

TRANSATLANTIC AIRLINE ALLIANCES: COMPETITIVE ISSUES AND REGULATORY APPROACHES

**A report by the European Commission
and the United States Department of Transportation**

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Notes and Acknowledgements

Annex 2 of the EU-U.S. Air Transport Agreement, provisionally applied as of March 2008, provides the legal basis for cooperation with respect to competition issues in the air transport industry between the European Commission and the United States Department of Transportation.

In the spirit of Annex 2, this report was prepared jointly by the staffs of the European Commission and the United States Department of Transportation. It does not take any position that would bind the EU and the European Commission, and the United States and the United States Department of Transportation, and is for informational purposes only.

Many professionals working in the airline industry volunteered their time to meet with the United States Department of Transportation and the European Commission staffs during this project. While this joint report was not coordinated with those individuals, their expertise and participation were critical to the success of this learning exercise.

Introduction

1. The primary goal of this joint research project is to foster a common understanding of the transatlantic airline industry among United States Department of Transportation (further in the text “DOT”) and European Commission (further in the text “the Commission”)¹ staffs as a basis upon which to build compatible regulatory approaches to competition issues in the airline sector. Perhaps the most fundamental conclusion of our inquiry is the remarkable similarities between the current competitive structures of the airline industries in Europe and the United States and, even more importantly, the remarkable similarities in the trends that continue to shape them, despite significant differences in their historical development.
2. The project related only to passenger transport. It was carried out in two phases. The first “qualitative” phase included individual meetings with EU and U.S. carriers. The carriers were selected in a representative way to include both allied and non-allied carriers. In the course of this phase, both authorities also met with representatives of the global aviation alliances. In order to enable an unconstrained and open exchange of views, the detailed content of the meetings is confidential. However, DOT and the Commission informed the carriers of their intention to publish this joint report summarising the main findings.
3. The second phase of the project – a “quantitative” phase – was an econometric assessment of the Passenger Origin-Destination (“O&D”) Survey data collected by DOT.² DOT has legal constraints on disclosure of some of the data. In order to be able to use the data for the project, the Commission was therefore obliged to obtain waivers from the carriers. Those waivers limit the use that can be made of the data and any results derived from it by the Commission exclusively to this project. The assessment was outsourced to an external consultant.³ The results of the quantitative assessment helped both authorities to better understand the likely effects on price and capacity resulting from various forms of cooperation in transatlantic markets.
4. Finally, DOT and the Commission also conducted a detailed review of the most prominent academic papers which set out a theoretical framework for the examination of the effects of airline alliances.
5. This report summarises the main qualitative findings of the joint research project. It does not divulge any confidential information obtained from carriers in the meetings, nor does it reveal any findings derived from the DOT O&D Survey data, concomitant with the text of the waivers granting the Commission access.
6. The report is structured as follows. First, as background, it describes how the EU and U.S. aviation industries evolved over time, what led to the birth of global alliances in the early

¹ The Commission and DOT are also jointly referred to in the text as “authorities”.

² All U.S. large certificated air carriers conducting scheduled passenger operations and all EU carriers that have been granted antitrust immunity to/from the U.S. have an obligation to participate in a Passenger Origin-Destination (O&D) Survey. The survey is designed to be a statistically valid 10% sample of tickets for those carriers that are required to report.

³ Corelim Consultants (Marc Ivaldi, Olivier Armantier, Philippe Gagnepain, Jérôme Pouyet, Raquel Sampaio, Miguel Urdanoz, Catherine Vibes)

1990s, and the main forms of cooperation between carriers in the aviation sector. The report then examines the nature of alliances, explains the main reasons that lead carriers to join them, and describes the most important trends. Thirdly, the report describes the regulatory framework and compares the approaches to the competition review of alliances on each side of the Atlantic. Finally, the report introduces the main challenges faced by the two authorities in their competitive assessment of airline alliances, the design of possible remedies, and the monitoring of the further development and effect of alliances.

I. Background

The U.S. and EU aviation industries

7. The U.S. airline industry was deregulated by Congress in 1978, setting the course for major structural change. The deregulation of the EU internal aviation market occurred later and was more gradual than that of the U.S. domestic aviation market. Indeed, the completion of the last provisions of the “Third Package” of reforms in 1997, opening intra-EU markets to free competition from all EU-licensed carriers, occurred nearly two decades after passage of the Airline Deregulation Act.
8. Following deregulation of the EU market, however, the European industry quickly evolved to closely resemble the U.S. industry in several key respects. First, pre-deregulation “legacy” carriers in the EU, many of which were state-owned, achieved substantial cost efficiencies as they were privatized and moved rapidly to restructure their businesses by adopting a more comprehensive hub-and-spoke model designed not only to connect national and European feeder networks to intercontinental flights, but also to more effectively connect passengers on intra-Europe journeys. Second, “low-cost carriers,” or LCCs, quickly appeared in Europe following deregulation, opening new markets and entering established intra-EU markets of the legacy carriers. But, unlike in the United States, where many new entrant carriers entered the market following deregulation - and then just as rapidly exited the market until a new generation of stronger LCCs took hold - the stability of LCCs in Europe was more firmly established from the beginning. Some of the European LCCs emerged from and/or focused on the well-developed charter market that had existed prior to EU deregulation, while others developed new business models, learning from the experience of successful and unsuccessful business models tried elsewhere.
9. Thus, despite differences in the evolution of the EU and U.S. airline industries, similar competitive dynamics on both sides of the Atlantic have led to remarkably similar competitive structures.
10. Both EU and U.S. industries are largely divided into: pre-deregulation legacy or full-service network carriers, on the one hand, and post-deregulation no-frills or hybrid low-fare carriers, on the other hand.

The development of alliances

11. While the large European carriers historically focused on intercontinental traffic even prior to deregulation, the legacy of regulation in the United States led to differentiation in the business models of U.S. carriers. For example, Pan Am and Trans World Airlines

focused on serving international destinations, relying heavily on the interline system to access passengers in markets behind their international gateways – Pan Am because it had no domestic routes and TWA because it initially failed to exploit its ability to link its domestic and international systems. While U.S. carriers took steps to develop domestic network feed for these services, they did not keep up with the other large pre-deregulation U.S. carriers that focused their post-deregulation commercial strategies on building strong domestic networks. Carriers like American and Delta had little international service at the time of deregulation, emphasizing instead the development of state-of-the art omnidirectional hub-and-spoke systems largely to carry domestic traffic. Pan Am and TWA struggled to adapt to changes in the deregulated market in the United States and their core international route structures were eventually taken over by the stronger domestic network carriers. As a result, the largest U.S. legacy carriers in existence today are relatively new to international operations compared to their European counterparts.

12. Facing enhanced competition from the U.S. legacy carriers, which had been able to expand their international presence by leveraging their strong domestic networks, the European legacy carriers, which were prohibited from access to the domestic US market, initially were in favour of restricting traffic rights for flights to and from the Member States as a means of protecting their competitive positions. Ultimately, the European legacy carriers turned to code-share and marketing alliances to adjust to the changing competitive landscape. Meanwhile, the U.S. legacy carriers also required closer commercial ties. Among other things, they sought more cost-effective access to European destinations (than was available through the limited European operations of their predecessors, such as Pan Am's Frankfurt hub) as well as increased brand awareness in Europe.
13. The global alliance strategy is rooted in the fundamentals of network economics and a global economy. Post deregulation, the legacy carrier business model on both sides of the Atlantic is predicated on a “from anywhere to everywhere” consumer proposition. However, no airline is able to efficiently serve every destination its customers require with its own aircraft. Additionally, few city-pairs can generate sufficient demand on a daily basis to sustain non-stop service. To meet the demands of customers, carriers must seek commercial partners that can help them provide greater network coverage and increased service options.
14. Legacy carriers on both sides of the Atlantic now face substantial and growing competition from LCCs on short- and medium-haul routes,⁴ and the legacy carriers are increasingly dependent on revenues from long-haul international services to sustain the viability of their networks. To remain competitive, the legacy carriers have two main challenges: expanding their global networks, which are an important comparative advantage versus LCCs, and making their overall costs more competitive with the growing LCC sector.
15. To address these challenges, legacy carriers continue to broaden and deepen their global network integration with alliance partners, tapping traffic flows that are not yet subject to LCC competition. The advent of significant LCC competition on transatlantic routes would put further pressure on legacy carrier business models and place more importance on the network as a comparative advantage. Developments in other regions of the world,

⁴ Within the EU, legacy carriers also face growing competition from the development of high speed train service.

notably in Asia, indicate that low-cost, long-haul service may come to the transatlantic markets (see also Section II of this report). The reason for its delayed appearance is due, in part, to the already highly developed and competitive transatlantic marketplace and, in part, to the fact that European carriers only had access to the United States via their home countries until the provisional implementation of the U.S.-EU Air Transport Agreement in 2008. The European nationality clause in the agreement opens up the transatlantic market to new business models (See also Section III of this report).

II. Alliance cooperation in the transatlantic market

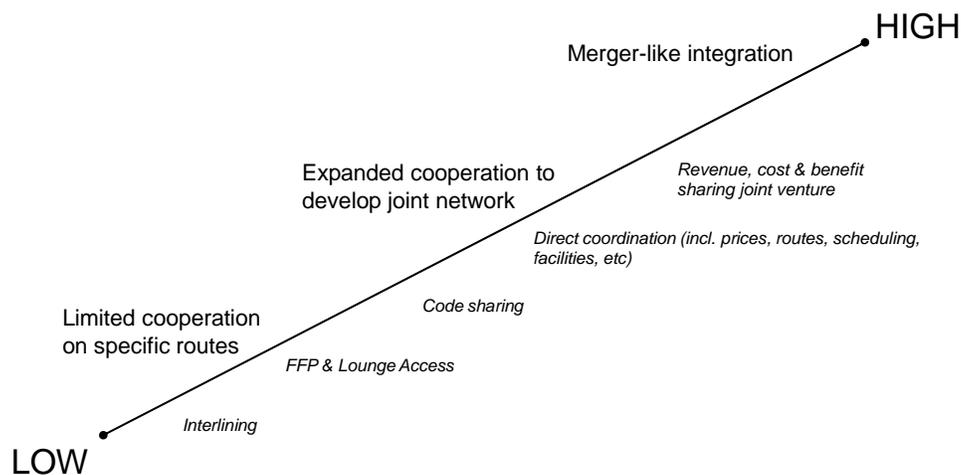
Existing forms of cooperation

16. Air carriers enter into cooperative arrangements for a variety of reasons, and the details of those arrangements vary widely depending upon the markets in which, and the partners with whom, they cooperate. For example, carriers may want to achieve a better network reach (and thus generate additional revenue), seek to minimise risk exposure, and/or share in the risks of launching new routes or creating information technology (“IT”) projects. While there are no definitive categories or labels, cooperation can be generally characterised as taking the form of either a “tactical” or a “strategic” alliance.
17. Carriers may form tactical alliances to address a specific deficiency in their networks. Tactical alliance agreements typically involve only two carriers and cover a limited number of routes, with the principal objective of providing connectivity to each carrier’s respective networks. Tactical alliances often involve at least one independent carrier that is not a member of a larger strategic alliance. Examples of tactical alliances include Virgin Atlantic / Continental (a code-sharing arrangement), American / jetBlue (an interline and frequent flyer programme (“FFP”) arrangement), and Air France / FlyBe (a code-sharing arrangement).
18. While tactical alliances are still rather common, many carriers providing international service increasingly prefer to join one of the three branded strategic alliances – Star Alliance, SkyTeam, or oneworld – which are also commonly referred to as the “global alliances.” Examples of the strategic, or global, alliances are shown in Table 1. Membership in a global alliance usually does not prevent the members from also forming tactical alliances with non-allied carriers and in some limited cases with members of other global alliances.
19. Members of the global alliances coordinate on a multilateral basis to create the largest possible worldwide joint network. The global alliance model generally applies to the entirety of member airlines’ networks and offers a much wider scope for revenue synergies. While a “basic” level of cooperation is required by members of a global alliance – generally involving standard code-share agreements,⁵ cooperation on FFP and lounge access – some alliance members seek higher levels of cooperation to enhance the benefits of the alliance.

⁵ A standard code-share agreement allows for certain seats on a flight operated by one carrier also to be marketed by another carrier under its two-letter designator code.

20. Although alliance members cooperate on many aspects of the customer experience, they may nonetheless remain competitors, as the level of integration between and among the members of the alliance varies greatly. Thus, the trend towards joining a global alliance may not necessarily represent consolidation or reduced competition in the aviation industry. Instead, the competition analysis should distinguish between the degree of integration within the existing global alliances and the likely competitive effects. The analysis is similar regardless of whether the alliance is more tactical or strategic in nature.

Figure 1: Spectrum of Alliance Cooperation*



* Source: Airline industry presentations, DOT

21. As shown above, there is a broad spectrum of cooperation by alliance partners, ranging from basic, arms-length arrangements to highly integrated joint ventures (“JVs”). To assess the competitive effects of a given alliance, competition authorities must engage in a fact-intensive inquiry to determine the structure, scope, and overlap created by each transaction. Carriers participating in a revenue- or profit-sharing JV⁶ with a grant of antitrust immunity (“ATI”) from DOT⁷ engage in the highest degree of cooperation. Carriers that do not currently participate in any JV but have a grant of ATI and thus the potential to deepen their cooperation, engage in a medium degree of cooperation. Finally, carriers in a standard alliance relationship, mostly involving cooperation with respect to FFP, lounge access and code-sharing, engage in the lowest degree of cooperation. It needs to be noted, however, that the degrees of cooperation are not definitive, and do not capture all the unique characteristics of each specific cooperation between carriers.

⁶ A profit sharing JV is a more integrated JV than a revenue sharing JV since carriers also share costs of operating services.

⁷ Under 49 U.S.C. §§ 41308-4109, DOT is authorized to make limited grants of ATI from the U.S. antitrust laws to airlines to improve international air service. See Section III of this report for further details.

22. Over time, the existing global alliances have evolved to exhibit a wide variety of cooperation levels, as shown in Table 1.

Table 1: Historical Development of the Existing Global Alliances

	 STAR ALLIANCE		
Members	26*	11**	12 ***
Founding year	1996	1999	2000
Founding members	Air Canada, Lufthansa, SAS, Thai Airways, and United Airlines	American Airlines, British Airways, Cathay Pacific, Canadian Airlines, and Qantas	Delta, Air France, Aeroméxico, and Korean
Evolution	<ul style="list-style-type: none"> In 1996, Lufthansa and United obtained ATI from DOT and began coordinating price and capacity on transatlantic routes. They expanded to revenue sharing in 2003. From 1996 to 2009, more members of Star obtained ATI along with United and Lufthansa. In 1999, Air Canada and Lufthansa began sharing revenues on Germany-Canada routes. In 2010, Air Canada, Continental, Lufthansa, and United launched an integrated JV on all North Atlantic routes. 	<ul style="list-style-type: none"> Until 2010, members of oneworld generally did not enter into integrated arrangements with each other. In July 2010, both DOT and the Commission adopted their respective decisions allowing American, British Airways, and Iberia to establish a JV on North Atlantic routes, subject to remedies. The ATI granted by DOT extended to Finnair and Royal Jordanian as well. 	<ul style="list-style-type: none"> In 2002, Air France, Alitalia, Czech, and Delta obtained ATI. In 2008, following the Air France-KLM and the Delta-Northwest mergers, Northwest and KLM joined the immunised SkyTeam JV. Northwest and KLM had operated their own JV prior to joining SkyTeam. In 2009, Air France/KLM and the merged Delta launched an integrated JV in the North Atlantic. Alitalia joined the JV in 2010.
Transatlantic passengers carried in 2009 (mln.)****	8.85	5.36	6.66
Market share of each alliance in transatlantic market****	37.6%	22.7%	28.3%

* Shanghai Airlines, now merged with China Eastern, exited Star Alliance on October 31, 2010. Air India is expected to join in March 2011.

** S7, Kingfisher and Air Berlin are expected to join oneworld in 2010, 2011 and 2012, respectively.

*** China Eastern and China Airlines are both expected to join SkyTeam in 2011.

**** Source: DOT onboard (non-stop segment) data for Year Ended June 2010. The alliance shares include all allied carriers operating between the US and the Member States of EU, plus Switzerland and Norway. Currently nonaligned carriers account for 2.70 million passengers carried or 11.4% of the market.

23. As of 1 November 2010, the state of cooperation among the members of the global alliances is as follows:

Table 2: Levels of Cooperation among Existing Alliance Members

	 STAR ALLIANCE		
Low	All 26 members – Adria, Aegean, Air Canada, Air China, Air New Zealand, ANA, Asiana, Austrian, Blue 1, bmi, Brussels, Croatia, Egypt Air, LOT, Lufthansa, SAS, Singapore, South African, Spanair, Swiss, TAM, TAP, Thai, Turkish, United-Continental, and US Airways.	All 11 members – American, British, Cathay Pacific, Finnair, Iberia, JAL, LAN, Malev, Mexicana, Qantas, and Royal Jordanian.	All 12 members – Aeroflot, Aeromexico, Air Europa, Air France-KLM, Alitalia, China Southern, Czech, Delta, Kenya, Korean, Tarom, and Vietnam.
Medium	9 members – Air Canada, Austrian, bmi, LOT, Lufthansa, SAS, Swiss, TAP, and United-Continental (obtained ATI from DOT)	5 members – American, British, Iberia, Finnair, and Royal Jordanian (obtained ATI from DOT)	5 members – Air France-KLM, Alitalia, Czech, Delta, and Korean (obtained ATI from DOT)
High	3 members – Air Canada, Lufthansa, and United-Continental (integrated JV in North Atlantic markets)*	3 members – American, British, and Iberia (integrated JV in North Atlantic markets)	3 members – Air France-KLM, Alitalia, and Delta (integrated JV in North Atlantic markets)

* Lufthansa has by now acquired control of Swiss, bmi, Brussels Airlines, and Austrian. These Lufthansa affiliates are, for the time being, not party to the Star JV.

24. As shown above, the core members of the global alliances have deepened their cooperation by launching highly integrated JVs. Their stated goal is to become effectively indifferent to which plane or “metal” carries a passenger, i.e. they seek “metal neutrality” in their cooperation. This form of cooperation is effectively a close substitute to a merger

because it typically involves full coordination of the major airline functions on the affected routes, including scheduling, pricing, revenue management, marketing, and sales.

Reasons for carriers to join global alliances

25. Carriers join global alliances because membership brings important benefits for carriers. However, the differing degrees of cooperation within alliances give rise to different types and levels of benefits. The benefits described below are those that can be generated by means of basic alliance membership.
26. Global alliances allow airlines to link their networks of routes and sell tickets on the flights of their commercial partners, thereby offering travellers access to hundreds of destinations around the world on a single virtual network. Airlines participating in an alliance aim to provide value to consumers by creating a comprehensive route network, more convenient and better coordinated schedules, single on-line prices, single point check-in, coordinated service and product standards, reciprocal frequent flyer programs, and service upgrade potential.
27. With wider network reach, a carrier can also benefit from wider brand recognition, in particular through code-sharing with an alliance partner already well established in a region. In addition to code-sharing, an alliance carrier has the possibility to familiarise customers with its individual brand (at a limited cost) by associating it with the global alliance brand. Since the alliance brand is generally promoted by all alliance members, passengers are often more aware of the alliance brand than of a new carrier's individual brand. This ability to use the alliance brand can be of particular importance to smaller alliance members with a limited marketing budget.
28. Alliance partnership with other carriers can also significantly improve access to feeder traffic of alliance partners – particularly important for long-haul operations. While feeder traffic can also be obtained outside of the global alliances through interlining agreements such as an IATA multilateral proration arrangement (“MPA”)⁸ or a bilateral proration agreement,⁹ airlines in an alliance tend to favour their alliance partners in the financial terms of their interlining and choose them for code-sharing. With the increasing membership of alliances (and, respectively, their network coverage), it may be difficult for unaligned carriers to secure feeder traffic at some airports. This can therefore encourage them to join an alliance to benefit from more attractive conditions for feeder traffic from fellow members.
29. By covering more destinations and providing better connections, alliance partners are also able to better address the needs of corporate customers,¹⁰ certain of which may be interested in a single contract covering a large network and offering attractive schedules.¹¹ Although carriers with basic alliance membership in the same alliance (that is, that are not

⁸ An agreement on the apportionment of through-fares on the basis of the standard IATA multilateral proration terms on journeys with two or more legs operated by different carriers which are Signatories (or owned 50% or more by Signatories) to the IATA Prorate Agency Agreement.

⁹ A bilateral agreement between two (or more) airlines on the apportionment of through-fares on journeys with two or more legs operated by different airlines

¹⁰ Corporate customers are entities that conclude a corporate contract with airlines.

¹¹ It needs to be noted however that any alliance package for corporate customers outside of a revenue-sharing JV (and a code-sharing with price coordination) should imply separate pricing by each alliance carrier, as standard alliance membership does not allow for any coordination on prices.

party to a JV or code-sharing agreement with price coordination) tend to compete with each other, a joint alliance offer can nonetheless provide more flexibility to give customers what they are seeking and enhance revenues.

30. The members of global alliances may also jointly finance expensive and long-term projects, for example, IT development projects. By pooling resources, alliance partners may find it easier to modernise their IT systems to make them more compatible with partner airlines (for example, their passenger reservation systems) and thus potentially more competitive versus non-aligned carriers that are unable to make such investments individually.

Trends in global alliances

31. Two trends appear to be well established: increased breadth and increased depth in cooperation between members of the existing global alliances.
32. Breadth is important for the global network reach of an alliance. Alliances recruit new members to fill so-called “white spots” in their networks, where an alliance does not yet have coverage. Such white spots remain *inter alia* in Russia (for Star), India (for SkyTeam) and Brazil (for oneworld and SkyTeam). On the downside, while growing in size is important for the network, a large alliance unavoidably increases the complexity of governance, and risks rendering it less efficient in decision making and more difficult to integrate. Alliances, therefore, balance the trade-off between, on the one hand, an increment in global network and increased revenue synergies, and, on the other hand, the risk of inefficiencies due to increased size of the alliance.
33. Since closer cooperation implies significant establishment costs and can be difficult to dismantle once implemented, to date only a few carriers have established a JV within their respective global alliances. Indeed, the number of carriers which have implemented a JV has been smaller than the number of carriers which are engaging in enhanced cooperation (often enabled by a grant of ATI by the DOT insofar as it relates to transatlantic or transpacific air services).
34. Presently there are no plans in the public domain for the creation of a fourth global alliance. Recent trends instead indicate that new or non-aligned network carriers are likely to gravitate towards one of the three existing alliances. A frequently cited example is Northwest/ KLM’s integration into SkyTeam in 2004 following the Air France-KLM merger. At that time, the principals of the Northwest/ KLM alliance, unofficially known as “Wings,” argued that even its industry-leading JV could not compete on a long term basis with the larger global alliances.¹²
35. Still, the possibility of new alliances should not be discounted. Industry professionals frequently discuss the potential for unaligned carriers and/or LCCs to devise new forms of cooperation that could exert competitive discipline on the network carriers that form the backbone of the existing global alliances. Furthermore, a number of carriers remain unaligned by choice and view independence or limited commercial cooperation as beneficial to their competitive strategies.

¹² See Joint Application of Alitalia, Czech, Delta, KLM, Northwest, and Société Air France at 51-52, Docket DOT-OST-2007-28644.

36. With regard to LCC cooperation in intercontinental markets, there are a number of challenges. The current LCC model, targeted primarily at cost minimisation, appears inconsistent with the complexity (and associated costs of implementation) of a global alliance. LCCs would be more likely to form an alliance if their business models evolve to include long-haul flights for which they will need improved access to feeder traffic. At the moment, however, LCCs appear more likely to continue developing simplified forms of cooperation, which are less integrated and thus less costly than the current global alliance model.
37. One example of such cooperation is U.S. domestic LCC jetBlue's relationships with Aer Lingus (an interline), Lufthansa (a code-share), and American, a U.S. network carrier (an interline). This heightened cooperation with various network carriers was facilitated by jetBlue's recent decision to invest in upgrades to its reservations system.
38. Another example of such cooperation is the code-share agreement signed in 2009 between a Canadian LCC, WestJet, and Air France/KLM, and the recent code-share agreement between WestJet and American.

III. Comparison of regulatory regimes

Developments in regulatory environment

39. Traditionally, international air services around the world have been governed by bilateral agreements between sovereign states, as foreseen in the Convention on International Civil Aviation signed at Chicago on 7 December 1944 (also known as the Chicago Convention). Many of the inter-State bilateral agreements allow only a limited number of carriers to operate between the two countries and require those carriers to be owned and/or controlled by nationals of the signatory State involved. Moreover, such agreements may determine the number of flights that can be operated by the carriers and sometimes even require the carriers to agree the level of fares. The scope for competition in such an environment may be limited. Slowly but surely, however, reform of the regulatory framework is occurring.
40. In the United States, DOT launched an initiative in 1992 to negotiate "open-skies" agreements that would be more responsive to the dynamic changes in the global aviation industry.¹³ In keeping with its international aviation policy, announced in 1995,¹⁴ DOT sought liberalised aviation agreements with European countries and other partners that provide for open entry on all routes, unrestricted capacity and frequency on all routes, open rights to introduce air service between any point in the United States and any point in the partner country (including intermediate and beyond points), rights of airlines to price their products and services without government restrictions, open code-sharing opportunities, as well as liberal cargo and charter rights. As of the date of publication of this report, the United States has more than 90 open-skies partners.

¹³ See Final Order, In the Matter of Defining "Open Skies", Docket 48130 (Aug. 5, 1992).

¹⁴ See Statement of United States International Air Transportation Policy, Docket 49844, published in the Federal Register at 60 FR 21841 (May 3, 1995).

41. In Europe, the “open skies” judgements of 5 November 2002 of the Court of Justice of the European Union¹⁵ laid the foundation for liberalisation of international air services at the EU level. In that case the Commission challenged the bilateral agreement that from 1995 a number of Member States had individually entered into with the United States (so called “open skies agreements”). The judgments first clarified the European Union’s¹⁶ powers in the field of international air services in that they recognised that it has certain exclusive responsibilities in external relations in the field of aviation. The open skies judgments thus meant that Member States cannot solely negotiate international air service agreements. Secondly, the judgments ruled that Member States may not reserve benefits in such agreements to their national carriers alone: the freedom of establishment principle laid down in Article 49 TFEU entails that equality between EU carriers (regardless of their country of establishment within the EU) needs to be preserved as to their operation of flights from any EU airport towards third countries.
42. In June 2003, the Council of the EU established a new legal framework for the air transport relationship between the EU and the rest of the world.¹⁷ The Commission and the Member States agreed on the mechanism to address the issues identified by the Court. Any bilateral air services agreements that were not in line with the freedom of establishment in the EU as interpreted in the Open Skies judgments had to be revised to put all EU airlines on an equal footing for flights from any Member State to third countries. Alternatively, the Commission, acting on a mandate of the Member States, could negotiate a single “horizontal” agreement¹⁸ with a third country. The EU also started setting up open aviation areas (so called “open skies”) with key partners with a view to further liberalise these markets.
43. A major step forward in the liberalisation of EU-U.S. air traffic was marked with the EU-U.S. first-stage negotiations and provisional application in March 2008 of the EU-U.S. Air Transport Agreement.¹⁹ This agreement introduced new commercial freedoms for EU and U.S. airlines and a unique framework for regulatory cooperation in the field of transatlantic aviation. It replaced the individual agreements between each of the Member

¹⁵ See Judgement of the Court of Justice in Case C-466/98 *Commission v United Kingdom* [2002] ECR I-9427; Judgement of the Court of Justice in Case C-467/98 *Commission v Kingdom of Denmark* [2002] ECR 9519; Judgement of the Court of Justice in Case C-468/98 *Commission v Kingdom of Sweden* [2002] ECR 9575; Judgement of the Court of Justice in Case C-469/98 *Commission v Republic of Finland* [2002] ECR 9627; Judgement of the Court of Justice in Case C-471/98 *Commission v Kingdom of Belgium* [2002] ECR 9681; Judgement of the Court of Justice in Case C-472/98 *Commission v Grand Duchy of Luxemburg* [2002] ECR 9741; Judgement of the Court of Justice in Case C-475/98 *Commission v Republic of Austria* [2002] ECR 9797; Judgement of the Court of Justice in Case C-476/98 *Commission v Federal Republic of Germany* [2002] ECR 9855.

¹⁶ At that time European Community.

¹⁷ This package included Regulation (EC) No 847/2004 of the European Parliament and of the Council of 29 April 2004 on the negotiation and implementation of air service agreements between Member States and third countries, OJ L 157 of 30.04.2004, pp. 7-17, Council Decision of 5 June 2003 on authorising the Commission to open negotiations with third countries on the replacement of certain provisions in existing bilateral agreements with a Community agreement, and Council Decision of 5 June 2003 on authorising the Commission to open negotiations with the United States in the field of air transport.

¹⁸ A “horizontal” agreement is an agreement negotiated by the Commission on behalf of the Member States, in order to bring all existing bilateral air services agreements between Member States and a given third country in line with European Union law.

¹⁹ See Decision of the Council and the Representatives of the Governments of the Member States of the European Union, meeting within the Council of 25 April 2007 on the signature and provisional application of the Air Transport Agreement between the European Community and its Member States on the one hand, and the United States of America, on the other hand. OJ L 134 of 25.5.2007, p. 1.

States and the United States and removed barriers for EU and U.S. airlines wishing to offer passenger and cargo services between and beyond EU and the United States. The EU-U.S. Air Transport Agreement also created a Joint Committee whose main functions are to deal with the issues relating to interpretation or application of the Agreement, and review its implementation.²⁰

44. The European nationality clause in the agreement provided all EU-established airlines with a right to operate services to the U.S from any point in the EU, including outside their home Member State. British Airways has already made use of this clause by creating a subsidiary, OpenSkies, operating on the Paris-New York route (as well as for less than a year on the Amsterdam-New York route) and briefly so did Air France, which entered the London-Los Angeles route but exited shortly thereafter.
45. The most immediate effect of the EU-U.S. Air Transport Agreement was to introduce more competition in transatlantic markets. The provisional implementation of the Agreement as of end of March 2008 led to capacity and structural changes. While overall capacity has decreased in the U.S.-EU market since 2007 likely due to economic conditions, there has been a diversification of services. On the U.S.-London Heathrow routes, departures are up 15.3% versus 2007 and overall seats have increased by 8.7%.²¹ Given the economy, new services on the U.S.-London Heathrow routes account for much of the changed landscape. Carriers now provide more frequencies and serve more destinations in the United States from London Heathrow.
46. Another important result of the EU-U.S. Air Transport Agreement was to formalise cooperation on competition matters between the Commission and DOT. Annex 2 to the agreement allows for general exchange of views and experience between the two authorities and aims at *inter alia* reducing the potential conflicts in the application of the competition regimes in the EU and U.S. and promoting compatible regulatory approaches through a better understanding of the methodologies, analytical techniques and remedies used in the respective competition reviews of the Commission and DOT.
47. Cooperation between the Commission and DOT on competition matters has been fruitful: extending from discussions of analytical issues in specific cases, with the parties providing appropriate waivers, to cooperation on this research project. In their parallel but independent reviews of the proposed JV agreement among British Airways, American Airlines and Iberia, the Commission and DOT discussed their respective competitive assessments with a view aimed at avoiding conflicting applications of remedies.²² In parallel to cooperation with DOT, the Commission also has long-standing and productive cooperation with the U.S. Department of Justice (“DOJ”).
48. Successful as it was, the first-stage negotiations between the EU and U.S. did not result in removal of all regulatory barriers, notably those on ownership and control, prohibiting EU and U.S. carriers from merging.
49. On 24 June 2010, a protocol to amend the first-stage EU-U.S. Air Transport Agreement was signed and entered into provisional application. The protocol did not remove the foreign ownership and control restrictions. Both sides did commit to the shared goal of

²⁰ See in particular Article 18 “The Joint Committee” of the EU-U.S. Air Transport Agreement.

²¹ Source: Official Airline Guide Scheduling Data for August 2007-2010.

²² See Oneworld Case, Docket DOT-OST-2008-0252, Order 2010-2-8 at 27 (Feb. 13, 2010); Order 2010-7-8 at 16-20 (July 20, 2010).

removing market access barriers to maximize benefits, including enhancing the access of airlines to the global capital markets, and the development of a process of cooperation in this regard.²³ Since ownership and control restrictions will remain to limit the freedom of carriers to merge and given that alliances result in significant benefits for carriers, global alliances and immunised JVs seem likely to continue to play an important role in transatlantic markets.

50. It is clear that the regulatory changes engendered by the EU-U.S. Air Transport Agreement, as amended, are significant. It will therefore likely take several years for the market to adjust fully, so that significant further evolution cannot be excluded. For instance, with fewer regulatory barriers in place for transatlantic air services, more commercial opportunities are created, including those allowing airlines to restructure and adapt to dynamic industry changes. In addition, LCCs may expand their networks or adjust their business models to take advantage of new possibilities, such as the right to operate transatlantic services from any EU city to any U.S. city. Investment in a long-haul fleet may now be more financially attractive because carriers are no longer limited to non-stop operations from a single Member State. The full effects of the EU-U.S. Agreement, however, cannot yet be assessed.

U.S. antitrust regime for international airline alliances

51. The U.S. ATI requests are made by application in a public docket and decided by the Secretary of Transportation following a detailed competitive analysis in a public proceeding.²⁴ Once the Secretary's staff at DOT determines that the application is "substantially complete," the agency establishes a schedule for public comments. A written decision must then be made within a six-month period.²⁵
52. DOT's decision is based on a rigorous two-step analysis required by statute. First, DOT must determine whether to approve the alliance agreements. DOT will approve alliance agreements if it finds that they are not adverse to the public interest. DOT may also approve agreements that substantially reduce competition if 1) the agreements are necessary to meet a serious transportation need or to achieve important public benefits, and 2) if that need or those benefits cannot be met or achieved by reasonably available alternatives that are materially less anticompetitive.
53. If the alliance agreements are approved, DOT undertakes a second step, in which it decides whether to grant ATI. It is not DOT's policy to confer ATI simply on the grounds that an agreement has been approved as pro-competitive. DOT may, however, grant ATI if 1) the parties to such an agreement would not otherwise go forward without it, and 2) DOT finds that the public interest requires a grant of ATI.

²³ Article 21 of the EU-U.S. Air Transport Agreement, as amended by the protocol on 24 March 2010, reads: "The Parties commit to the shared goal of continuing to remove market access barriers in order to maximise benefits for consumers, airlines, labour, and communities on both sides of the Atlantic, including enhancing the access of their airlines to global capital markets, so as better to reflect the realities of a global aviation industry, the strengthening of the transatlantic air transportation system, and the establishment of a framework that will encourage other countries to open up their own air services markets.[...] The Joint Committee shall develop a process of cooperation in this regard including appropriate recommendations to the Parties."

²⁴ See 49 U.S.C. § 41308-41309; 14 C.F.R. Part 303.

²⁵ See 49 U.S.C. § 41710.

54. Each step of the way, DOT must consider the public interest. The U.S. Congress has set forth a wide range of factors that DOT should consider as being in the public interest, including the availability of a variety of air service, maximum reliance on market forces, the avoidance of unreasonable industry concentration, and opportunities for the expansion of international services.²⁶ These factors form the backbone of DOT's statutory mission to promote a competitive aviation system and facilitate commerce while, at the same time, ensuring that consumers benefit from enhanced service options and competition. Because each alliance case presents a unique set of circumstances, and because the industry environment changes rapidly, the public interest standard is applied on a case-by-case basis. DOT carefully considers the full public record in analyzing the issues of each case.
55. The public interest standard also guides DOT in determining how to remedy any competitive harm that might occur following the approval of an alliance. Such conditions can be vital to preserve competition and ensure that consumers realise benefits from the alliance.

EU regime for alliance review

56. While it is the Directorate General for Competition within the Commission that is directly responsible for competition matters at the EU level, the most important decisions relating to competition area are taken at the level of the College of Commissioners of the Commission. The College of Commissioners groups together the Commissioners in charge of all EU policies, including competition, transport, energy, and environment. In this way, the Commission ensures that each policy area is given due consideration and that decisions are taken consistently across all areas of its competence. In its competition assessment of airline alliances, the Commission, however, only applies EU competition rules.
57. As the enforcer of the EU competition rules, the Commission may initiate an alliance investigation on its own initiative if there are concerns that the cooperation may infringe EU competition law or as a result of a complaint. The main EU competition rules are laid out in Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU).
58. Article 101(1) TFEU prohibits all agreements between undertakings and concerted practices which may affect trade between Member States and which prevent, restrict or distort competition within the internal market. However, an agreement which restricts competition escapes the prohibition under Article 101(1) TFEU if it creates sufficient benefits meeting the criteria of Article 101(3) TFEU. These criteria, which are cumulative, are as follows: (a) the agreements must contribute to improving the production or distribution of goods or promote technical or economic progress, (b) consumers must receive a fair share of the resulting benefits, (c) the restrictions imposed by the agreements must be indispensable to the attainment of these objectives, and (d) the agreements must not afford the parties the possibility of eliminating competition in respect of a substantial part of the products or services in question.
59. Article 102 TFEU prohibits the abuse of a dominant position within the internal market or a substantial part of it. Abuses are commonly divided into exclusionary abuses, which exclude competitors from the market, and exploitative abuses, where the dominant

²⁶ See 49 U.S.C. § 40101.

company exploits its market power by, for example, charging excessive prices. Article 102 TFEU does not contain an equivalent exception for anticompetitive agreements as set out in Article 101(3) TFEU, whereby a firm's conduct may be deemed legal because of benefits for consumers. However, a dominant company may be able to show that its conduct, which may prima facie appear abusive, is - in light of the circumstances of the case - objectively justified and proportionate.

60. Prior to 1 May 2004, the Commission did not have full procedural powers in relation to agreements covering provision of air transport services to and from third countries. Thus, although in 1996 the Commission initiated proceedings into cooperation among Lufthansa, SAS and United Airlines under Article 101(1) TFEU, the Commission lacked effective enforcement powers to enable it to issue a decision relating to the international air transport. The case was closed on the basis of commitments proposed by the parties in 2002.
61. On 1 May 2004, there were two fundamental changes to the EU competition regime. The first change was specific to air transport, namely the Commission obtained jurisdiction as of that date to investigate air transport services between EU and third countries in accordance with the generally applicable procedural framework.²⁷ The second change was of broader application, as Member State courts and national competition authorities obtained the power to apply in full Article 101 TFEU. Enforcement of the EU competition rules is now the joint responsibility of the Commission and the national competition authorities of the Member States which as of 1 May 2004 together form the European Competition Network (ECN).

Comparison of approaches to aviation in the EU and U.S.

62. Notwithstanding the significant similarities in the development of the airline industry in the EU and U.S. and the trend towards more compatible regulatory results pursued by both the Commission and DOT, there are a number of fundamental differences in the regulatory approaches on each side of the Atlantic. More specifically, the differences are manifest in four areas: (a) the competition regime applicable to aviation, (b) mandates of the respective competition authorities, (c) tests for competition review and, finally, (d) procedure.

A. Competition regime applicable to aviation

63. The most striking difference between the EU and U.S. competition regimes is in the approach taken with respect to the airline industry as opposed to other sectors of the economy in competition law terms.
64. In the United States the approach remains one of "regulatory exception". While DOJ is responsible for enforcing the antitrust laws across all industries, including the airline industry, DOT has authority to make limited grants of ATI from those laws. Thus, airlines may seek ATI from DOT to coordinate their international operations. Because requests for ATI may raise important competitive issues, in practice DOT and DOJ work together to assess the competitive effects of international airline alliances.

²⁷ Council Regulation (EC) No 411/2004 of 26 February 2004 repealing Regulation (EEC) No 3975/87 and amending Regulations (EEC) No 3976/87 and (EC) No 1/2003, in connection with air transport between the Community and third countries, Official Journal L 68, 06.03.2004, p. 1-2.

65. In the EU, in the past, air transport services were also subject to exceptional treatment in terms of competition law with multiple block exemptions.²⁸ The more recent trend, however, has been alignment of the substantive and procedural rules for transport services with those generally applicable. There are presently no sector-specific competition rules in aviation and the same Commission department – the Directorate General for Competition – is charged with the application of EU antitrust and merger rules.²⁹
66. Furthermore, as mentioned above, before 1 May 2004, the Commission’s investigatory powers did not apply to air transport services between the EU and third countries. As of that date such air transport services are subject to standard scrutiny under the EU competition rules.

B. Mandates

67. The mandates of the Commission and DOT in the field of competition differ at least in two respects.
68. While DOT’s authority is limited to the transport industry, the Commission has the authority to enforce competition rules across all industries, whether mergers, cooperative agreements, unilateral conduct or State aid is involved.
69. On the other hand, DOT has both specific competition powers and the authority of a general regulator and policy maker in the U.S. transport industry. In the Commission, however, these two areas of competence are split between two Commission services. While the Directorate General for Competition is charged with enforcement of EU competition rules, the Directorate General for Transport and Mobility is responsible for general transport policy. All relevant Commission services nonetheless have a right to provide input at the time of inter-service consultations whether on decisions in the competition area, or on policy and legislative documents relating to transport policy. Furthermore, the most important Commission decisions in respect of both competition and general transport policy are taken at the level of the College, where both the Commissioner in charge of Competition and the Commissioner in charge of Transport and Mobility participate.

C. Tests

70. The legal tests applied by the two authorities to their assessment of alliances are also different. The test applied by the Commission is laid out in Articles 101 and 102 TFEU. The main task of the Commission is to apply and enforce the competition rules, thereby ensuring that alliances do not produce harm to consumers.
71. The test applied by DOT, on the other hand, is a broader test of public interest under its statutes. DOT must consider the broader implication of any grant of ATI not only on the

²⁸ A Block Exemption Regulation (“BER”) defines types of agreements which are compatible with EU competition rules provided that the agreements meet the conditions laid down in the BER. Until 29 June 2007 the IATA passenger tariff conferences concerning air routes between the EU and non-EU countries were exempted (under the BER) from the TFEU’s ban on restrictive agreements (Article 101 (1)). The existence of a BER does not, however, mean that agreements covered by it are generally treated more generously by EU competition law than agreements for which no BER exists.

²⁹ In the transport sector there is currently only one BER in maritime (Liner Shipping Consortia Block Exemption).

public but also specifically on the air transport industry. The public interest test gives DOT broader discretion in its decision making.

72. Notwithstanding these important differences, decisions by the Commission and DOT are based on generally compatible analytical frameworks and are both subject to judicial review by the respective courts in the EU and United States. In practice, judicial review of Commission decisions occurs more frequently.

D. Procedures

73. An important procedural difference between the EU and U.S. systems is that, in the United States, the process of reviewing and making a decision on ATI applications occurs *before* alliances are implemented. Carriers are however not required to apply for ATI in any instance. As is the case with many other industries, airlines have the option of proceeding with commercial cooperation at their own risk and subject to traditional antitrust enforcement by the DOJ and other agencies. Airlines can, and often do, form alliances with varying degrees of integration absent a grant of ATI.
74. In the EU, after 1 May 2004 there is no possibility for carriers to notify agreements to the Commission for approval. Carriers must instead themselves conduct an assessment of whether their cooperation is in breach of EU competition rules.³⁰ The Commission or a national competition authority may, however, in the exercise of their discretion, open an investigation (either *ex-officio* or following a complaint) both into proposed or implemented cooperation if there are sufficient indications that the cooperation may violate the EU competition rules.
75. Another difference is that the procedures followed by DOT involve a public record, by means of a “docket” system, which allows interested parties and the public to view evidence and application materials being considered by DOT. The Commission’s procedures, on the other hand, are not public. Parties that are subject to the Commission’s investigation have rights of defence and thus a right to access the Commission’s file. The Commission also provides access to certain documents contained in its file to formal complainants in antitrust proceedings, although the rights of complainants for access to documents are not as extensive as those of the parties under investigation. Other third parties, which can show a sufficient interest in the case, are also informed in writing concerning the nature and subject matter of the procedure. Finally, the Commission ensures transparency *vis-à-vis* the public by publishing non-confidential versions of its most important decisions and press-releases concerning the main steps in proceedings.

IV. Towards a compatible approach

76. The significance of the differences outlined above should not be overstated. Both competition authorities apply a generally compatible analytical framework to alliance transactions.

³⁰ In the EU, the notification system in antitrust was abolished following the entry into force of Regulation 1/2003 on 1 May 2004.

Market definition

77. Both DOT and the Commission consider supply- and demand-side substitution important to market definition. It is however demand-side substitution that usually plays a determining role.
78. The absence of widespread demand-side substitution suggests that the appropriate market definition in the passenger airline industry would usually be city-pairs. If the price of travel in City-Pair A increases, consumers would not generally consider substituting travel in City-Pair B.
79. DOT has long assessed the competitive effects of an alliance at three levels: network-level, country-pair level, and city-pair level. It is important to note that, even analysing a transaction at the city-pair level allows the competition authorities to take account of the fact that the airline industry is a network enterprise. That is, carriers make decisions relating to an individual city-pair by assessing not only the O&D market but also implications for their overall networks. For example, a carrier may choose to enter an unprofitable route if that route would provide important feeder traffic to other routes within its network.
80. There is thus a common understanding between the Commission and DOT that it is imperative to take into account in any competition assessment the network characteristic of the airline sector.
81. Furthermore, both the Commission and DOT understand that, depending on the specific facts of each case, it may be necessary to narrow down the city-pair market across the following dimensions:
 - specific airports;
 - customer segments, or/and
 - types of services.
82. Airports substitution may need to be assessed when there is more than one airport at either end of a city-pair. The assessment should determine the extent of a competitive constraint provided by air transport services at one airport on the air transport services at another airport.
83. In case of different customer segments, it is important to analyse the existence of the chain of substitution between services provided to these segments. In some past cases both the Commission and DOT defined separate markets for premium (mostly time-sensitive) and non-premium (mostly non-time-sensitive) passengers. These groups of consumers often have distinct consumer preferences, and carriers can often effectively price discriminate between them.
84. Finally, it may need to be determined whether non-stop and one-stop services are in the same market – that is, whether connecting services offer competitive discipline on non-stop carriers in city-pair markets, notably in relation to some passengers. For example, depending on a city-pair, one-stop service may be a suitable alternative for non-premium passengers in long-haul markets where the passengers may be willing to accept a longer

time in transit to obtain a lower fare. However, the precise extent of the competitive constraint exerted by one-stop services should be defined on a route-by-route basis, taking into account factors such as the length of the route, the traffic mix, number of non-stop services offered, and geography (circuitry of available one-stop services).

Barriers to entry

85. The Commission and DOT have a largely consistent approach to the analysis of barriers to entry. To be able to assess whether the parties' post-cooperation behaviour will be constrained by a real threat of entry from potential competitors, it is necessary to assess the barriers to entry (and expansion) in all city-pair markets of concern. The main potential barriers to entry typically considered by the competition authorities are:

- limited availability of airport slots at either or both ends of a city-pair;
- frequency advantage of the parties;
- strength of the parties' position at their hub (loyalty effects because of strong FFPs and corporate contracts, extensive network).

86. All of these barriers to entry are particularly important on hub-to-hub routes, where new entry is difficult given the substantial presence of the incumbent carriers.

Competitive assessment

87. Given the competitive dynamics of the airline industry, the competitive assessment is likely to differ by route. The competition authorities understand that they should also consider network effects such as the relationship between particular routes and the overall viability of the network.

88. The crucial element of the assessment is the competitive effect of reducing the number of competitors offering non-stop service in a given city-pair. These so-called "non-stop overlaps" occur frequently in the airline industry when two carriers with hubs in large cities at either end of a city-pair combine their networks. It needs to be assessed whether cooperation on a given route gives the parties market power that they can exercise sustainably by raising prices, lowering capacity³¹ and/or degrading quality of service. The effect of the loss of non-stop competition must further be assessed in light of the market position of the parties, the market position of competitors, the market position of buyers, the existence of potential competitors and the level of entry barriers.

89. In this regard, it is important to assess the extent of residual competition, whether it would be sufficient to constrain the post-cooperation behaviour of the parties, and whether any potential exit from the routes by existing competitors would cause competitive concerns. Cooperation which reduces the number of independent competitors on a route from two to one is more likely to raise concerns than cooperation where significant residual non-stop competition remains.

90. It also is relevant to assess the likelihood, sufficiency and timeliness of any new entry or expansion of existing competitors to evaluate the likely constraints on the behaviour of the

³¹ Given airlines' revenue management practices, this means not only total capacity offered but also specifically the capacity that is effectively offered to customers flying on the overlap route.

cooperating parties. The latter can only be assessed by taking a broad network perspective: would it make commercial sense from the network point of view for any carriers to consider entry? This also implies an assessment of the extent to which planned entry may be less likely to occur on the routes of concern as a result of cooperation between alliance partners.

91. While these “horizontal” effects (between firms that are direct competitors in a given market) are a primary concern, there is also a possibility of “vertical” effects. For example, if as a result of cooperation on a transatlantic route alliance partners restrict the ability of competitors to gain access to feeder traffic at their hubs, the viability of the competitors’ operations on transatlantic routes could be substantially reduced. In this case, it is necessary to assess the incentive and ability of alliance partners to foreclose competitors’ access to feeder traffic and to determine any resulting likely negative effect on competitors’ operations on a route of concern.

Efficiencies and consumer benefits

92. The competitive assessments of both the Commission and DOT provide for the weighing of efficiencies and consumer benefits. However, the two authorities follow conceptually different approaches.
93. The authorities weigh efficiencies and consumer benefits in different ways and at different stages during the review of a transaction. Under EU competition rules, the Commission conducts an analysis of possible negative competitive effects of a transaction, whereas the burden to demonstrate efficiencies to the requisite legal standard lies entirely on the parties. Thus, the Commission may not take efficiencies into account in its competitive assessment if, for example, the parties do not submit any evidence which would demonstrate, to the requisite legal standard, that the cumulative criteria set out in Article 101(3) TFEU are met.
94. DOT, on the other hand, must weigh the potential efficiencies or benefits before it can make a grant of ATI.³² Thus, if DOT approves an alliance and makes a grant of ATI, the agency makes detailed findings on the record about potential public benefits and/or efficiencies. The magnitude of these benefits and efficiencies, as well as the likelihood that they will be achieved, is important to assess in order to justify an exemption from the antitrust laws. Consistent with its case precedent, DOT requires applicants to make a strong showing that the alliance will produce substantial public benefits that are attributable to the grant of ATI and also likely to be realised proximate to a grant of ATI.³³
95. The authorities also treat out-of-market efficiencies differently. The Commission considers, as a general rule, that negative effects and efficiencies should be weighed within one and the same relevant market.³⁴ Still, the Commission can, in principle, also consider, for the purpose of balancing of negative effects on the routes of concern, the efficiencies generated on other routes, provided certain conditions are satisfied: (i) the routes on which these “out-of-market” efficiencies are produced should be related to the routes of concern, and (ii) the customers affected by the cooperation on the routes of

³² See 49 U.S.C. §§ 41308-41309.

³³ See, e.g. SkyTeam I Case, Docket DOT-OST-2004-19214, Show Cause Order 2005-12-12 at 2 (Dec. 2, 2005).

³⁴ See paragraph 43 of the Guidelines on the application of Article 101(3) of the Treaty.

concern should be “substantially the same” as the customers reaping benefits on other routes.³⁵

96. DOT, on the other hand, views efficiencies in a broader context. DOT may consider efficiencies that are possible not just in the relevant market, but also in other markets subject to the parties’ cooperation across the network.
97. Despite differing approaches, the authorities generally agree on the types of potential economic benefits that alliances can generate. The magnitude of the benefits, the likelihood that they will be realised, and the extent to which they are passed on to consumers – the latter being a particular focus of the authorities in their reviews – depend upon the type of the cooperation and the particular facts of the case.
98. The primary potential benefits of integrated alliances are identified below. It should be stressed that a case-specific investigation is required to determine whether, or the extent to which, benefits are likely to arise in a given factual situation, whether benefits will be passed on to consumers, whether a given restriction of competition is indispensable to achieving benefits, and whether benefits are sufficient to offset any competitive harm caused by such alliances.

Supply side

- Lower costs and increased capacity through increased density
99. Perhaps one of the most fundamental potential benefits from consolidation or cooperation arises from economies of scale, or lower per-unit costs from an increased level of output. By participating in an alliance, airlines can enjoy lower per-passenger costs when they increase the number of passengers carried on their existing network, a phenomenon known as economies of density. When two airlines cooperate, by joining their respective feeder flows, the alliance may serve a larger pool of customers and can realise cost savings by carrying additional passengers over trunk routes.
100. While economies of density provide advantages to airlines, consumers may realise some of the benefits as well. If markets are competitive and consumers are price-sensitive, firms may face an incentive to pass cost reductions along in an attempt to undercut their rivals’ fares. Furthermore, economies of density may incentivise carriers to increase capacity to meet demand, giving travellers more flight options and better timing of itineraries.
- Reduction of double marginalisation
101. Reduction in double marginalization has long been identified in the literature as a source of potential benefit resulting from cooperative alliances.³⁶ Under a traditional interline arrangement, two cooperating carriers individually set prices on the portion of the

³⁵ *Idem.*

³⁶ See Brueckner, Jan K. & Whalen, W. Tom. “The Price Effects of International Airline Alliances.” *The Journal of Law and Economics*. Vol. 43, No. 2 (2000), pp. 503-545; Brueckner, Jan K. “A Panel Data Analysis of Code-Sharing, Antitrust Immunity, and Open Skies Treaties in International Aviation Markets.” *The Review of Industrial Organization*. Vol. 30 (2007) pp. 39-61; Ito, Harumi & Lee, Darin. “Domestic Code Sharing, Alliances, and Airfares in the U.S. Airline Industry.” *Journal of Law and Economics*. Vol. 50, No. 2 (2007), pp. 355-380.

itinerary that they operate with their own aircraft, maximising their own “mark-up” based on demand on that segment. Doing so, however, does not account for demand on the overall interline itinerary and thus results in a loss in profit for both carriers and sub-optimal capacity utilisation. Economic theory suggests that both consumers and producers are worse off under this arrangement.

102. When two firms engage in cooperative pricing of a complementary product each carrier can account for the effect of its pricing, and will price to satisfy demand for the entire itinerary. By doing so, fares are reduced and more interline passengers can be accommodated. The result is that both airlines and consumers are likely to be better off.
103. A number of studies have attributed lower immunised alliance fares to the elimination of double marginalisation.³⁷ Those studies suggest that code-share agreements provide some fare benefits as airline partners take basic steps to facilitate traffic flows over each other’s networks. The same studies also suggest that an integrated alliance operating with ATI may lead to a more significant reduction in double marginalisation and ultimately to even lower fares than would normally be offered in a standard code-share.³⁸ This conclusion is not unanimous, however.³⁹ Moreover, it should be noted that the level of mark-up (and thus the potential for reduction in double marginalisation) is generally determined by market factors such as the number of competitors in a market and customers’ price sensitivity.

Demand side / consumer convenience

- Fare combinability

104. Integrated JVs give members of alliances the strongest incentives to cooperate on sales and pricing, because the individual carriers no longer seek to maximise their own revenue, but rather the revenue of the network. A key component of an agreement designed to achieve “metal-neutrality” is fare combinability, in which the customers are able to view fares for different segments and combine them easily into a single itinerary. Achieving fare combinability requires airlines to harmonise their fare class maps and rules. Absent an integrated alliance, airlines may not necessarily have the incentive to make these detailed changes to their pricing and selling processes because they remain focused on pricing and selling their own flights.
105. Without fare combinability, alliances may only have a limited number of combined fares or passengers may pay a premium to book two separate itineraries on different carriers, potentially eliminating any savings. As the level of cooperation increases, the alliance becomes indifferent as to which flights the customer chooses. This allows a passenger who values low prices to select the least expensive fares for each leg of a trip even if those fares are offered by different airlines. More broadly, consumers have access to a

³⁷ See Brueckner & Whalen (2000); Brueckner (2007); Park, Jong-Hun & Zhang, Anming. “An Empirical Analysis of Global Airline Alliances: Cases in North Atlantic Markets.” *Review of Industrial Organization*, Vol. 16 (2000), pp. 367-383.

³⁸ Brueckner (2007) at 52.

³⁹ It should, however, be noted that there are also studies which suggest that code-sharing may, on the contrary, lead to price increases. See, for example, Armantier O. and O. Richard, 2006, “Evidence on Pricing from the Continental Airlines and Northwest Airlines Code-Share Agreement”, *Advances in Airline Economics 1*, Elsevier Publisher, 91-109. See also Gayle P., 2008, “An Empirical Analysis of the Competitive Effects of the Delta/Continental/Northwest Codeshare Alliance,” *Journal of Law and Economics*, Vol. 51, pp. 743-766.

larger number of itineraries at a lower fare level and have additional opportunities to realise discounts.

- Better schedules

106. When linking multiple networks, immunised alliances may wish to coordinate schedules and flight timing to optimise traffic flows and create more options for the consumer. While arms-length coordination permits certain basic accommodations, such as minor adjustments in schedules to provide for better connections, airlines operating without an integrated alliance agreement still face an economic incentive to independently decide flight timing to maximise individual carrier revenue. If, however, the airline partners can deepen their cooperation through revenue sharing and other forms of integration, they may develop the incentive to schedule flights based on optimal traffic flows across the entire network. This can greatly increase the options available to the consumer, avoiding “wingtip-to-wingtip” operations and spreading flights throughout the day rather than only during periods of peak demand.⁴⁰

- More seamless customer experience

107. By having a joint stake in network cooperation, an integrated alliance has an incentive to develop common marketing, procedures, and product attributes for customers. Doing so increases an alliance’s competitive position and helps to foster repeat business. Additionally, alliances may be more inclined to co-locate facilities at key airports and allow for reciprocal usage of lounge facilities. These benefits are often sought by customers and have the potential to reduce information and physical infrastructure costs, which can, in turn, be passed on to the consumer.

- Frequent flyer program integration

108. While carriers often link frequent flyer and loyalty programs with those of other carriers, deeper cooperation creates stronger incentives to harmonise the programs and allow for fully reciprocal treatment. In highly integrated arrangements, carriers become indifferent as to where miles are earned or burned. Consumers gain access to additional mileage redemption and earning opportunities.

Challenges in developing remedies

109. In markets where there is potential competitive harm, the authorities have generally tried to alleviate it with tailor-made remedies. The authorities agree to give consideration to adopting remedies that are proportional to the competitive harm that has been identified as resulting from the proposed transaction.

⁴⁰ The “wingtip-to-wingtip” phenomenon is explained by Hotelling’s law in economic literature. Hotelling observed that businesses will make their products as similar as possible to maximise market share. See Hotelling, Harry. “Stability in Competition.” *The Economic Journal*. Vol. 39, No. 153 (1929), pp. 41-57.

In the airline industry, competing airlines often cluster their flights at peak travel times to capture the highest amount of revenue traffic, even though it is not allocatively efficient. With an integrated arrangement, airline partners share in the overall revenues so they can make more efficient, welfare-enhancing choices that provide full time-of-day coverage and thus better schedules for consumers.

110. The Commission and DOT agree that one of the main challenges in the airline industry is to design a remedy that can effectively address the identified negative effects of the parties' cooperation while giving consideration to the principle of proportionality. Given the specificities of the airline industry, it is, however, difficult to apply the traditional forms of divestiture remedy, commonly used in other sectors. A key issue is the assessment of the barriers to entry on the route(s) of concern: is it possible to design remedies which would lower these barriers such that entry on the route would become likely? Are there carriers whose existing networks would be compatible with potential entry on a city-pair of concern, with appropriate remedies?
111. The Commission and DOT must be cognisant of infrastructure constraints at some of the largest gateways between the United States and Europe. Where, as in some cases, cooperation among carriers potentially leads to competitive harm including as a result of barriers to entry due to the lack of available slots, the authorities may consider the transfer of slots, including access to necessary airport infrastructure. Such quasi-structural remedies provide an opportunity for competitors to launch new flights and for competition to likely be restored.
112. The Commission also addresses other barriers to entry by accompanying the core slot remedies with additional remedies, such as access to the parties' FFP, their feeder traffic, or assuring combinability between fares of the parties and a new entrant.
113. Another potential remedy is a prohibition against cooperation on a particular route (a "carve-out"). Carve-outs prohibit carriers from commonly pricing their products and services for a defined group of passengers in a city-pair market, which is intended to preserve competition on routes in which the alliance members both offer non-stop services. DOT has imposed carve-outs in selected cases; however, in some recent cases involving integrated JVs, DOT has determined that carve-outs would inhibit the realisation of efficiencies and thereby the consumer benefits resulting from those efficiencies.⁴¹ The Commission has no experience, to date, with carve-out remedies.
114. Hence, given the network nature and other characteristics of the airline industry, designing a remedy which, on the one hand, would be effective in addressing the competition concern on a given route and, on the other hand, would be practicable and proportionate to the harm, is challenging.

Conclusion and next steps

115. The respective analytical approaches to airline competition matters employed by the Commission and DOT are already largely compatible. Both authorities recognise the importance of continued discussions to deepen their mutual understanding of the competitive structure of the industry. Further, the authorities recognise the importance of continuous cooperation on remedies with the view to avoiding, where possible, conflicting or unnecessarily duplicative remedies in the case of parallel reviews of the same transaction.

⁴¹ See, e.g., Star Alliance Case, Docket DOT-OST-2008-0234, Order 2009-7-10 at 20 (July 10, 2009).

116. In order to seek even better compatibility, at times it may be appropriate for the authorities to exchange confidential information or documents. Although Annex II of the EU-U.S. Air Transport Agreement allows the authorities to discuss competitive issues that have arisen in common matters, it does not provide for exchange of confidential information and documents. Thus, to the extent necessary, the authorities will continue to employ the use of waivers by interested parties to investigations or matters.
117. The authorities intend to report on their cooperation in a transparent manner. As required by the EU-U.S. Air Transport Agreement, the authorities will brief stakeholders on cooperative activities through the Joint Committee. However, it is important to note that the discussions in the Joint Committee are for informational purposes, and do not allow for the exchange of confidential information or substantive remarks about pending cases.
118. Given the dynamic nature of the industry, cooperation between the authorities has to be a continuous process. It is essential for both authorities to understand exactly how the industry evolves and how its regulators should respond. This necessitates further cooperation and joint work. This research project demonstrates the tremendous value and ongoing need for non-case specific cooperation, which both enhances understanding of alliances and informs the assessment of specific cases, facilitating a more compatible approach to antitrust regulation and enforcement.
119. The authorities will, therefore, continue their efforts to foster a common understanding of the competitive dynamics of the airline industry. The authorities will seek to refine and build upon the existing quantitative work initiated by this project. Additionally, the authorities will share further knowledge and expertise concerning how each goes about assessing and verifying efficiencies and benefits in the airline industry.