

# Improving Aviation Sector for International Tourism Promotion in Korea

Lee, Kangwook<sup>1)</sup>

#### Abstract

This paper is intended to identify the main problems for attracting inbound tourists in Korea in conjunction with aviation sector. This paper mainly deals with policy issues of tourism-aviation sector. The major impediments in the aviation sector for attracting inbound tourists can be lack of flight seat supply at peak season, flight time schedule, and cooperation of Airlines. Policy suggestions for international tourism promotion in Korea can be summarized as: re-adjustment of flight time schedule between Japan-Korea routes, market promotion for attracting Chinese visitors, development of Korea-China-Japan triangular tourism product, efficient provision of airport facility, and in particular collaboration between government sectors of countries and private sectors of Airlines and travel agencies.

#### 1. Introduction

In an era characterized by openness and globalization, tourism is recognized as a catalyst of economic and social development within a nation. Tourism is known as the collective activities and services that facilitate and attract tourists and shaped within their participation. These service industries include accommodation, food services, and transportation services such as airlines, cruise ships, rails, taxis and any other mode of transportation.

The relationship of tourism and air transport industry is complement each other. Tourism depends on transportation to bring visitors, while the transportation industry

<sup>\*</sup> Korea Culture & Tourism Institute, Research Fellow (kwlee@kcti.re.kr)

depends on tourism to generate demand for its services. The growth in tourism industry directly reflects onto the air transportation. The expansion of international tourism has a large impact on the discipline of transport geography. However, growth rates of international air traffic are pegged with growth rates of international tourism.

In recent years, one of the problems for attracting inbound tourists in Korea arises from the lack of flight seats, problems of flight time schedule, seasonality, etc. Another issue for international tourism promotion is impediments of flight connection from international flight to domestic flight. In this context the objectives of this paper are firstly to identify the main problems for attracting inbound tourists in Korea; and secondly to explore the policy implications in the aviation sector for inbound tourism promotion in Korea.

This paper mainly focuses on policy issues of tourism-aviation sector, in conjunction with issue of flight seats between Korea and Japan, and Korea and China. Inbound tourists from both Japan and China occupies around 50% of total inbound in Korea. In particular, flight seats between Japan and Korea are constrained in the peak travel season. The limited flight seats affects to attracting inbound tourists. Aviation transport policies and decisions of governments can make a big difference in the destinations available to tourists.

Following introduction, section 2 discusses the trends of international tourism in Korea, together with environmental changes of the aviation sector. Section 3 identifies the main problems of aviation sector for attracting inbound tourists to Korea. Section 4 suggests policy implications for improvement of aviation sector, and final section is a summary of this paper.

## 2 Trends of International Tourism and Aviation Sector



#### 2.1. International Tourism Trends in Korea

International tourist arrivals in Korea have reached 6.4 million, as of 2007, in spite of natural disasters and rising fuel costs. As shown in Table 2.1, the number of incoming tourists to Korea grows by 3.5% per annum and visitors from Japan share 34.7% of total inbound tourists. Chinese tourists are followed by 16.5% and USA 9.1%. Both Japanese and Chinese tourists occupy over 50% of total inbound tourists

in Korea.

Table 2.1 Volume of Korean Inbound Tourism

('000 person, %)

0-1	2007		2006		2005		2004		2003		2002	
Category	'000	ratio										
Inbound	6,448		6,155		6,021		5,818		4,754		5,347	
Japan	2,335	34.7	2,339	38.0	2,439	40.5	2,443	42	1,802	37.9	2,321	43.4
China	1068	16.5	897	14.6	709	11.8	627	10,8	513	10.8	539	10,1
USA	587	9,1	555	9.0	530	8,8	511	8,8	422	8,9	459	8.6

Source: Korea National Tourism organization

However Koreans traveling oversea reached a record high of 13.3 million, due to a strong currency exchange rate favoring the Korean won against the US dollar. China is the most favorite travel destination, occupying a growing market share over Japan. In 2007, Korean visitors to China shows 35.8% and 19.5% to Japan of total outbound tourists.

Table 2.2 Volume of Korean Outbound Tourism

('000 person, %)

	2007	2006	200	)5	20	04	200	03	200	)2
Category	'000	'000	'000	ratio	'000	ratio	'000	ratio	'000	ratio
Outbound	13,324	11,609	10,077		8,825		7,086		7,123	
China	4777(35,8)	3924(33.8)	2,960	29,4	2,334	26.5	1,561	22,0	1,722	24,2
Japan	2606(19.5)	2117(18,2)	1,739	17,3	1,569	17.8	1,436	20.3	1,266	17.8
Thailand	_	_	661	6,6	754	8,5	575	8.1	582	8,2

Source: Korea National Tourism organization (http://www.knto.or.kr)

Note: Destination statistics of Korean departures have not produced from July 2006.

In accordance with imbalance of inbound and outbound, balance of tourism payment (BTP) in Korea has shown a deficit of US\$ 101.1 billion, as shown in Table 2.3. The deficit of BTP was resulted from more outbound with a higher tourism expenditures by outbound tourists. One of the problems for attracting inbound tourists is often argued the lack of flight seats by larger outbound to be returned from overseas. The concentration of travel demand at the peak season is also impediments for attracting foreign visitors. Besides many factors affecting inbound tourists, lack of flight seats is dealt as policy target in this paper.

Table 2,3 Tourism Revenues and Expenditures

(US\$ million)

Category	1997	1999	2001	2003	2004	2005	2006	2007
Tourism Balance	-1,146	2,827	-174	-2,905	-3,803	-6,232	-8,489	10,129
Revenues	5,116	6,802	6,373	5,343	6,053	5793	5,759	5750
Expenditures	6,262	3,975	6,547	8,248	9,856	12025	14335	15879

Source: Korea National Tourism Organization (http://www.knto.or.kr)

#### 2.2 ends of Aviation Sector

The aviation sector in Korea is gradually changing in accordance with an environmental changes of world aviation sector, together with changes of economic, social, political trends. This section discusses changing trends of tourism-aviation sector in recent years.

#### 2.2.1. Expansion of Aviation Liberalization

Open-sky is being gradually expanding in terms of bilateral and multilateral agreements between countries. The effect of open sky can lead to increase inbound tourists by increase of number of flight operation. The airline industry in Korea has established cooperative agreements with 83 countries, 2 of which are Asian countries, as of 2005 (World Tourism Organization, 2007). Korea-Japan constitutes regional bloc, but is not reached full scale of open sky agreement.

#### 2.2.2. Emerging Low Cost Carriers (LCCs)

Since several low-cost carriers (LCCs) expanded their networks, they stimulate tourists more travel. The core strategies of LCCs provide 50-60% lower airfare and target to the niche market in particular. In Korea LCCs are gradually introducing, for instance, such as Hansung Airline, Jeju Airline and Busan Airline in the domestic aviation sector. It can be predicted that more LCCs will be competition with lower airfare which stimulates more travel opportunities in the future.

#### 2.2.3. Abolition of Group/ Bloc Reservation

As tourism demand is increasing, agency group booking system is decreasing for the reduction of operation cost. KAL and Asiana airlines have abolished hard-bloc booking system in 2007. The cooperation between airline and travel agency is diminishing by distributing channel system. This is mainly from new technology advance in reservation system.

#### 2.2.4 Change of Air-ticket Distribution System

The electronic ticket system leads changes of distribution channel of aviation related tourism products. The system of e-ticket can weaken the relationship between airline company and travel agency, since air tickets can be sold by internet of direct booking engine. The advantage of this system is to provide cost-down and simplification of ticketing process.

#### 2.2.5. Enhancing Star Alliance

Airline Alliance is expanding in terms of cost-efficiency in operation of Airline company and expansions of routes. For instance, Skyteam, Star Alliance and Oneworld are some example of Airline alliance. KAL joins Skyteam and Asiana, Star Alliance. The main advantage of alliance will be expansion of routes which can generate more tourism and airplane passenger demand.

#### 2.2.6. E-GDS System

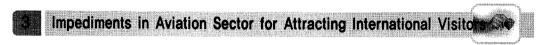
The function of Global Distribution System (GDS) in the tourism sector is changing into Web-based distributing system by expansion of internet. The computer monitor of travel agency will be disappeared, internet ticketing system is rapidly replacing in the aviation and tourism industries. KAL in Korea is operating TOPAS based on internet e-GDS and Asiana for AVACUS. The traditional booking system is replacing by web-based e-GDS system.

#### 2.3. Trends of Passenger Boarding in National and Foreign Airlines

Passenger boarding rate are compared with national airlines (eg. KAL) and foreign airlines for status of flight seats. Data are collected for passenger boarding rate from the average monthly boarding rate from 2004 to 2007. The average rate of passenger boarding for national airlines is over 70% for each month, while the rate for foreign airlines is over 70% for February, July, and August (Chon et al., 2007).

Most of passengers departing to Asia, America, Europe is over 70% in boarding rate, while only the rate of Japan airlines which departs to Korea is higher than the rate of national airlines. Overall, domestic travellers visiting overseas are concentrated during holidays and vacation seasons of July and August. This travel pattern hinders travel agencies in attracting international visitors. For these periods, there will also be limitation of flight seats for domestic traveller to travel overseas with an exception of visiting China.

With regard to the air routes destined to China, both national and foreign airlines have recorded low level in passenger boarding rate except August. Improvement of visa process or promotions by specialized travel agency could be a solution to attract flight seats for Chinese visitors.



Difficulties for attracting international tourists can be discussed in the context of limitation of flight seats, cooperation between travel agency and airlines company, peak season, and flight connection. From point of tourism-aviation policy view, impediments of aviation services and the capacity will be investigated in this section.

#### 3.1. Lack of Available Flight Seats

Inbound travel agencies complain about lack of seats, while airlines do not want to increase the number of seats regarding the matter of aircraft's number in peak season, authorization, and the operating profits. As of 2007, the supply of flight seats has increased 13.0%, the total boarding rate has also increased 1.1% compare to the previous year as shown in Table 3.1. Total international tourists in Korea have increased 13.7%, thus boarding rate of international tourists is shown an increase of 0.6%. The occupancy rate of international tourists a decrease of 0.4% from 54.1% in

Table 2.4 ssenger Boarding Rate by National and Foreign Airlines

Category	Total Passenger Rate		Boarding Rate to Japan		Boarding Rate to China		Boarding Rate to Asia		Boarding Rate to America/ Europe		Boarding Rate to Others	
	F/A	N/A	F/A	N/A	F/A	N/A	F/A	N/A	F/A	N/A	F/A	N/A
Jan.	68.0	72,3	72.0	71.2	61.5	62.9	72,1	77.5	67.9	75.2	65,9	77.7
Feb.	70.2	74.3	75.4	76.2	63,7	66,9	73.9	77.8	67.6	72.8	63,2	76.8
Mar.	65.8	71,6	73.7	74.4	59.6	61.4	67.7	73.7	63.6	74.7	57.6	71.9
April	65.4	71.0	65.9	67.3	63,5	66,7	66.6	74.2	67.0	76.5	61,0	76.2
Мау	64.5	70.0	66,3	64.2	60,2	66.1	66.1	72,4	71,2	80.3	60,4	71.8
June	67.0	72,9	69.9	67.0	62.1	66.6	68.9	76.2	72.7	84.4	64.6	75.0
July	71.6	74.6	75.4	69.0	66,7	69.0	73.0	78.8	76.1	82,7	66.9	79.0
Aug.	76,3	79,2	82.2	78,5	72,5	73.0	77.0	81.3	78,7	84,3	67.7	78,5
Sep.	65.2	70,2	73,9	70.1	60.3	64.6	63,5	67.1	71.0	78,9	63.9	72,9
Oct.	68.9	73.9	73.9	74.2	63.9	69.2	70.4	73,5	71.4	78.2	56,9	75.0
Nov.	66.7	73.6	72.8	75.4	57.0	62,9	74.4	80,6	61.7	71.6	52,3	79.6
Dec.	64.6	70,1	72.5	69.8	50.8	52,6	73.6	80.5	62,2	72.9	50.3	80.4

note: F/A represents Foreign Airlines and N/A National Airlines.

2006 to 53.8% in 2007. In short, passenger boarding is increasing, while the international passenger boarding is decreasing. This implies that the number of international visitors are increasing but the number of available seats are relatively decreasing.

Table 3.1 ight Seats and Occupancy Rate of Tourists

Category	Supply of Flight	Total Passenger	Boarding Rate	Intern	ational Toul	Boarding Rate of	Occupancy Rate of		
	Seats(S)	(P)	(F)	total	inbound	outbound	Tourists (TF)	Tourists (TS)	
2003	32,074,443	21,612,942	67.4%	11,838,895	4,752,762	7,086,133	36.9%	54.8%	
2004	38,194,069	27,234,405	71,3%	14,643,723	5,818,138	8,825,585	38,3%	53.8%	
2005	41,326,936	29,786,258	72.1%	16,102,895	6,022,752	10,080,134	39.0%	54.1%	
2006	46,587,954	32,847,396	70.5%	17,764,925	6,155,046	11,609,879	38.1%	54,1%	
2007	52,275,420	36,732,346	70,3%	19,773,216	6,448,240	13,324,976	37.8%	53,8%	
Growth Rate	13,0%	14.2%	1.1%	13.7%	7,9%	17.1%	0.6%	-0.4%	

source: Korea Civil Aviation Development Association(2007), Aviation Statistics; ttp//www.koreanair.com Ministry of Culture, Sports and Tourism(2007)

note: Boarding Rate (F) =P/S, Boarding Rate of Tourists (TF)=T/S, Occupancy Rate of Tourists(TS)=T/P

#### 3.2 Problem of Flight Time Coordination

Airline schedule is coordinated under KASO (Korea Airport Scheduling Office) which is composed of manager of Seoul Regional Aviation Administration, the executives concerned in KNTO, KAL and AAL(Asiana Air Line). The relevant foreign airline however is not included in the committee. There are therefore difficulties in airline schedule coordination reasonably being considered from foreign airline's standpoints. There are also difficulties in airline schedule coordination since airline companies primarily are concerned with their operating profits.

#### 3.3 Problem of Peak Season Operation

Peak season of tourism can result in expensive airfare and lack of available seats for travellers. Referring to Figure 3.1, the peak seasons are July, August and January or inbound tourists. In particular, concentration of student's entry (who are studying overseas) to Korea in August and September constrains the flight seats for inbound tourists. Congregation of visitors in spring season in Jeju Island in Korea is more serious by domestic students visitors, Japanese and Chinese visitors.

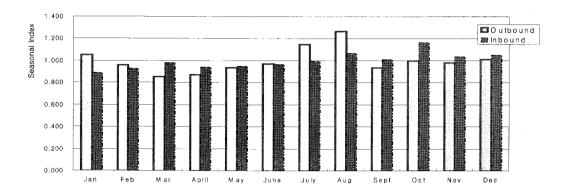


Figure 3.1 Seasonal Index of Inbound and Outbound

Korean outbound tourists in summer peak season (ie. July, August) hinder incoming international visitors. Airline company's limited seat providing system to travel agency in peak season also hinders travel agency's trial for attracting visitors. Airline company secures off-season seats by using travel agency. This is because travel agency needs to guarantee airlines to purchase the off-season tickets to get summer seats.

#### 3.4 Problem of Airline Route Connection

Most of regional departure lines from Japan to Korea, except for Tokyo, Osaka, Nagoya, Sapporo, do not provide non-stop flights to major regional destinations in Korea. For examples, Busan and Jeju have not direction routes from Japan.

Category	departure	arrival	reference			
Incheon-Busan	08:30 09:00	09:30 10:00				
	20:05	21:05	Connection flights is with			
Incheon-Jeju	07:35 08:15	08:40 09:20	limited number of operation			
Incheon-Daegu	19:20	20:15				

Table 3,2 Flight Connection Time of Incheon- Busan, Jeju, Daegu

source: Incheon Airport(2008), http://www.airport.kr; http://www.koreanair.com

As indicated in Table 3.2, there is insufficient domestic lines connecting regional destinations (eg. Incheon-Busan, Incheon-Jeju). Problem of Airline Route Connection

can be another impediment regional destination for Japanese visitor

#### 3.5 Limited Cooperation between Airlines and Travel Agency

Air line company's late decision of summer/winter flight service schedule causes travel agency's difficulties in attracting vacation travellers. For instance, shortage of available seats in flights from China to Korea often arises regular lines as well as charter lines by lots of Korean travellers visiting to China. Difficulties in cooperation among different national airlines can be non-cooperative attitude in connecting their own lines with a different airline's domestic lines (eg. China Airlines and Korean Airlines). Cooperative arrangement between airlines and travel agency, and between national and foreign airlines should be improved for international tourism promotion.

Another case can be poor time schedule for travelling from Japan to Korea line. Poor airline schedule for visiting Korea reduces the destination competitiveness of Korea in travel market. Korea-Japan-Korea airline schedule (late departure in Japan) makes only one day travel activity possible in Korea with 2-nights 3-days travel itinerary.

#### 3.6 Lack of Seats to China-Jeju and Japan-Jeju Connection

It is often reported that there is lack of flight seats in Jeju during March~April, July~August, end of August~early of September. These lines include China-Incheon (Jeju), Japan-Incheon (Kimpo, Jeju), Kimpo-Jeju, and American route in summer peak season. The number of seat supply has been decreasing especially from Kimpo to Jeju. The number of operating lines and available seats from Kimpo to Jeju both in Asiana and Korean airline are decreasing by 5.5%, as of 2007. Moreover, many domestic travellers flying to Jeju in peak season make international visitors to have difficulties with booking. A sufficient supply of flight seats may lead to attract foreign visitors from Japan and China.

#### 3,7 Difficulties in Use of Airport Facility

Foreign airline flights arrive in the Airport at night time or dawn, which is serviced for inbound travel products in cheaper prices. Most of airport facilities are closed during late night time. This causes international visitors' dissatisfaction with using airport facilities.

# Policy Suggestions for International Tourism Promotion

Slowdown of inbound market can be affected by limitation of flight seats and diverse supply channels in the aviation sector. Open-sky policy and LCCs supply may lead to increase inbound tourists. Several specific strategies are discussed in this section.

#### 4.1 Re-schedule of Flight Time to Japan Route

In regard to the route from Japan to Korea, time schedule is required to change into morning departure in Japan and afternoon departure in Korea. Referring to Table 4.1, re-schedule of flight time for Nigata-Incheon route has been brought an increase of 27.0% of travellers visiting from Japan to Korea.

Table 4.1 Before-After of Flight Time Re-Schedule

Category	Visitors from Japan	Visitors to Japan from Korea
Jan Mar. 2007	7,153	4,192
Jan Mar. 2006	5,632	3,987
Growth Rate	27.0%	5.1%

source; Ministry of Culture, Sports and Tourism(2007), References of 'TF for Inbound Attraction'

#### 4.2 Market Promotion for Chinese Visitor

Market promotions are required for Chinese visitors especially in their long national holiday between 1st and 7th in October, in cooperating with Chinese travel agencies and Chinese airlines. It is needed to increase the air routes connecting to regional destination for Chinese and Japanese visitors

### 4.3 Korea-China-Japan Travel Product Development

Seoul-Shanghai-Tokyo circling 1 day life zone may bring 50,000 visitor demand through the revitalization of economy in the areas. The joint tourism product can also promote international tourism in Korea-China-Japan. Thus Korea-China-Japan triangular air shuttle can be suggested for connecting routes between major cities of three countries, based on low cost carriers (LCCs).

#### 4.4 Efficiency of Airport Facility Operation

A flexible operation of airport facility leads to enhance visitor's convenience in

airport facility using at night time. It is also required especially for foreign airline users arriving at night time and dawn. Transportations, duty free shops, convenient facilities etc should be regarded for this.

#### 4.5 International Collaboration

The cooperative agreement of airlines and travel agencies is essential to promote mutual products development and advertisement. Collaboration among airlines is needed to activate international tourism between countries. It is also required to cooperate between airlines company and travel agencies more effectively for attracting visitors in off-season. Inter-governmental cooperation is also crucial for development of international tourism products.

### Concluding Remarks



This paper is largely based on a descriptive approach for policy issue in the aviation-tourism sector. This paper identified and discussed the major impediment in the aviation sector for attracting inbound tourists in Korea. These include problem of flight seat supply at peak season, flight time schedule, and cooperation of Airlines. Aviation demand is continue to grown as long as tourism demand increase and vice versa.

Policy suggestions for international tourism promotion in Korea can be summarized as: re-adjustment of flight time schedule between Japan-Korea routes, market promotion for attracting Chinese visitors, development of Korea-China-Japan triangular tourism product, efficient provision of airport facility and international cooperation. In particular, collaboration between government sectors of countries and private sectors of Airlines and travel agencies.

Some of the suggesting ideas could not be implemented by the relevant organizations. Nonetheless, sooner or later these recommendations will become serious priorities for the tourism and aviation development. The implementation activities will require long-term relationship building with relevant stakeholders. For a better policy to be successful, it is also needed for long term plan in the aviation-tourism sector.

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