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THE CURTAIN WAS RAISED - THE GRAND OPENING OF INCHEON INTERNATIONAL

The Incheon International Airport, a US\$4 billion project (expenditures for the 1st phase construction), has commenced its operation at last since March 29 with the completion of the 1st phase construction started in 1992. Aiming at becoming a hub airport to cover the Northeast Asian region, it was constructed on the reclaimed land of 11.7km² between the Yeongjong Island and Yongyu Island near the Incheon City. When fully developed around 2020, the airport will cover an area of 47.4km². When airline companies concentrate or distribute travelers and freights around a specific airport, the airport is called a hub airport.

THE RELATIVE POSITION OF THE NEW AIRPORT

Although it is difficult to count how big an effect the Incheon International Airport will have on enhancing the national competitiveness, it is obvious that it will work quite positively. As the table 1 shows, Incheon International Airport has advantages over other airports such as Japan's Kansai Airport, Chek Lap Kok International Airport in Hong Kong, Shanghai Pudong International Airport and Singapore Changi

Airport.

When the second and final phase construction is completed around 2020, the Incheon Airport will rank within the world top ten serving 100 million travelers, 7 million tons of freight and 530,000 flights per year. Its geographic location placed it in the center of the Northeast Asian transportation corridor, where there are 43 cities with population over 1 million within 3-hour flight distance and also allows non-stop flights to the eastern coast of the U.S and major cities in Europe. At present, only Japan's Kansai Airport, Narita Airport and Shanghai Pudong Airport of China provide non-stop flights to the U.S. and Europe. However, Narita airport reached the limits of



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1. This article is compiled from the five special contributions to the April 2001 issue of 'Planning and Policy', a monthly publication by KRIHS: 'The formation of Northeast Asian Economic Zones and the role of Incheon International Airport' by Won-Bae Kim, head of Northeast Asia Research Team of KRIHS; 'The effects of opening the new airport on improving competitiveness' by Se-Ho Kim, inspector general of the Ministry of Construction and Transportation; 'The growth of the West Coastal Axis and the status of Incheon International Airport' by Yang-Ho Park, director of National Territorial Planning and Environmental Research Division of KRIHS; 'Measures for economic vitalization in the Incheon City and airport region' by Dong-Hoon Hur, head of Regional Economic Research Team of Incheon Development Institute; 'Measures for reinforcing international logistics functions by connecting airports to seaports' by Il-Soo Jun, vice president of the Korea Transport Institute.

capacity and Shanghai Pudong Airport runs short of demand to such an extent that facility expansion is unthinkable.

It is also expected that the new airport will contribute to attracting many tourists visiting adjacent international tour sites. The passenger terminal in size of 500,000m² boasts the world-class facilities such as hotels, shopping centers, fitness center, international business center and other convenience facilities. The new airport is accessible only by the Yeongjong Grand Bridge and ferry passageway now, but when the second bridge and railway to connect it to the mainland are constructed in 2005 and 2007 respectively, tourism and leisure industries will be boosted in the airport region. Furthermore, the charge for takeoff or landing of an airplane at the Incheon Airport is US\$2,810, which is the lowest in Northeast Asia compared to US\$8,910 for Kansai airport in Japan, US\$4,674 for Chek Lap Kok airport in Hong Kong and US\$5,388 for Shanghai Pudong airport in China. It means that the new airport is in a favorable position to attract foreign airliners.

The 21st century will be an era of logistics. According to technological advancement, the number of compact, high value-added and air-transported products such as semiconductor will increase. In this sense, the new airport is anticipated to contribute to sharpening the competitive edge of Korea in trading by enabling to reach every corner of the world at a convenient time. However, there are two prerequisites for South Korea to root firmly as a logistics center in Northeast Asia: one is that the Northeast Asian region should be placed in the center of multi-national companies' logistics networks and the other, extensive regional networks should be formed encompassing every sub-region in Northeast Asia. The extension of transportation networks in Northeast Asia through port construction in Korea such as Incheon airport, Incheon seaport and Pyeongtaek seaport will offer an impetus to converge people, freight and information upon the Korean Peninsula by making it possible to create new transport services within

Cities within 2-hour flight distance from Incheon International Airport



Northeast Asia. The Korean government enacted in December 1999 'the Law on the Designation and Operation of Free Customs Zones for International Logistics Center' and heralded an enforcement ordinance in March 2000. Presently, Incheon International Airport, Busan Seaport, Gwangyang Seaport and Incheon Seaport have been designated as free customs zones.

The new airport will also contribute to enhancing the overseas competitiveness of Korean construction companies. The know-how acquired in the process of reclaiming the sea to construct an airport will be of help for Korean construction companies to win

orders in overseas markets. The construction of new highway to and from the new airport was also a good chance to accumulate precious experiences. The 4km-long Yeongjong Grand Bridge was built as a world-first three dimensional self-anchored suspension bridge and praised as a splendid achievement in the history of bridge construction.

THE ROLE OF INCHEON AIRPORT IN NORTHEAST ASIA

The Incheon International Airport will play an important role in vitalizing personal traveling in the Northeast Asian region making one-day living space possible. Despite the arrival of internet age, face-to-face contact is still critical in making important decisions at entrepreneurial and national levels. The answer to whether the new airport will enable one-day living space is dependent on how long it will take to move to the downtown area and to go through immigration proceedings rather than flight time itself. If it takes two hours for flying and less than one hour in moving downtown and another one hour in clearing immigration, one may leave Tokyo, Beijing or Shanghai early in the morning to have a business meeting over lunch and return back to Tokyo, Beijing or Shanghai in the afternoon. Therefore, the new airport will allow one-day living space in a practical

sense when the simplification of immigration proceedings and availability of fast and convenient transportation facilities such as highways and railway are guaranteed at a higher level than at the Chek Lap Kok International Airport in Hong Kong. If the new airport satisfies all these conditions, it will greatly contribute to increasing investment, trade and industrial cooperation within Northeast Asia.

IMPLICATIONS OF NEW AIRPORT IN NATIONAL DEVELOPMENT

What does the opening of new airport mean for national territorial structure? The 4th Comprehensive National Territorial Plan over the period from 2000 to 2020 seeks to shape open and integrated national axes that will lead Korea to become the center of interchange in Northeast Asia and at the same time, to achieve balanced development throughout the country. Among the national territorial axes, the West Coastal Axis in which Incheon airport is located encompasses the area along the West Coast Highway, the respective regions where the Ansan-Siheung Highway and Janghang National Railway pass by, and other coastal areas and islands in the western part of Korea. The West Coastal Axis region holds

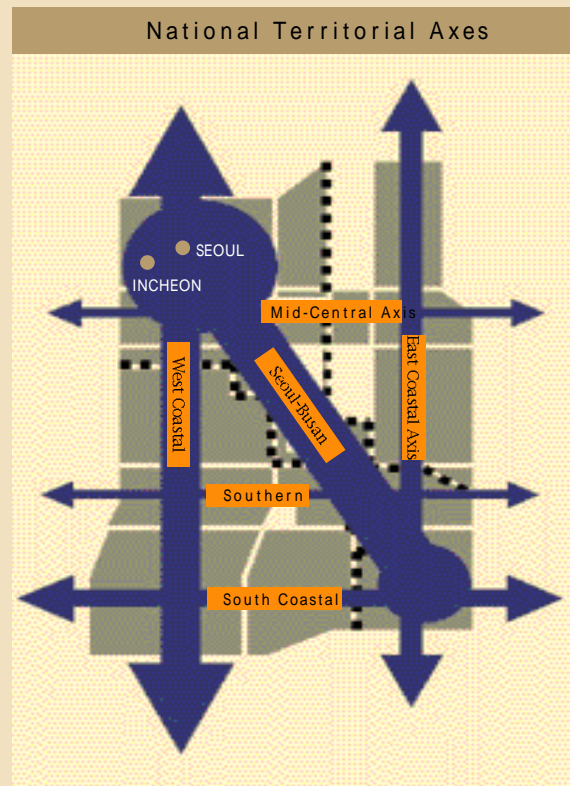


Table 1. The comparison of major airports in Northeast Asia

| | Incheon | Kansai | Chek Lap Kok | Pudong |
|---------------------------------------|--------------------------|-------------------------|-------------------------|-------------------------|
| Land area (km ²) | 11.7(47.4) | 5.1(13) | 12.5(14.9) | 9.5(32) |
| No. of runways | 2(4) | 1(3) | 1(2) | 1(4) |
| Passenger terminal (km ²) | 0.5(1.1) | 0.3(0.6) | 0.5(0.9) | 0.3(0.8) |
| Freight terminal (km ²) | 0.2(0.8) | 0.19 | 0.3(1.8) | 0.3(0.8) |
| Flight frequency | 170,000(530,000) | 160,000(260,000) | 160,000(320,000) | 20,000(320,000) |
| Passenger handling capacity (persons) | 27,000,000 (100,000,000) | 25,000,000 (40,000,000) | 35,000,000 (87,000,000) | 20,000,000 (70,000,000) |
| Freight handling capacity (tons)* | 700,000 (7,000,000) | 390,000 (1,750,000) | 3,000,000 (9,000,000) | 750,000 (5,000,000) |
| Construction period | 1992 - 2000 (2020) | 1986 - Sept. 1994 | 1991 - Apr. 1998 | 1995 - 2000 |
| Expenditure for airport facilities | US\$4 billion | US\$25 billion | US\$19.9 billion | US\$1.5 billion |
| The time of opening | March 2001 | September 1994 | July 1998 | October 1999 |

1) The items marked with an asterisk contain figures per annum

2) The parenthesized figures are estimates for the operation after the completion of the final stage of construction.

about 26 million people, which accounts for 55.7% of the nation's population.

The new airport will provide an impetus for restructuring the Capital Region. Seoul and Incheon areas will be readjusted to fit international exchange belt. For example, Seoul will transform into a political and economic capital, whereas Incheon will grow into an international free city and air transportation hub.

The new airport is also likely to take an important role in promoting economic cooperation between North and South Korea. This is because the Incheon airport will serve North Korean needs for international travel, when the two Koreas make an agreement on inter-Korean traveling.

From an international perspective, connected to China and Eurasia northward and to China and Southeast Asia southward, the new airport region will enjoy synergy effects from the growth of the economic zones surrounding the Yellow Sea, especially the east coastal region of China.

LOOKING AHEAD

In spite of the failure of baggage handling system and electronic arrival and departure bulletin board in trial operation, the operation of new airport seems successful so far. Nonetheless, there are still obstacles to overcome in order to leap into an air transportation hub in the region. In short term, the new airport should be prepared for a dense fog having less than 200 meters of visibility. Airport authorities reveal that if such cases arise, the Kimpo Airport, which currently serves only domestic lines since the opening of the new airport, will be used as alternative for emergency landing and takeoff. Staff training and management are also important to handle any possible emergency situation smoothly such as the malfunctioning of an integrated information and communication system and accidental flight crash. In longer term, the construction of the second bridge and railway to connect the airport to the mainland should be expedited, which are to be completed by 2005 and 2007 respectively. The Yeongjong Grand Bridge, the only bridge connecting the airport to the mainland at the moment, will not be sufficient to accommodate rapidly increasing

traffic volume. Furthermore, new cities should be constructed around the airport where airport workers can reside. It is also crucial to secure profitability of the new airport. Only 40% of the total construction cost has been financed through the government budget, so the airport needs to raise most of the remaining funds through loans. Lastly, consorted efforts of various actors are essential for the Incheon airport to expand its horizons into the global aviation market.

MASTER PLAN AND DEVELOPMENT STRATEGY FOR THE SURROUNDING AREA (YEONG JONG) OF IIA

Yeong Jong Island is located in the center of the Korean Peninsula on the western coastline, approximately 40km away from Seoul. With the opening of the Incheon International Airport (IIA), Yeongjong will take on a TRI function role viewed from three perspectives, namely from the local Incheon point of view, from a national point of view and from its role as North East Asia's hubbing center. If viewed from an Incheon and national point of view, Yeongjong should be developed as an airport support city, providing functions and facilities that will complement the role and function of the international airport. This should be seen as a short-term vision. If accepted from an East Asia point of view, then Yeongjong should be a Metropolis city, offering

