

## Chapter 9

### AIR TRANSPORT IN KOREA AND NORTHEAST ASIA

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- Competition on domestic routes in Korea by low cost carriers has led to much lower fares.
- The negotiation of an Open Skies agreement led to lower fares and more flights and, therefore, greater convenience and higher traffic levels on routes to Shandong province in China: this experience could be extended to other international routes.
- There are some lessons in the experiences of the European Union and the USA on how this might be done; and the expected competitive pressure that spills over from the agreement between the EU and the USA is another driver for change in North-East Asia.

#### 9.1 INTRODUCTION

Korean civil aviation has shown remarkable development in recent years. Korea has recorded one of the highest air traffic growth rates in Asia, averaging over 10% annual growth for international passengers and 7% for cargo from 2005 to 2007. Incheon International Airport has grown into one of Northeast Asia's largest hub airports since its inauguration in March 2001. It now ranks as the world's second airport in international cargo transported and the tenth airport in passenger volume in 2009. Meanwhile, domestic traffic has slumped from a peak of 23.5 million trips in 1996 to less than 17 million in 2007. There was a large drop in 2004 which coincided with the opening of Korea's Bullet Train. This led to a response in airline strategy, which is discussed in this case study.

In international markets, a new program of 'Open Skies' negotiations has begun. These developments and their consequences are reviewed in this case study. The main interest is developments on international routes but also included is a brief review of the experience of the entry of low cost carriers (LCCs) to the domestic market in Korea.

#### 9.2 DOMESTIC MARKETS

A series of regulatory reforms in 2009 changed the entry conditions into the Korean air transport market, including reductions in the value of the capital required for new entrants and in the number of aircraft in the fleet. However, even prior to the regulatory and policy reform, private entities had already been operating airline services as new start-up carriers. The LCCs began to enter domestic routes in 2006. Kim and Lee (2010) review the LCC sector in Korea and Zhang et al. (2008) review the experience in Thailand and China. They link the growth of the sector to the growth of domestic tourism in 2005. Another pressure on the full service carriers (FSCs) that previously dominated the market was the competition

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from high-speed trains which began in 2004. The use of the LCC model was a competitive response. Another driver was the interest of regional governments willing to invest and to develop their local airports.

Table 9.1 shows the status of Korea's start-up operations. Six have set up and four remain in operation. There are reports that Hansung Airlines may resume this year (*Korea Herald* 2010). Most charge fares of about 70% (one charges 80%) of the fares of the FSCs or the fare prior to their entry. Two of the airlines are not subsidiaries of the established carriers. The LCC share is now 25% (Jin Air 8% Jeju Air 7%, Air Busan 7%, Eastar Jet 3%) of the domestic market, with Korean Air having 48% and Asiana Airlines 27%. The LCC share is close to 30% on some routes (e.g., Gimpo-Jeju).

Clearly, the established FSCs see the LCCs as a threat. Recently, the Korean competition authority, the Korea Fair Trade Commission (KFTC), ruled as anti-competitive some practices of the FSCs, including offering loyalty rebates to travel agents. The KFTC also warned against FSCs asking agents to restrain sales of tickets on LCCs by threatening access to fewer seats on FSCs at peak times or on certain routes.

**Table 9.1: Status of Korean low cost carriers.**

<b>Carrier/ Operations</b>	<b>Seju Air</b>	<b>Hansung Airlines</b>	<b>Yeongnam Air</b>	<b>Jinair</b>	<b>Air Busan</b>	<b>Eastar Jet</b>
<b>Licence issued</b>	August 2005	March 2005	July 2008	April 2008	June 2008	August 2008
<b>Inauguration</b>	June 2006	August 2005– April 2009	July 2008– December 2008	July 2008	October 2008	June 2009
<b>Airport base</b>	Jeju International Airport	Cheongju International Airport	Kimhae International Airport	Gimpo International Airport	Kimhae International Airport	Gimpo International Airport
<b>Licence type</b>	Scheduled	Non- scheduled	Non-scheduled	Scheduled	Scheduled	Non-scheduled
<b>Route</b>	Jeju–Gimpo Jeju–Kimhae Gimpo–Kimhae	Cheongju– Jeju Gimpo–Jeju	Kimhae–Jeju, Gimpo, Daegu	Gimpo–Jeju	Kimhae–Gimpo Kimhae–Jeju Kimhae– Gunsan	Gimpo–Jeju Gunsan–Jeju Cheongju–Jeju
<b>Air fare</b>	70% of current fare	70% of current fare	70% of current fare	80% of current fare	70% of current fare	70% of current fare
<b>Capital investment</b>	Aekyung Group KRW15 billion; Jeju Province KRW5 billion	Private fund KRW5 billion	na	Korean Air subsidiary	Asiana Airlines subsidiary	na
<b>Operational</b>	Yes	Ceased	Ceased	Yes	Yes	Yes

Note: na = not applicable

### 9.3 INTEGRATED INTERNATIONAL AIR TRANSPORT MARKETS

The international policy of the three Northeast Asian (NEA) economies is reviewed in this section. All are working towards more liberal arrangements. Before turning to the detail it is important to note that events in transport across the North Atlantic Ocean are a driver of this change. In May 2008 routes to any destination within the European Union (EU) and the United States of America (USA) were opened to carriers of either continent. Two giant markets have been consolidated with the aim of expanding market share in the global air transport industry, and the increased competitiveness of these carriers may be expected to spill over to other markets. The North Atlantic market is well known for its profitability and the EU–Far East market remains one of the biggest premium travel markets (accounting for 15.2% of total premium revenues worldwide; Centre for Asia Pacific Aviation 2008). The EU

and USA carriers may target other routes in NEA and carriers in that region now also seek to remove the impediments to their own international competitiveness.

### 9.3.1 Policy in Korea

The Korean government's aim is to have Korean airlines operating in a hub and spoke structure in the international market, thereby adding to traffic growth to and within Korea. With more open agreements, air carriers will operate more effectively and efficiently and passengers will benefit as a result. To establish a more liberal hub and spoke air transport market, the Korean government has negotiated bilateral and multilateral agreements according to the principles of Open Skies. Table 9.2 summarises the state of these negotiations and Table 9.3 refers to features of all Korea's air services agreements (ASAs).

**Table 9.2: Status of Open Skies in Korea, January 2010.**

Deregulation of passenger and cargo traffic rights	Deregulation of cargo traffic rights	Open Skies
Maldives; China; Thailand; Chile; Myanmar; Peru; Cambodia; Japan; Viet Nam; Ukraine; Sri Lanka; Kenya; Azerbaijan; Mexico; Malaysia; Tunisia; Belarus	Australia; India; Austria; Sweden; Norway; Denmark; Macau; Germany; South Africa; Finland; Greece; Uzbekistan	USA; Canada

Source: KOTI.

**Table 9.3: Status of Korean Air Services Agreements (ASAs).**

Type of bilateral ASAs	Non-operational bilateral ASAs	Operational bilateral ASAs
Predetermined (TP) <sup>1</sup>		
Bermuda (B) <sup>2</sup>	Macau (pax); Brunei; Khuzestan; Gabon; Nigeria; Libya; Morocco; Algeria; Djibouti; Columbia; Rumania; Malta; Bulgaria; Iceland; Palau; Yugoslavia; Portugal; Bahrain; Saudi Arabia; Oman; Jordan; Iraq; Kuwait	France; Hong Kong, China; Chinese Taipei; Singapore; Indonesia; Netherlands; Belgium; Switzerland; Spain; Italy; Czechoslovakia; Poland; Finland; Hungary; UAE; Iran; Turkey; Egypt; Qatar; Israel; Fiji; Australia (pax); New Zealand
'Point to Point' Open Skies (POS) <sup>3</sup>	Maldives; Peru; Norway; Denmark; Sweden; Portugal; Qatar; Palau; Nigeria; Kenya; Mexico; Chile	Viet Nam; China; Japan; Malaysia; Myanmar; Cambodia; Thailand; Sri Lanka; Azerbaijan; Ukraine; UK (cargo); Australia (cargo); Germany; Austria
'Multiple Point' Open Skies (MOS) <sup>4</sup>	Canada	USA

<sup>1</sup> TP – Each economy designates a single company to operate on the route; limited number of points/routes operated by designated airlines; capacity and frequency to be agreed *ex ante*; few 5th freedoms are granted.

<sup>2</sup> B – Each economy designates one or several airlines on each route; limited number of points/routes operated by designated airlines; there is no *ex ante* capacity control on each route, capacity offered is often negotiated via commercial agreements between airlines; several 5th freedoms may be granted; total capacity must be proportional to the needs of the main bilateral route.

<sup>3</sup> POS – Multiple designation of airlines; free access to designated routes, between specific points, either departure or arrival points may be left open and unrestricted; no frequency or capacity control; extensive 5th freedom rights are granted.

<sup>4</sup> MOS – Multiple designation of airlines; airlines can fly on any route between two states; no frequency or capacity control; unrestricted 5th freedom rights.

This more open approach was reinforced in March 2008 when a new government sought to open the international air transport markets to and from Korea. The administration's intention was to promote and deregulate Korea's air transport industry, and to offer a broader range of

choices to the air passengers by allowing open market competition to air transport operators. However, the procedure was that airlines had to ‘provide the basic requirements for domestic air transport operation before entering the international air transport market’. All ‘start-up’ carriers in Korea were required to serve 2 years of probation in order to stabilise their safety management systems, and also to complete 20 000 Aircraft Transport Movements (ATMs) in the domestic sector before they could launch their international operations. This meant, for example, that LCCs had to become established on domestic routes before being able to fly internationally, whereas some may have preferred otherwise.

In one case, an international LCC, Tiger Airways, attempted to enter the Korean market. The majority owner of Incheon Tiger was the Incheon municipal government (51%) and the balance was owned by Tiger. However, it was argued to the Ministry of Transport that the new airline was effectively controlled by Singapore Airlines, which has an ownership share in Tiger. This would have contradicted Korea’s policy on the entry of foreign controlled carriers, and the application for a licence was withdrawn.

### **9.3.2 Policies in China and Japan**

Instead of an immediate move to Open Skies, China has preferred a process of ‘stepwise’ market integration, with a focus on NEA. China’s preference is to follow the example of the EU’s ‘Open Aviation Area’ (OAA), which was set up in three packages from 1988 to 1997. Chinese researchers have proposed four stages of reform. As the first step, the target is to turn the separate ASAs of China; Korea; and Japan into a plurilateral ASA. At this stage, the difficulty is how to coordinate the differences among the ASAs. The other three steps would be followed in a package program similar to the OAA (Table 9.4). However, change of this sort would be significant. The partial open sky policy between Korea and China established in 2006 is discussed in detail below. In May 2007 they also initiated the Seoul Gimpo–Shanghai Hongqiao shuttle service.

In 2006, under the former Abe Administration, Japan began a reform called the Asian Gateway Initiative (AGI) that was to revitalise the Japanese economy and share prosperity with its neighbouring economies, China and Korea. In May 2007 the government of Japan proposed a comprehensive policy package for air transport which accelerated the promotion of an Open Skies policy in Japan. This brought about drastic changes in the Japanese air transport industry. In July 2007 Korea became the first partner of Japan to abolish the restrictions on entry points into both economies and, with the exception of flights to and from airports in metropolitan areas of Japan that have capacity constraints, to abolish limits on frequencies. The Japan Civil Aviation Bureau (JCAB) has now reached agreement with Thailand; Macau; Hong Kong, China; Viet Nam; Malaysia; and Singapore, with negotiations in progress with China and India.

A Japanese air transport specialist has suggested that Japan; China; and Korea should cooperate to approach an integrated air transport market. In the first stage of bilateral liberalisation, two economies could, as much as possible, reciprocally seek to liberalise both the routes and frequencies between any points within them and direct flights between them. The two economies may also reciprocally expand up to the rights of airlines to pick up traffic bound for destinations other than the airline’s home base. In the second stage the expansion of traffic rights up to the full Open Skies could be initiated on a reciprocal basis. However, according to this analyst, prior to the formation of the integrated air transport market in NEA, the following issues would have to be resolved:

- proper capacity of infrastructure for the air transport industry;
- development of common safety, security and social rules and regulations;
- geographical scope of liberalisation; and
- security policy.

**Table 9.4: The EU action package for the integration of the air transport market.**

	1st (January 1988–)			2nd (November 1990–)			3rd (January 1993–)
	Percentage of full fare			Percentage of full fare			
	Fare type	Ref. fare	Approval	Fare type	Ref. fare	Approval	
<b>Fare*</b>	Discount or radically low fare	45–90	Permitted	Fully flexible	106	Not to be denied by either government	Establish regulations for committee or government to implement Inordinate discount fare Continuous lowering of the fare
				Economy	95–105	Permitted	
				Discount or radically low fare	30–94	Permitted	
<b>Approval of dual service</b>	Annually, > 250 000 passengers at each departure point (1988) Annually, >200 000 passengers or >1200 aircraft frequencies at each departure point (1989) Annually, >180 000 passengers or 1000 aircraft frequencies at each departure point (1990)			Annually, >140 000 passengers or >800 aircraft frequencies at each departure point (1991) Annually, >100 000 passengers or >600 aircraft frequencies at each departure point (1992)			Not applicable
<b>Seat distribution per economy</b>	45/55% (Jan. 1988–) 40/60% (Oct. 1989–)			Up to 60% capacity to be distribution Up to 75% of yearly expansion			Unlimited
<b>Route entrance</b>	3 <sup>rd</sup> , 4 <sup>th</sup> freedom for permitted hub routes 5 <sup>th</sup> freedom up to 30% of capacity 5 <sup>th</sup> freedom to Ireland and Portugal			3 <sup>rd</sup> , 4 <sup>th</sup> freedom in all airports 5 <sup>th</sup> freedom up to 50% of the capacity			All entrants on international and domestic routes Cabotage since April 1997 Permitted cabotage in >50% of capacity <sup>†</sup> prior to April 1997
<b>Exempt from fair competition</b>	Fare discussion Slot allocation CRS Ground service for aircraft, freight, passenger and in-flight meals etc.			Fare discussion Slot allocation CRS Ground service for passenger, freight and in-flight meals etc.			Fare discussion Slot allocation CRS Cooperate in low demand routes
<b>Operator licence</b>	Not applicable in 1 <sup>st</sup> and 2 <sup>nd</sup> package.						

Source: Kim 2004.

Note: \*To the above exception, the bilateral agreement can be applied (up to 2nd package)

†Domestic flight operation by third economy flag carrier

## 9.4 IMPACT OF OPEN SKIES

A regional version of Open Skies was established between Korea and Shandong Province in China in 2006. The result was rapid growth in passenger numbers and aircraft movements (much faster than other routes to China), higher frequencies (and therefore greater convenience), a new network structure and lower fares by more than 8% on average. Tables 9.5 and 9.6 report the data for routes between Korea (ICN) and Shandong Province compared with other Chinese destinations. Both series show growth to record heights but with much higher growth on routes to Shandong.

Another way to assess the impact of Open Skies is to review the experience of the following destinations in Shandong from 2005 to 2007 and their links to Korea:

- Incheon–Weihai, Yantai, Qingdao, Jinan routes
- Busan–Weihai, Qingdao routes
- Daegu–Qingdao routes

**Table 9.5: Aircraft movement after the Open Skies policy between Korea and China.**

Classification		Aircraft movement		
		A	B	C
ICN–Shandong	Korean Carriers	3,756	5,330 (+41.9%)	5,645 (+50.3%)
	Chinese Carriers	4,208	8,361 (+98.7%)	8,732 (+107.5%)
ICN–Other Cities	Korean Carriers	19,897	26,667 (+34.0%)	25,361 (+27.5%)
	Chinese Carriers	18,229	27,976 (+53.5%)	24,493 (+34.4%)

Note: A = 12 months to 16 June 2006; B = 12 months from 16 June 2006; C = 12 months to June 2008.

**Table 9.6: Passenger performance after the Open Skies policy between Korea and China.**

Classification		Passengers			L/F		
		A	B	C	A	B	C
ICN–Shandong	Korean Carriers	495,259	549,836 (+11.0%)	563,109 (+13.7%)	62.3%	56.6%	57.9 %
	Chinese Carriers	376,234	653,388 (+73.7%)	774,869 (+106.0%)	60.1%	52.4%	59.6 %
ICN–Other Cities	Korean Carriers	3,303,690	3,893,738 (+17.9%)	3,236,856 (-2.0%)	71.0%	65.5%	61.2 %
	Chinese Carriers	2,671,634	3,473,055 (+30.0%)	2,876,549 (+7.7%)	66.5%	62.2%	65.4 %

Note: A = 12 months to 16 June 2006; B = 12 months from 16 June 2006; C = 12 months to June 2008.

The number of passengers using the Korea–Shandong route in 2006 was 1.02 million, showing an increase of 16.1% compared to the previous year (Table 9.7). In 2007 the number of passengers was 1.4 million, a much higher growth rate of 37.2%.

The number of passengers carried on all Korea–China routes in 2006 and 2007 were 6.57 million and 7.32 million respectively, each showing growth of 24.3% and 11.4% compared to the previous years (Table 9.8). In 2006 the increase on the Korea–Shandong route was 8.2%, which was lower than that on all routes, whereas it was higher by 25.8% after the initiation of Open Skies. The performance of Korea–Shandong Province passenger traffic has surpassed the rate of growth in the overall Korea–China market.

The aircraft movements on the Korea–Shandong route also grew rapidly (Table 9.9). This was the case even before the agreement but after 2006 the growth rate was even higher. More aircraft movements also meant higher frequencies and therefore a higher quality of service.

Airfares on the Korea–Shandong routes decreased by 8.4% on average.

The response to Open Skies differed among the airlines (Table 9.10). New airlines entered the Incheon–Weihai and Yantai, Busan–Weihai and Qingdao routes with Open Skies and they offered lower fares.

**Table 9.7: Number of passengers on the Korea–Shandong route, 2005–07.**

2005	2006	2007
880,390	1,021,806 (16.1%)	1,401,523 (37.2%)

Note: Unit = persons; (%) = growth rate compared to the previous year.

**Table 9.8: Number of passengers on the Korea–China route, 2005–07.**

2005	2006	2007
5,288,252	6,573,175 (24.3%)	7,321,391 (11.4%)

Note: Unit = persons; (%) = growth rate compared to the previous year.

**Table 9.9: Aircraft movements on the Korea–Shandong route, 2005–07.**

2005	2006	2007
9,907	13,954 (40.8%)	23,256 (66.7%)

Note: Unit = times; (%) = growth rate compared to the previous year.

**Table 9.10: Airfare changes on the Korea–Shandong route.**

Routes		Carriers	Airfare (June 2006)	Airfare (July 2007)	YoY (%)
Incheon	Jinan	KE	450	460	2.2
		SC	360	300	-16.7
		Average	405	380	-6.2
	Qingdao	KE	400	400	0.0
		OZ	370	400	8.1
		CA	450	300	-33.3
		MU	280	200	-28.6
		Average	375	325	-13.3
	Weihai	KE	350	390	11.4
		OZ	340	390	14.7
		CA	400	300	-25.0
		MU	–	150	–
		Average	363	308	-15.4
	Yantai	KE	–	390	–
		OZ	370	390	5.4
		MU	340	180	-47.1
		CA	–	300	–
Average		355	315	-11.3	
Busan	Weihai	OZ	–	390	–
		Average	–	390	–
	Qingdao	KE	410	410	0.0
		SC	340	–	–
		CA	–	340	–
Average	375	375	0.0		
Daegu	Qingdao	KE	370	–	–
		SC	340	–	–
		CA	–	340	–
		Average	355	340	-4.2
Overall					-8.4

Source: AirTimes, Economy Class

Note: Regular airfare, excludes fuel and airport taxes. Currency exchange hypothesised as USD1 = KRW1000.

KE = Korean Air; OZ = Asiana Airlines; SC = Shandong Airlines; CA = Air China; MU = China Eastern Airlines

Korean Air and Asiana Airlines, Korea's flag carriers, did not lower fares but Chinese airlines such as Shandong Airlines, Air China and China Eastern Airlines did. The network structure also changed. A new route Busan, Korea–Weihai, China was launched in 2007.

## 9.5 STEPS TOWARDS NEA MARKET INTEGRATION

The next question is how the experience between Korea and China might be made more general across NEA. There are several constraints:

### *Different interests*

The Korea Transport Institute (KOTI) has pointed out that the most serious obstacles are the asymmetries between economies with diverse market sizes, different geographical locations and disparate economic interests based on the varying strengths of their airlines.

### *Bilateral agreements*

Another constraint is the set of terms of existing bilateral agreements. KOTI found that the bilateral ASAs between Japan, Korea and China are in certain respects even more restrictive than the Bermuda I agreement between EU economies, which was established at the point when a common European air transport policy began to emerge.

### *Legal issues*

Zhang (2008) identified a legal issue as each economy's legal system is not in line with up-to-date transport and logistics practices. An updated Civil Aviation Act, Decree and Ordinance should be implemented or reinforced through regulation. Korean aviation authorities have begun to reconstruct the legal system that governs the air transport industry, bringing the issue to the National Assembly with the intention of presenting a better method of regulation.

### *People movement*

With regard to eliminating administrative barriers, particularly in the movement of people, Korea and Japan agreed to implement a visa exemption program, which was initiated to comply with the opening of the 2004 Aichi Expo in Japan and the inauguration of the Central Japan International Airport in Nagoya.

More specific suggestions for the development of the air transport regulatory system in the region are the following:

### *Give first priority to air cargo liberalisation*

The air cargo sector may be a good place to start in implementing liberalisation in NEA, rather than passenger operations. Korea has a special interest in this strategy because throughout the region air cargo traffic is growing rapidly. Table 9.11 shows the fastest growing airports in Asia. In terms of freight volume, airports in NEA mark the top five, and there are five Chinese and three Japanese airports within the top 30. Each of the three economies plans to construct more social infrastructure at airports to provide improved business and to support air cargo operations. Narita International Airport (Japan) Beijing-Tianjin International (China) and Incheon International Airport (Korea) are either already equipped with the necessary infrastructure or plan further expansion. These plans would be supported by a commitment to more liberal arrangements for cargo operations.

**Table 9.11: Fast-growing cargo airports in Asia, 2007.**

Rank	Airport	Cargo carried (ton)	YoY (%)	World rank
1	Beijing, China	1,220,001	15.8	20
2	Shanghai Pudong, China	2,494,808	15.5	5
3	Jakarta, Indonesia	384,050	11.5	46
4	Chengdu, China	328,429	11.1	56
5	Xiamen, China	193,625	10.6	89
5	Shenzhen, China	616,058	10.1	33
7	Incheon, Korea	2,555,582	9.4	4
8	Shanghai Hongqiao, China	388,815	6.9	47
9	Guangzhou, China	694,923	6.4	30
10	Kunming, China	232,647	6.1	78

Source: KOTI and Airport Council International.

### *Complementary measures*

It will be important to deal with complementary issues in order to capture the benefits from a regional agreement. For example, issues to consider include traffic control, people movement and safety and security.

While NEA may not follow the EU model exactly, there are lessons to be learnt from that experience. In particular, the EU started EUROCONTROL for safe airspace control and the centralisation of the air traffic control system before proceeding into discussions on the integration and liberalisation of the air transport market. Similarly, EU's air transport passengers or citizens of EU members are not required to carry their passport within the EU boundaries. However, NEA economies demand authorisation stamps from economies to which one desires to travel, as well as travel documentation, which must be unnecessary in a truly integrated and liberated air transport market.

A regional agreement would also put emphasis on safety and security. Representatives from the three economies must discuss and cooperatively stipulate such measures. ICAO has set forth a complete series of common safety and security standards, by which the contracting states must abide. Aviation authorities in China and Japan established a cooperative mechanism at the ministerial level in May 2005, which covers the entire field of aviation issues except for air traffic rights. Furthermore, China and Korea could establish an identical cooperative mechanism. If the three economies shared identical safety and security obligations and adhered to the common standards, it would be easier to develop bilateral safety and security mechanisms into tripartite ones.

To capture these and other wider dimensions and non-aeronautical issues directly linked to the air transportation market, KOTI has proposed to use the term 'free sky policy' for the scope of regional strategy.

## **9.6 CONCLUSION**

There are significant examples of reform to date within NEA. Within Korea (and other economies) the growth of the LCCs has been important. Fares are lower and traffic has grown. The negotiation of an Open Skies arrangement between Korea and China based on Shandong Province led to lower fares, more frequent flights, greater convenience and higher traffic levels. This has increased the interest in extending this experience to international routes. There are some lessons in the experiences of the EU and the USA on how this might be done but for a variety of reasons its applicability is limited. At the same time, the expected

competitive pressure that spills over from the agreement between the USA and the EU is a driver for change in NEA.

There are some specific issues to be addressed, including security and safety, air traffic control and the movement of people. However, the members of the region have common interests in pursuing this development. A place to start may be to seek more rapid liberalisation in the cargo sector, where traffic is growing rapidly. There are challenges to resolve and this case study concludes with some comments on the role of research, both in the experience to date and in formulating the next steps.

Further research will contribute to progress. For the integration of NEA's air transport market, a number of academic and government institutes have already conducted important studies on the regional air transport market (Oum, Zhang & Fu 2009). There have been many studies and proposals; aviation academic specialists have presented the requirements for the market integration process and suggested additional research ideas for the identification of winners and losers at the bilateral/trilateral air transportation liberalisation meetings. Whatever projects are designed, the goal must be to develop a new strategy. To carry such studies further, forming a joint research group among NEA's representatives might be the first step of the action plan. A methodology that supports the reform program but recognises issues in the distribution of its effects, as well as an analysis of safeguard measures, could be developed.

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