conversely, liberalisation) which characterises an ASA and conditions air traffic on the corresponding routes (Box 2).

Box 1 The Freedoms of the air

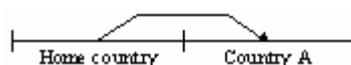
First freedom- the right of an airline of the home country to fly to country B over the territory of country A without landing



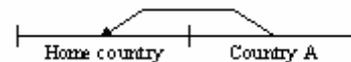
Second freedom- the right of an airline of the home country to land in country A for non-traffic purposes such as refuelling or maintenance, while en route to country B



Third freedom- the right of an airline of the home country to carry traffic (passengers, cargo or mail) from its territory to country A



Fourth freedom- the right of an airline of the home country to carry traffic from country A to its own territory



Fifth freedom- the right of an airline of the home country to carry traffic between countries A and B providing the flight originates or terminates in its own country



Sixth freedom- the right of an airline of the home country to carry traffic between two countries A and B via its own country: effectively a combination of the third and fourth freedoms



Seventh freedom- the right of an airline of the home country to operate flights between countries A and B without the flight originating or terminating in its own country

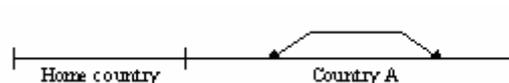


Cabotage rights- the right of an airline of the home country to carry traffic between two points within the territory of countries A and B:

consecutive cabotage rights allows a foreign airline stopping at two or more domestic points to carry domestic passengers and freight (eighth freedom)



stand-alone cabotage rights allows dedicated domestic flights by foreign carriers (ninth freedom).



Sources: PC 1998 and WTO 2006.

Box 2 **Assessing the restrictiveness of ASAs**

The WTO Secretariat has developed the **Quantitative Air Services Agreements Review (QUASAR)**, which includes consistent data on (i) regulation (i.e. the ASAs), (ii) scheduled passenger traffic, and (iii) basic data on the 180-odd economies included in the database.

The Air Liberalisation Index

The Air Liberalisation Index (ALI) is the main feature of the regulatory part of QUASAR. It is an expert-based index that measures how restrictive ASAs are. By categorizing the different provisions in ASAs and assessing them within a scoring system, the ALI provides a simple quantification of the regulatory system in place. ALI scores can take values between 0 and 50. The lower the ALI score, the more restrictive the ASA. The ALI scoring refers to the following regulatory features:

1. **Freedoms of the air:** ASAs include clauses on freedoms of the air. More basic agreements grant 'transit rights' (3rd and 4th freedoms). More liberal ASAs also include the right of the designated airlines to carry traffic to a third country providing the flight originates or terminates in the partner country (5th freedom). Few ASAs grant the right to operate flights between two foreign countries without the flight originating or terminating in one's own country (7th freedom), and then usually restricted to cargo carriers. The right of a foreign carrier to operate domestic flights (cabotage) is usually excluded from ASAs.
2. **Multiple or single designation:** This provision restricts the number of carriers that can operate on a route. In restrictive agreements each government allows a single airline as national carrier. In more liberal agreements, multiple airlines are designated to operate services between partner countries.
3. **Cooperative arrangements:** More liberal ASAs tend to allow cooperative arrangements between the designated airlines, such as code-sharing.³
4. **Capacity:** Restrictive ASAs regulate the number of weekly services each designated airline can operate, and the number of seats (by defining the aircraft type to be flown).
5. **Pricing:** Restrictive ASAs include a mechanism prescribing air fares, including double approval (in which any change in fares requires the approval of both parties, more restrictive) or double disapproval (in which any change in fares can be effected unless both parties object, less restrictive) systems. Least restrictive ASAs allow free pricing.
6. **Ownership:** Restrictive ASAs stipulate that the designated airlines have to be "substantially owned and effectively controlled" by nationals. Liberal ASAs allow foreign investment in air transport markets.
7. **Exchange of statistics:** restrictive ASAs often contain a provision on the exchange of statistics between the signatory parties to monitor traffic or verify adherence to quantitative restrictions.

Source: WTO 2006.

³ Some cooperative arrangements are not governed by ASAs. For example, airlines can enter revenue-sharing pools, which fall outside the jurisdiction of ASAs.

As new ASAs are being negotiated (including the creation of single markets and liberalising investment rules) it is useful to put them in context in terms of their degree of restrictiveness. Starting with the Chicago Convention and the first bilateral ASAs in the 1940s, this paper outlines the main changes in the landscape of Air Service Agreements to date. The evolution of ASAs suggests distinguishing three types of ASAs, all of which are currently in place:

- a first generation of relatively restrictive bilateral ASAs, inspired by the set-up of the Bermuda I Agreement between the United Kingdom and the USA.⁴
- a second generation of so-called ‘Open Skies Agreements’ (OSAs), which are relatively more liberal than the original ASAs, and which the USA concluded with several partner countries
- a more recent, third generation of ASAs, which aims to open domestic air services markets to foreign airlines.

The first generation of ASAs: ‘Bermuda I’ agreements

In 1944, the International Convention on Civil Aviation, also known as the “Chicago Convention”, marked the beginning of the modern regulation regime in international air services. Since the establishment of a multilateral system failed, the first bilateral ASA between the United Kingdom and the USA (“Bermuda I”) – although relatively liberal – served as a model for later ASAs between various other countries. Until the end of the 1980s, the complex web of ASAs evolved towards some degree of liberalisation.

The Chicago Conference

Prior to Chicago, countries participating in the Paris Convention relating to the Regulation of Aerial Navigation agreed in 1919 that each state has exclusive sovereignty over its airspace. Hence nations had the right to favour their airlines (Cosmas et al. 2008). More than two decades later, it became necessary to meet the needs of the growing air services industry. For this purpose, 52 countries⁵ convened in Chicago to try to agree on an international framework of rules and standards. Although it was not possible to conclude a multilateral

⁴ Although the provisions of the Bermuda I agreement were more liberal than many of the ASAs whose structure and content it later inspired, the label ‘Bermuda I’ is used to identify the first generation of ASAs. In 1977, a more restrictive Bermuda II agreement arose, partly as a result of an increased dominance of US airlines.

⁵ http://www.icao.int/cgi/goto_m.pl?icao/en/chicago_conf/delegates.html

agreement to exchange freedoms of the air, the Chicago Convention established a set of standards and practices for air transport services. For example, standards for communications systems, registration and aircraft identification were agreed upon. Moreover, it was agreed to restrict the operations of foreign carriers and to restrict cabotage rights to national carriers. To monitor relations in international aviation, the International Civil Aviation Organisation (ICAO) was founded.

In the aftermath of the Conference, two other agreements were signed resulting from negotiations in Chicago. First, in 1945, the International Air Services Transit Agreement (IASTA) led to a bilateral exchange of the first and second freedoms of the air (the rights to fly over a foreign country and to land for non-traffic purposes such as refuelling or maintenance) (see Geloso Grosso 2008). Second, in an attempt to extend this initiative to other traffic rights, the International Air Transport Agreement (IATA) exchanged – and, thus, defined – the third, fourth, fifth freedoms of the air. This agreement was ratified by only 17 countries, out of which four subsequently denounced the agreement, including the United States.⁶

How might one explain the difficulty in establishing a multilateral exchange of traffic rights which led to the restrictive bilateral system, which is still largely in place today? Most prominently, regulating competition in the industry was seen as a means of safeguarding national interests. Airlines were viewed as instruments of national policy (Mendelsohn 2008). For example, US airlines provided airlift capacity in emergencies through the Civil Reserve Air Fleet (CRAF) program. In return, these carriers were granted preferred access to US Government peacetime airlift contracts — an arrangement which remains in place today (Cosmas et al. 2008).

More generally, a country's airline, or 'flag carrier', which was normally government-owned, was maintained 'for reasons of trade, tourism, defence and foreign policy' (ICAO 1977). Their operations were determined more by a nation's general commercial policies than by airline industry economics.

Protection of many national carriers also reflected concerns that US carriers would otherwise come to dominate trade in air services because they possessed advantages in technology and production capabilities after the Second World War (PC 1998).

In the absence of a multilateral solution, traffic rights were exchanged on a bilateral basis. The so-called 'Bermuda I' agreement signed in 1946 between the US and the UK served as a blueprint for many ASAs.

⁶ See: http://www.icao.int/cgi/goto_m.pl?icao/en/chicago_conf/intro.html

Characteristics of ‘first generation’ ASAs

First generation ASAs granted third and fourth freedoms to a single designated carrier from each country and limited the set of routes that carriers can fly. In Bermuda I regime, changes in airfares are negotiated by carriers at conferences under the auspices of the International Air Transport Association (IATA), and require the approval from each government. Service standards are also set in a way that limits non-price competition across carriers. Capacity limits are also common, ensuring that neither country’s airline has the ability or incentive to dominate passenger flows on particular routes. The result is little or no competition and high fares on most international routes.

The ALI score related to this first generation of ASAs range between 0 and 14, while the more liberalised tend to include fifth freedom rights, multiple designation and a slightly less restrictive pricing mechanism in which governments review capacity *ex post* (after each airline has determined its own capacity) instead of *ex ante* (which is referred to as the ‘Bermuda I provision’ in WTO 2006.).

First steps towards liberalising air services

Following the deregulation of its domestic aviation market in 1978, the US began negotiations with several European countries (for example, the Netherlands, West Germany, and Belgium) to liberalise ASAs. Changes eventually included removing capacity and service restrictions, and multiple designation. carriers were given greater freedom in setting airfares, and the set of allowable routes between two countries was also expanded (Borenstein and Rose 2007). Between 1979 and 1982 the US concluded similar agreements with Singapore, South Korea, Thailand and the Philippines.

As an increasing number of European countries entered into more liberal agreements with the US, the intra-European airspace also became more liberalised (Marin 1995). Although still only granting third and fourth freedoms, some ASAs began to remove restrictions on frequency, capacity and on the number of carriers that may serve a route (designation). These new ASAs also introduced the less restrictive ‘double disapproval’ system for changing airfares.⁷ In 1984, the UK and the Netherlands signed a first relatively liberal intra-European ASA. This was followed by other agreements between the UK and West Germany (1985), Belgium (1985) and Ireland (1986).

⁷ Double disapproval means that proposed changes in prices will enter into force unless both countries disapprove.

According to QUASAR, the majority of international traffic takes place under this first category of ASAs.

Towards more “Open Skies”

In the 1990s, a new generation of liberalised ASAs emerged, called Open Skies Agreements (OSAs). The principle governing OSAs was to liberalise everything but investment restrictions and cabotage rights. The latest example is the recently concluded OSA between the US and the EU.

Characteristics of Open Skies Agreements

Although there is no strict definition of what an OSA entails, according to ICAO (2008), an OSA typically:

- grants third, fourth and fifth freedom rights, and
- removes restrictions on designation, capacity, frequencies, codesharing and fares.⁸

Thus, in contrast to first generation ASAs, OSAs provide for free pricing and free determination of capacity. In general, OSAs do not allow entry by foreign carriers into the domestic market (cabotage rights) and do not lift foreign ownership restrictions on domestic airlines. Seventh freedom rights — which grant an airline the right to fly between two foreign countries without the flight originating or terminating in its own country — are sometimes included, but often restricted to cargo traffic. According to ICAO (2008), 60 per cent of OSAs grant seventh freedom traffic rights for all-cargo services. Since the negotiation of OSAs forms part of US aviation policy, 78 out of 142 OSAs (counted on bilateral basis)⁹ have been signed by the US with partner countries (ICAO 2008).

The Multilateral Agreement on the Liberalization of International Air Transportation (MALIAT)

MALIAT is a multilateral OSA that the US concluded with Brunei, Chile, New Zealand and Singapore in 2001. It grants fifth freedom rights, free determination of capacity and free pricing. A Protocol to the agreement also

⁸ This definition is consistent with that used by the US Department of Transportation. (as cited by Geloso Grosso 2008)

⁹ Although the EU is becoming a signatory in its own right to ASAs, ICAO maintains the bilateral framework when accounting for plurilateral agreements.

includes seventh freedom passenger and cabotage rights.¹⁰ Since the protocol was not signed by the United States, MALIAT can still be considered as a second generation ASA from the US point of view. According to QUASAR, the US configuration of the MALIAT scores an ALI of 30.

The recent US – EU OSA

The first stage US–EU OSA (effective from March 2008) has made several important breakthroughs. The main aspects of the agreement include the following:

- Open service capacity, open frequency and freedom in setting airfares. Airlines are allowed to operate aircraft of any size at any frequency, and are free to set airfares without requiring government approval.
- Fifth freedom rights are granted to all US and EU carriers (both cargo and passenger). For example, United Airlines can fly from Washington to Paris and onward to Athens carrying Paris–Athens local traffic.
- US and EU carriers are able to codeshare on flights to previously–restricted nations (for example, Greece and Spain), allowing airlines to offer new routes and service new markets.
- The elimination of the nationality clause which:
 - Allows EU airlines to consolidate into cross-border entities without jeopardising their right to fly to the US. For example, Air France and KLM were able to merge their operations without losing their right to fly to the US (although their traffic rights to other countries might be jeopardised).
 - Enables EU airlines to offer transatlantic services from any location in the EU. For example, Air France has begun nonstop flights between Los Angeles and London Heathrow.¹¹
- Seventh freedom rights are granted to cargo and passenger traffic, for services between the US and any point in the European Common Aviation Area, which includes a number of non-EU countries.
- US regulators will consider foreign requests to hold larger shares of non-voting equity in US carriers, including combinations in which the total of

¹⁰ See: <http://www.maliat.govt.nz/>

¹¹ Prior to this agreement, Germany, France, the Netherlands and 13 other member countries had already signed bilateral OSAs with the US. Those agreements gave EU airlines the right to fly without restrictions on capacity or pricing to any point in the US, but only from their home country — French airlines from France, German airlines from Germany, and so on.

voting and non-voting equity exceeds 50 per cent.

Booz Allen Hamilton (2006) have estimated that the US-EU OSA is likely to have a significant economic impact. Although US–European routes represent about 6 per cent of global scheduled international passenger traffic, the OSA is likely to affect two large domestic markets, which together carry at least 30 times more passengers than are carried on EU–US routes.¹² Granting US airlines fifth freedom rights within the EU, is likely to affect intra–EU traffic, and conversely, granting fifth freedom rights to EU carriers is likely to affect the US market.

In May 2008, both parties started negotiating the second stage agreement. The EU in particular aims to extend the current agreement by allowing foreign investment. This would be the next step towards the ultimate objective of establishing an Open Aviation Area.¹³

Beyond OSAs

While OSAs do not include foreign investment, seventh freedoms for passenger traffic and cabotage, a third category of ASAs does tackle these issues. The members of the European Union formed an internal air transport market in 1997. Although an agreement creating a single market among EU members might not be considered an ASA between countries in a strict sense, given the degree of integration between EU members, the agreement provided a model for agreements with Switzerland (1999) and Morocco (2006) and in the context of the creation of the European Common Aviation Area (ECAA), which superseded the single market in 2006.

The Single Aviation Market created between Australia and New Zealand in 1996 is another example of this new generation of ASAs.¹⁴

The latest developments in 2008 confirm the emergence of this third generation of liberal air services agreements. Next to the Istanbul Declaration, the newly

¹² In 2005, EU-US traffic amounted to 42.1 million passengers (WTO, 2006). In 2006, domestic passenger traffic was 658 million in the US (DoT – Bureau of Transportation Statistics) and 737 million in the EU (Eurostat).

¹³ See:

http://ec.europa.eu/transport/air/international_aviation/country_index/united_states_en.htm

¹⁴ There are also agreements between Australia and Singapore, and Australia and the UK. The Australian Department of Transport characterises these agreements as liberal: “These agreements grant near unlimited access to the Australian market, with the exception of the Pacific route and the China-UK route (at the UK’s insistence). The inclusion of liberal investment clauses, such as a principal place of business designation clause, may make these agreements more liberal than traditional OSAs.” (personal communication, 2008)

negotiated Air Transport Agreement between Canada and the EU provides for liberalisation in several steps.

The European single market for air transport

Following the 1978 US deregulation, the European Council decided at the end of the 1980s to establish a single European aviation market. Subsequently, the market for air transport was liberalized in three steps during the 1990s. The so-called first and second ‘packages’ were implemented between 1987 and 1990. The main objective of these two packages was to allow flexibility on capacity and pricing for EU airlines on their intra-European routes. The ‘third package’ applied as from January 1993. From then on, airlines had the right to operate services within EU member states without the flight originating or terminating in their country of origin (seventh freedom) For example, British Airways would now have the right to operate flights between Frankfurt (Germany) and Madrid (Spain). Since April 1997, EU airlines also have the right to operate a route within another member state (‘cabotage’).¹⁵

Since 2006, the European Common Aviation Area (ECAA) extends the single market to Norway, Iceland, and eight Balkan countries.¹⁶ Prior to that, in 2000, the European Commission concluded a liberal ASA with Switzerland on behalf of its member states. EU Neighbourhood Policy framework has for objective to develop a broader Common Aviation Area by 2010.¹⁷ For example, the Euro–Mediterranean agreement in the field of aviation between the EU and Morocco was signed in December 2006.

The Australia–New Zealand Single Aviation Market

Australia established a single aviation market with New Zealand in 1996. This agreement grants cabotage rights — that is, authorises airlines from both countries to fly unrestricted within each other’s territory and across the Tasman (PC 1998). The agreement has relaxed foreign ownership limits on domestic and trans-Tasman carriers and allowed foreign ownership in domestic operations (Findlay and Kissling 1997). In this regard, it is significantly more liberalised than typical OSAs, most of which do not lift foreign ownership restrictions nor allow any form of cabotage.

¹⁵ See: http://ec.europa.eu/transport/air/internal_market/integration_history_en.htm

¹⁶ Albania, Bosnia and Herzegovina, Bulgaria, Croatia, the Former Yugoslav Republic of Macedonia, Romania, Serbia and Montenegro and the United Nations Mission in Kosovo (see: http://ec.europa.eu/transport/air/international_aviation/country_index/ecaa_en.htm)

¹⁷ See: http://ec.europa.eu/transport/air/international_aviation/external_aviation_policy/neighbourhood_en.htm

Latest developments

Towards yet more open skies

In 2008, the entry into force of the first-stage US–EU OSA was a major step in the recent evolution of ASAs. Still, two negotiation initiatives demonstrate that liberalisation of ASAs can go further: the Istanbul Declaration and the recent EU–Canada Air Transport Agreement.

The Istanbul Declaration

At the International Air Transport Association's (IATA) 64th Annual General Meeting and World Air Transport Summit held on 2–3 June 2008, the executives of the world's airlines resolved unanimously to pursue a campaign to eliminate certain restrictions on the ways in which carriers can operate and adapt to changes in their economic environment. This resolution was published in the form of an Istanbul Declaration. The Declaration by IATA members was followed on 26 October by the Agenda for Freedom Summit, also held in Istanbul, in which officials from some 15 economies¹⁸, including the US and the EU tried 'to find ways to expand the commercial freedoms of airlines, namely access to markets and to global capital' (IATA 2008b). Jomini *et al.* (2009) have speculated on the possible liberalisation outcomes of the Istanbul Declaration. Since the Istanbul Declaration has the potential to alleviate some of the constraints which affect operations on many routes, it could increase passenger traffic on the 'Istanbul routes' by 3 to 10 per cent. Besides granting fifth freedom rights, this is due to the elimination of restrictions on ownership, pricing and capacity (see annex for a comparison with other ASAs).

The EU-Canada Air Transport Agreement¹⁹

The European Commission and Canada finalised negotiations on an Air Transport Agreement on 30 November 2008. This agreement will eventually allow foreign ownership of domestic airlines. This new ASA applies from the date of signature, which is expected to take place in the first half of 2009. According to press releases of the European Commission, the gradual liberalisation of traffic rights and investment is expected to create in four

¹⁸ These are: Australia, Brazil, Canada, Chile, European Union, India, Mauritius, Morocco, Panama, Singapore, Switzerland, Turkey, United Arab Emirates, United States and Vietnam. Although invited, New Zealand was unable to attend. It is, however, likely that New Zealand will participate in the process and it is therefore included among the Istanbul economies (IATA 2008).

¹⁹ See: http://ec.europa.eu/transport/air/international_aviation/country_index/canada_en.htm

phases an ‘Open Aviation Area’ between Canada and the European Union.²⁰ Although the ASA has not been published, one can expect that the legal text does not yet stipulate the provisions for all phases of liberalisation. Eventually, the four phases would be:

1. From the date of signature, restrictions on capacity will disappear, i.e. an unlimited number of airlines can operate an unlimited number of services. Moreover, fifth freedom rights will be granted to cargo carriers.
2. As soon as European investors are allowed to own up to 49 per cent of a Canadian carriers’ voting equity,²¹ passenger airlines will be granted fifth freedom rights and cargo carriers will be granted seventh freedom rights.
3. Once European investors have the right to *set up* and control *new* airlines in Canada’s markets, and vice versa, passenger airlines will be granted seventh freedom rights.
4. In the fourth and final phase, full rights, including cabotage rights, will be granted to all carriers. This stage is reached once nationals from one party have the right to invest in *existing* domestic carriers of the other party, including to fully own and control them.

Other developments

United Kingdom – Singapore ASA

In October 2007, news reports indicated the conclusion of an ASA between the UK and Singapore granting seventh freedom rights for passenger airlines. As from March 2008, carriers are allowed to base aircrafts in each other’s countries and operate services to any other destination.²² In other words, Singaporean airlines would now have the right to use London Heathrow as a hub while UK carriers have the same right at Singapore Changi Airport.

²⁰see:

<http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/776&format=HTML&aged=0&language=en&guiLanguage=en>

²¹ According to the ‘Investment Canada Act’, foreign investment is submitted to review if it exceeds 5 million dollars for direct investment and 50 million dollars for indirect investment. Investors from WTO member countries benefit, however, from higher thresholds. This amount was 295 million dollars, for 2008 (see http://www.ic.gc.ca/eic/site/ica-lic.nsf/eng/h_lk00050.html)

²² See International Herald Tribune (03/10/2007) <http://www.ihf.com/articles/ap/2007/10/03/business/AS-FIN-Singapore-UK-Open-Skies.php>

Moreover, cabotage rights have been granted, as Singaporean airlines can benefit from the same rights as British airlines in the UK market, including the right to operate domestic services.

The UK–Singapore ASA is an example of how airlines might not wish to commit to investing in foreign airlines and rather have the flexibility to use seventh freedom traffic rights. Through benefiting from seventh freedom, airlines enjoy similar rights as if they had the right of investing locally, but without having to maintain the kind of commitment which foreign investment requires. To some extent, airlines might prefer access to seventh freedom in that it provides them with more flexibility than investment does.

India – United Arab Emirates

Recent news reports indicate that India and the UAE are negotiating an agreement which provides free pricing, multiple designation and cooperative arrangements (Press Trust of India. 27/11/08). The agreement is qualified as a ‘mother agreement’ allowing India to negotiate new bilateral Memoranda of Understanding with the seven Emirates. (The Hindu Business Line. 28/11/08). But there is no indication of provisions on capacity and whether this agreement includes fifth freedom. This ASA has the potential to illustrate the likely effects of liberalisation among two developing countries.

Summary

This paper has presented a typology of ASAs, which define the way in which carriers can provide air services. Since 1945, ASAs have evolved from being restrictive instruments to protect national carriers to becoming somewhat more liberal. Despite this evolution, ASAs with many degrees of restrictiveness coexist.

A first generation of ASAs inspired by the Bermuda I agreement between the US and the UK restricted competition and carriers’ ability to optimise routes and schedules. In 2005, 55.3 per cent of international scheduled traffic was regulated under an ASA with ALI scores between 0 and 21.²³

A second generation of agreements, so-called Open Skies Agreements, have removed restrictions on pricing, capacity and granted fifth freedom rights.

²³ In QUASAR typology, this refers to ASAs ranging from type A (very restrictive) to type F. Only ASAs type G are more liberal with ALIs ranging approximately from 21 to 50. Some type G agreements are Open Skies Agreements. (WTO 2006)

However, they remain restrictive in terms of foreign ownership and cabotage rights. In 2005, second generation agreements applied to at least 14 per cent of scheduled traffic.²⁴

A third generation of ASAs is beginning to incorporate foreign ownership and cabotage. Examples include the European Common Aviation Area, the Australia-New Zealand Single Aviation Market and more recent developments, such as the Istanbul Declaration and the EU-Canada Air Transport Agreement. The Istanbul process – which could transform many second generation agreements into third generation ones – is likely to affect around 28 per cent of traffic.

²⁴ Approximate. Based on Istanbul traffic, ASAs with ALIs ranging from 21 to 35, see Jomini *et al* (2009).

APPENDIX and REFERENCES

Table 1 The landscape of ASAs

| Feature / ASA | First Generation | | Second Generation | | Third Generation | | | ALI weight |
|--|--------------------|------------------------|-------------------|-----------|------------------|-----------|-------------------|------------|
| | 'Low' ^a | 'Medium' ^b | MALIAT | US-EU | Istanbul | EU-CH | ECAA ^e | |
| 5th freedom | X | X | X | X | X | X | X | 6 |
| 7th freedom | | | | | | X | X | 6 |
| Cabotage | | | | | | | X | 6 |
| Cooperative arrangements | | | X | X | | | | 3 |
| Multiple designation | | X | X | X | X | X | X | 4 |
| Ownership: ^c | | | | | | | | |
| SOC | | | X | X | | X | | 0 |
| Col | | | | X | | X | X | 4 |
| PPoB | | | | | X | | | 8 |
| Free pricing | | | X | X | X | X | X | 8 |
| Free determination on capacity | | Bermuda I ^d | X | X | X | X | X | 8 |
| No provision on exchange of statistics | | | X | X | | X | X | 1 |
| TOTAL | 6 | 14 | 30 | 32 | 34 | 39 | 43 | 50 |
| <i>Share in international traffic ^f</i> | 8.7 % | 20.4 % | 0.5 % | 8.5 % | 27,8 % | 3.0 % | N/A ^g | |

^a 'Low' score ASAs (eg Australia-Singapore, Germany-India, Italy-India). ^b 'Medium' score ASAs (eg Australia-UK, Australia France, Singapore-Netherlands), ^c In case of different provisions on ownership for each signatory party, the sum of the relevant scores is divided by two (e.g. the US-EU agreement accounts for 2 points). SOC: substantive ownership and control; Col: Community of interest; PPoB: Principal place of business. ^d The Bermuda I mechanism to determine capacity is given a score of 4. ^e European Common Aviation Area. ^f Based on total passenger traffic estimated in WTO 2006 at 495.3 million passengers. All proportions – except for Istanbul traffic – taken from WTO 2006. 'Low' corresponds to the type C, 'medium' to type F. Istanbul traffic is taken from Jomini *et al.* (2009). Istanbul traffic includes second and third generation categories. ^g Traffic among EU members within the ECAA is not considered as international traffic. This traffic is estimated at 191.3 million passengers among EU-25 countries, or 28 per cent of international traffic when intra-EU traffic is included.

Source: Jomini *et al* (2009), WTO (2006), authors' calculations

References

- Booz Allen Hamilton 2007, *The Economic Impacts of an Open Aviation Area between the European Union and the US*, report prepared for the Directorate-General Energy and Transport, European Commission, http://ec.europa.eu/transport/air_portal/international/pillars/global_partners/doc/us/final_report_bah.pdf (downloaded 5 November 2008).
- Borenstein, S. and Rose, N., 2007, 'How Airline Markets work...Or do they? Regulatory Reform in the Airline Industry', *NBER Working Paper Series*, no. 13452.
- Cosmas, A., Belobaba, P., and Swelbar, W. 2008, *Framing the Discussion on Regulatory Liberalisation: A Stakeholder Analysis of Open Skies, Ownership and Control*, MIT International Centre for Air Transportation – White Paper, Global Airline Industry Program, MIT, Cambridge, United States.
- de Mestral, *Canadian–EU Bilateral Air Service Agreements*, Working Paper no. 05/05, Faculty of Law, McGill University.
- Findlay, C. and Kissling, C. 1997, 'Flying Towards a Single Aviation Market across the Tasman', in Findlay, C., Chia, L. S. and Singh, K. (eds), *Asia–Pacific Air Transport: Challenges and Policy Reforms*, Institute of South East Asian Studies, Singapore, pp. 181–91.
- Geloso Grosso, M. 2008. Liberalising air passenger services in APEC. GEM working paper. November.
- International Air Transport Association (IATA) 2008a. Istanbul Declaration. <http://www.iata.org/events/agm/2008/istanbul-declaration.htm> (downloaded 5 December 2008)
- 2008b. Successful Agenda for Freedom Summit Concludes, media release no. 51. <http://www1.iata.org/pressroom/pr/2008-10-26-01.htm> (downloaded 5 December 2008)
- 2008c. Agenda for Freedom Summit, Chairman's Summary. http://www1.iata.org/NR/rdonlyres/F4B97017-1F86-47E6-A2A1-3E0800EC40EB/0/chairman_summary_w_attachment.pdf (downloaded 5 December 2008)
- International Civil Aviation Organisation (ICAO). 1977, *Regulation of Capacity in International Air Transport Services*, Circular 137–AT/43.
- 2008, *Overview of Trends and Developments in International Air Transport*, <http://www.icao.int/icao/en/atb/epm/Ecp/OverviewTrends.pdf> (downloaded 5 November 2008).

- International Herald Tribune 2007, *Singapore, UK conclude open skies agreement*. <http://www.iht.com/articles/ap/2007/10/03/business/AS-FIN-Singapore-UK-Open-Skies.php>. 3 October.
- Jomini, P., Achard, P. and Rupp, J. 2009. The Istanbul Declaration and the Agenda for Freedom Summit – an opportunity for broad liberalisation. GEM working paper.
- Marin, P. 1995, Competition in European Aviation: Pricing Policy and Market Structure, *The Journal of Industrial Economics*, vol. 46 no. 2, pp. 141-159.
- Mendelsohn, A. 2008, 'The United States and The European Union in International Aviation', *Issues in Aviation Law and Policy*, vol. 5.
- Productivity Commission 1998, *International Air Services*, Report no. 2, AusInfo, Canberra.
- The Hindu Business Line 2008, *Nod for air services pact with UAE*. 28 November.
- The Press Trust of India 2008, *Government approves air services pact with UAE*. 27 November
- World Trade Organisation (WTO) 2006, Second Review of the Air Transport Annex: Developments in the Air Transport Sector (Part III) Quantitative air services agreements review (QUASAR) Volumes I and II: Note by the Secretariat, document S/C/W/270/Add.1.
- 2007, Second Review of the Air Transport Annex: Developments in the Air Transport Sector (Part III): Note by the Secretariat, document S/C/W/270/Add.2.