

run. Although loss in air traffic between these main cities is likely, it may also contribute to the solution of the capacity problem. If high-speed rail networks have connections at airports, they can be excellent feeders for intercontinental air transport flows, and the competitive position of airports and the airlines serving them may even improve. Further integration of rail and air, with respect to price and unification of the travel product, may improve the quality of transportation. If so, the high-speed rail network may not be a competitor, but a complement to the air transport system.

### **OSAKA KANSAI INTERNATIONAL AIRPORT**

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#### **BACKGROUND**

I have been involved in local politics for 25 years. For the last 10 years I have focused my activities on the development of the plan for the Kansai International Airport and related regional development. What I am going to tell you today is not the government's position, but my personal view.

Until now, the Atlantic Ocean has been the center of activities for people, goods, and information. But, the Pacific region is becoming very important, and indeed it may have surpassed the Atlantic in some activities. This trend is going to continue. This was reflected in the US-Japan aviation negotiations which took place toward the end of the 1980s where a major issue was landing rights in the Asian-Pacific region.

Japan has been often mentioned as a major economic power in the Asian-Pacific region. While we have 43 airports which allow takeoffs and landings of jet airplanes, only three international airports, namely New Tokyo Airport, Tokyo Narita Airport, and Osaka Airport, can currently accommodate a jumbo jet. Even these three airports have very strict curfews which prohibit flying in and out at certain nighttime hours. At the moment we have requests from 37 countries to land in Japan, but we cannot accommodate their requests because of limited airport capacity.

Osaka was built in 400 AD and therefore historically precedes Tokyo by 1200 years. Osaka is in the center of Kansai area that includes Osaka, Kyoto, Kobe, and Nara. In a residential area of 9.2 million acres, we have a population of 23 million and a GNP of \$400 billion. This is equivalent to the GNP of Canada.

### **CONCLUSION**

European airports will find themselves in a challenging position in the 1990s, much more than during the last two decades. Liberalization and increased competition is only one aspect. Capacity developments will not be easy, and environmental problems may be severe. Close cooperation between airlines, airports, other transport modes, and public authorities is necessary to further airport development and give new impulses to regional economic development.

Our goal to develop Osaka as a truly international city of the 21st century. To that end, we must have an airport with the capacity to provide for movement of people, goods and information. Currently, the Osaka airport operates under very stringent conditions, such as time constraints between the hours of 7:00 a.m. and 9:00 p.m. Additionally, there is a limit on the number of operations. We can accommodate only 370 flights per day, and of these only 250 jet flights. The Osaka airport is overused. It handles about 135,000 flights per year. Because of the location in a highly populated area, we cannot expand the area of the airport any further.

This is the background for the planning of the new Kansai International Airport.

#### **PLANNING FOR KANSAI INTERNATIONAL AIRPORT**

The plan for the new airport came into being because we have a very difficult from noise pollution problem at the present Osaka Airport. In 1966, it became clear that a totally new airport was necessary. At the same time we wanted to pursue this project as a strategy for revitalizing the Kansai area. By 1974 we had about 10 candidate locations. Finally we chose a current site, which is offshore of the southern part of Osaka Bay.

Planning for the airport did not begin until 1981. Why did it take so long time to start? Two reasons: First, because of the two oil crises, the government's fiscal situation was very tight. Second, in 1971, a candidate from the communist party won the governorship of Osaka with support of the anti-pollution movement. He had two terms as governor and for eight years, the Osaka economy worsened continuously. Although the government and the business world were very much aware of the need for construction of the new airport, no one could do anything.

By 1979, the public all became aware of the gravity of the matter and voted the communist administration out of power. Under the new governor, the plan for the airport was revived. In 1981, a concrete plan was devised and progress has been made ever since.

After three years of preliminary studies, the Kansai International Airport Company Limited was established in 1984. Planning was completed by January 1987, and we were able to start the first phase of construction. At present we have about 150 acres of reclaimed island above the surface of the water.

The Kansai International Airport is 3.1 miles offshore in the Osaka Bay, where the water depth is 66 feet. The first phase of construction is to reclaim an area of 1,262 acres. This will be a totally man-made island, on which there will be a runway, 3,500 meters long. This will make it possible to handle non-stop flights from Osaka to New York.

The runway will be opened for operation in 1993 and can accommodate a maximum of 160,000 takeoffs and landings per year. To provide access from downtown Osaka about 25 miles away, we will have two railways and two highways. We are also planning water access very high speed boats connecting to various other cities in the Kansai region.

Let me tell you about some of the important features of the Kansai International Airport. First of all, this is the world's very first, full-fledged offshore airport. Because of the dense population, and the need to limit noise pollution and yet remain close to the metropolitan area, we could only choose an offshore site. This meant that we had to face very adverse conditions such as salt water, soil conditions of the sea bottom, as well as very high construction costs.

In order to keep the man-made island to a minimum size, Osaka prefecture decided on its own to develop a coastal area just across the bay. This development covers 784 acres. This area, currently being land-filled, will be used for a cargo depot and food preparation facilities for in-flight service. Hotels and other supportive facilities will also be built in a coastal town just across the bay from the airport.

In short, Kansai International Airport will have two major parts. One will be a man-made island connected to the mainland by an access bridge; the other will be a coastal development to provide airport support facilities.

The second important feature of this airport is the fact that it will be the very first airport in Japan that can operate around the clock, providing 24 hour service.

The third feature is the company we have formed to carry out construction. This is a very new idea for Japan. At the time this airport was planned, the national

government's fiscal condition was so dire that we had to have private money to supplement the public funds available for construction. The Osaka Prefecture negotiated a joint public-private funding agreement with the national government.

Let me tell you the breakdown of funding. The total cost of the first phase of construction is estimated to be \$6.9 billion. One-third of this amount, roughly \$2.3 billion will be direct capital investment; the remainder (\$4.6 billion) will be financed by long-term loans. Of the \$2.3 billion in initial capital investment, the national government will supply \$1.5 billion. The Osaka Prefecture will put up 190 million dollars, which will be matched by other local governments in the Kansai region. Private capital will make up the rest, about \$380 million.

Another significant feature of the project is that it involves more than airport development. We are going to coordinate our efforts to develop adjacent areas as part of a total regional redevelopment plan.

Adjacent to the airport, but across the bay, we are planning to have a town that will be able to exploit the transportation and communication possibilities offered by the airport. Second, we will use the Kansai Airport complex to stimulate development of other areas of Osaka Bay. Third, we hope to develop a Kansai cultural and academic city. We also plan to develop an area in the hills near Osaka to attract bio-science research facilities. There are two specific objectives that we seek for the Kansai International Airport. One is that we wish to become a hub airport for the Asia-Pacific region. There is at present in Asia a movement to deepen international cooperation, and many of our cities are interested in developing a network for international aviation. For that purpose, Kansai Airport can act as a hub airport because of its advantageous location in the Asia-Pacific region, equidistant from the United States and Europe. We have a diligent staff, very good security, and geographical, historical and cultural ties to people of the Asia and Pacific regions.

The second objective is to become the central depot for air cargo. As you know, air cargo is becoming very important. Japan has a huge trade surplus, and many countries want us to expand our imports. Air freight is becoming very important within our country as well. Fortunately, cargo does not ask whether it is nighttime or daytime, so we can handle it anytime we wish. Kansai International Airport will be the only airport in Japan that can operate on a 24-hour schedule, and we can exploit this benefit to the utmost and distribution center for both domestic and international air cargo.

## REMAINING ISSUES

There are several issues still outstanding that need to be tackled. One of the biggest issues, is whether we will be able to realize the overall regional plan after the first phase of airport construction is finished. We conducted a survey last fall asking how many foreign and domestic companies would like to utilize this new airport. We found 36 companies who were interested. The total number of flights that these companies would need amounts to 202,000 flights per year, which is far above the airport capacity during the first phase of the construction. The first phase of construction allows only 160,000 flights per year. With that in mind, we believe we would need to complete overall plan originally of devised in 1981 -- that is, to have two main runways 4,000 meters long and one auxiliary runway 3,500 meters long, which would provide capacity for 260,000 flights per year. Therefore, it is indispensable that we go ahead with the overall plan. Yet, in order to do so, we have to be assured economic feasibility and profitability. We are very much aware that this airport will have a substantial this prospect seriously.

The second issue is international cooperation and how we can enhance it. Many companies want us to open our markets, and this is true with the airport construction, too. For the terminal construction we have chosen a design by a French designer, Mr. Diano. We are also

cooperating with the French Airport Corporation. We are trying our best to have not just a limited cooperation, but a true worldwide cooperation.

However, because the technology required to build Kansai Airport was of an uncharted nature and it took Japanese scientists and engineers a long time to develop it, and because the landfill and the reclamation work had to be done within such a limited time, we could not contract out the construction to any overseas companies. A related problem is that, we have some difficulties with proposals from overseas firms because they do not take into consideration the Japanese basic standard for loans and regulations pertaining to construction. We would ask you understanding in this regard.

The third issue is to now attract overseas research institutions and universities. Together with the plan for the new airport, we want to make Osaka a city that can contribute to the world. Our country does not have abundant natural resources, so our contribution to the world and society as a whole must be in the area of technology and science. That being the case, the many new towns and cities in the Kansai region are being planned to attract educational institutions and their research arms. We hope you will consider coming to Japan and establishing cooperative agreements with Osaka. We welcome you and believe that together we can make Osaka a center for research that can contribute to the world. To that end, I hope the Kansai International Airport will be useful as well.