Vision for the Next 10 Years at Narita Airport

26 May, 2008
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Vice President, Planning Department
Narita International Airport Corporation (NAA)
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  【Future Initiatives】
Part 1  Narita Airport Today
【Airport operations】
(NB) As discussed at the Roundtable Conference on Narita Airport Issues, the proposal for a crosswind runway will be resubmitted for local approval after the completion of the parallel runway and an environmental impact survey. Meanwhile, it will serve as a taxiway linking the two parallel runways.
Narita Airport handles 3.6 times more traffic movements than when it first opened, 5 times more passengers and 6.4 times more cargo.
Narita's Share of International Passengers, Cargo & Traffic Movements

**Passengers**
- Narita Airport: 52.2%
- Kansai: 21.5%
- Chubu: 10.8%
- Others: 15.5%

**Cargo**
- Narita Airport: 66.3%
- Kansai: 23.7%
- Chubu: 6.9%
- Others: 3.1%

**Traffic Movements**
- Narita Airport: 57.0%
- Kansai: 21.0%
- Chubu: 12.5%
- Others: 9.5%

Narita is ranked No. 1 in Japan
## Japan's economic strength

<table>
<thead>
<tr>
<th>Countries</th>
<th>GDP (millions of US dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>13,163,870</td>
</tr>
<tr>
<td>Japan</td>
<td>4,368,435</td>
</tr>
<tr>
<td>Germany</td>
<td>2,896,876</td>
</tr>
<tr>
<td>China</td>
<td>2,644,681</td>
</tr>
<tr>
<td>UK</td>
<td>2,376,984</td>
</tr>
<tr>
<td>France</td>
<td>2,248,091</td>
</tr>
<tr>
<td>Italy</td>
<td>1,850,961</td>
</tr>
<tr>
<td>Canada</td>
<td>1,271,593</td>
</tr>
<tr>
<td>Spain</td>
<td>1,224,676</td>
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<tr>
<td>Brazil</td>
<td>1,067,472</td>
</tr>
<tr>
<td>Total</td>
<td>33,113,639</td>
</tr>
<tr>
<td>Worldwide</td>
<td>48,461,854</td>
</tr>
</tbody>
</table>

Source:
World Development Indicators database; World Bank (2006), Gross Prefectural Product Report; Cabinet Office (2005)

**Greater Tokyo Area:** 1,577,138
Narita International Airport

Destinations (International)

36 nations, 2 territories (96 cities)
1,725 flights/week
* 2008 summer schedule

UK, France, Germany,
Netherlands, Austria, Italy,
Denmark, Swiss, Finland, Russia,
Uzbekistan, Kazakhstan

Egypt, Iran, Turkey

South Korea, China,
(Taiwan), (Hong Kong),
Mongol, Vietnam,
Thailand, Philippines,
Singapore, Indonesia,
Malaysia, India, Pakistan,
Sri Lanka, Maldives

Australia, Fiji,
New Zealand,
Papua New Guinea

Destinations (domestic)

Cities: Sapporo, Komatsu, Sendai, Chubu,
Osaka, Hiroshima, Fukuoka, Naha
8 cities, 126 flights/week
* As of April 2008

Narita Airport

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Traffic Movements Global Ranking (International)

Source: ICAO Statistics
Passengers Global Ranking (International)

Source: ICAO Statistics
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Cargo Global Ranking (International)

Source: ICAO Statistics
## Narita's Advantages and Disadvantages

### Narita's Advantages
- Strong demand in Tokyo area
- Extensive network
- No. 1 share in Japan
- Environment and Community
- e-airport Project

### Narita's Disadvantages
- Slot restrictions
- Curfew
- Access from central Tokyo
Part 2  Airports in Japan Today and Recent Developments at Tokyo Airports
Airports in Japan

- Narita Airport
- Haneda Airport
- Chubu Airport
- Kansai Airport
- Fukuoka Airport
- Osaka Airport
- Chitose Airport
- Naha Airport
- Tokyo
- Japan

Okinawa
Naha
Osaka
Fukuoka
Kansai
Chubu
Haneda
Narita
Traffic Movements (World and Japan) - 2006

Traffic movements (Japan)

- International: 344,450
- Domestic: 1,804,257
- Total: 2,148,707

Traffic movement
International + Domestic

70.05 million (97.0%)

2.15 million (3.0%)

World (except Japan)
Passengers (World and Japan) - 2006

- International: 54,318,586
- Domestic: 202,474,565
- Total: 256,793,151

Passenger distribution:
- World (except Japan): 4,143 million (94.2%)
- Japan: 257 million (5.8%)
Cargo (World and Japan) - 2006

- **Cargo (Japan)**
  - International: 3,316,313
  - Domestic: 1,873,299
  - Total: 5,189,612

- **Cargo International + Domestic**
  - 5.2 million (6.1%)

- **Overall**
  - 80.4 million (93.9%)

*Note: The data represents cargo shipments and mentions Japan and the world except Japan.*
Internationalization of Haneda Airport

- To open in October 2010
- Total slots 407,000 flights/year
- International passenger service 30,000 flights/year
- International passenger number 7 million/year
- International cargo 500,000 tons/year

Expansion to increase capacity by 40% (Increase of 111,000flts/year 152flts/day)

(Present) 30 Flights/hour 296,000flts/year 405 arrivals & departures/day
(After expansion) 40flights/hour 407,000/year 557arrivals & departures/day
## Passengers by city (2006)

<table>
<thead>
<tr>
<th>City</th>
<th>Passengers</th>
<th>Airports</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>137,214,301</td>
<td>Heathrow (67,530,197)、Gatwick (34,172,492)、Stansted (23,686,800)、Luton (9,447,494)、City (2,377,318)</td>
</tr>
<tr>
<td>New York</td>
<td>107,057,595</td>
<td>JF Kennedy Intl (43,762,282)、La Guardia (26,571,146)、Newark (36,724,167)</td>
</tr>
<tr>
<td>Tokyo</td>
<td>100,873,779</td>
<td>Narita (35,063,107)、Haneda (65,810,672)</td>
</tr>
<tr>
<td>Chicago</td>
<td>95,708,797</td>
<td>O'Hare (77,028,134)、Midway (18,680,663)</td>
</tr>
<tr>
<td>Paris</td>
<td>82,471,719</td>
<td>Charles de Gaulle (56,849,567)、Orly (25,622,152)</td>
</tr>
</tbody>
</table>

Sources: ACI Worldwide Traffic Report 2006, NAA statistics
Landing fee reduction

Overcoming the image of being "expensive"

To pass on the benefits of privatization to airport users and to bolster Narita's international competitiveness in East Asia, landing fees were reduced in October 2005.

Transition of landing fee at Narita Airport

Units: JPY 000's

31% reduction for quietest aircraft (Average reduction of 21%)
Airline relocation

Situation before relocation

- Disproportionate use of the two terminals
  - Congestion in Terminal 2

- Almost 66% of code-share services were in separate terminals
  - Inefficient Operation by Alliance
  - Inconvenience of Transit Passengers

Aim

To overcome these problems
Alliance Arrangement

Terminal 1

South Wing

Star Alliance
ANA etc...

One World
JAL etc..

Terminal 2

North Wing

Sky Team
NWA etc.
Airline Distribution in Terminal Buildings

Terminal 1
North Wing
Sky Team
ANA
AMX
ACI
BAW

One World
JAL
KAL
COA
DAL
FIN
AAL
AFR
KLM
AZA

South Wing
Sky Team
ANA
AJX
AAA
AAR
AAL
THY
UAL
USA

Star Alliance
ANZ
CSN
SAS
THA
SIA
SWR

Star Alliance
UZH
MGL
EVA
VRG

31 airlines

Terminal 2
One World
JAL
JAZ
IBE
QFA
CPA

Sky Team
ANZ
CSN

One World
FIN
AAL
AFR
KLM
AZA

Star Alliance
CAL
ANG
CES
HVN
PAL

29 airlines

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Retail development in Terminal 1

Opening of “narita nakamise” in Terminal 1, in 2006

Japanese tradition as area concept
Calm environment
Spacious shops, extensive selections

Concept

<table>
<thead>
<tr>
<th></th>
<th>Newly Opened Area</th>
<th>Existing Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cafés &amp; Restaurants</td>
<td>2</td>
<td>331sqm</td>
</tr>
<tr>
<td>Tax-Free Shops</td>
<td>3</td>
<td>675sqm</td>
</tr>
<tr>
<td>Duty-Free Shops</td>
<td>14</td>
<td>2,679sqm</td>
</tr>
<tr>
<td>TOTAL</td>
<td>19</td>
<td>3,685sqm</td>
</tr>
</tbody>
</table>
**Retail development in Terminal 2**

Opening of “**NARITA 5th AVENUE**” in Terminal 2, in 2007

**Concept**
- Timeless modern
- Sophisticated, universal interior
- Spacious shops, extensive selections

<table>
<thead>
<tr>
<th>Area</th>
<th>Number</th>
<th>Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cafés &amp; Restaurants</td>
<td>3</td>
<td>684sqm</td>
</tr>
<tr>
<td>Tax-Free Shops</td>
<td>4</td>
<td>495sqm</td>
</tr>
<tr>
<td>Duty-Free Shops</td>
<td>22</td>
<td>3,077sqm</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>29</td>
<td>4,256sqm</td>
</tr>
</tbody>
</table>
Contents of e-airport

e-Information
Integrate public transport & flight information service

Airport Net
On-airport Internet access

Biometrics

Automated gate
Integrated pax flow support

e-Tag
Use of RFID tags to provide sophisticated baggage management

Contents of e-airport

Automated gate
Integrated pax flow support

Biometrics

Automated gate
Integrated pax flow support

Biometrics

Automated gate
Integrated pax flow support

Biometrics

Automated gate
Integrated pax flow support

Biometrics

Automated gate
Integrated pax flow support

Biometrics
Automated Gate for Immigration Control (Overview)

- Implementation: November 20, 2007
- Location: Departure and Arrival Immigration Areas at Terminal One South Wing and South-end of Terminal Two
- Eligibility: Japanese nationals and foreign nationals in possession of a re-entry permit
- Number of units: 4 units where each unit for use either by Japanese nationals or foreign nationals in possession of a re-entry permit.
- Objective: Simplify and reduce process times of immigration control, thus enhancing passenger convenience.
- Biometrics in use: Fingerprint (both index fingers)
Automated Gate for Immigration Control (Process)

1) Place MRZ page of passport on the reader.

2) When verified as a registrant, entry gate opens.

3) Proceeds into unit and provides fingerprint. When authenticated as registrant, exit gate opens.

4) Once exit gate opens, Immigration control process is complete.
Hands Free Travel

1. Home
   - Passenger
   - Baggage
   - Baggage collected and delivered

2. Narita Airport
   - Hands free check in
   - Held in temporary storage
   - RFID Antenna
   - Bar Code

3. Delivery company system

4. Airline system

5. Destination airport
   - Baggage collected at
   - Destination airport
   - Customs

Airport delivery company system

Information integration system (to be created by airport operator)

- Passenger lodges request for hands-free travel with airport delivery company system
- Delivery company collects baggage
- Baggage is transported to airport
- Baggage security inspection
- Baggage held in temporary storage until passenger checks in
- Baggage arrival confirmed at hands-free check in
- Baggage is moved onto conveyor line for loading onto aircraft
- Passenger collects baggage at destination airport carousel

Hands-free travel offers both convenience and security
The Eco-Airport Master Plan

Scope of Activities

Local Environment

Global Environment

Resource Recycling

Natural Environment

Environmental Communications

Environmental Activities at NAA

Environmental Management
Part 3  Future Concept for Narita Airport
10 Years Ahead
【Future Initiatives】
Global Trends in Air Transport and Tourism Demand

Overall, global air passenger numbers are growing dramatically, particularly in Asia, and according to the Ministry of Economy, Trade and Industry, passenger figures will stand at 2.5 times the current number by 2025. International tourism demand is also growing strongly, particularly in Asia also, and World Tourism Organization statistics show an average growth rate of 7.1% in Asia between 2000 and 2005.

Excess

In 2010 when the fourth runway is opened, Haneda Airport will have 30,000 slots for scheduled international passenger services during daylight hours. This may be subject to change at a later date depending of circumstances. Scheduled international flights, including cargo flights, may operate during late-night, early morning hours, over and beyond the 30,000 slots available during daylight hours.
After the Council for Transport Policy hands down its report, legislation will be prepared, preparatory studies will be launched, including selection of items required by the Fiscal System Council for sale of shares, and, after necessary procedures have been completed, NAA's shares will be listed on the market at the optimum time.

*Official name: Narita International Airport Corporation*
Northward Extension Plan (After Completion)

① Northward extension of Runway B (2,180m → 2,500m)

② Construction of Taxiways C and D

R/w B dep  R/w A arr
R/w B arr   R/w A dep

200,000 → 220,000 flights
A380 Flight operation at Narita
Installation of A380 Direct Upper Deck Access (DUDA)

Terminal 2

Terminal 1

Terminal 1 North Wing

Terminal 1 South Wing

Planned DUDA gates

Completion of DUDA in May 2008
## Plans for A380 Services at Narita Airport

As of May 2008

<table>
<thead>
<tr>
<th>A/L</th>
<th>Terminal</th>
<th>Timing</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singapore Airlines</td>
<td>1</td>
<td>20th May 2008</td>
<td>Changi-Narita (1 flight/day)</td>
</tr>
<tr>
<td>Air France</td>
<td>1</td>
<td>TBD</td>
<td>Paris-Narita</td>
</tr>
<tr>
<td>Lufthansa</td>
<td>1</td>
<td>TBD</td>
<td>Frankfurt-Narita</td>
</tr>
<tr>
<td>Korean Air</td>
<td>1</td>
<td>TBD</td>
<td>Seoul-Narita</td>
</tr>
<tr>
<td>Thai Airways</td>
<td>1</td>
<td>TBD</td>
<td>Bangkok-Narita</td>
</tr>
<tr>
<td>Atlantic Airways</td>
<td>1</td>
<td>TBD</td>
<td>London-Narita</td>
</tr>
<tr>
<td>Qantas</td>
<td>2</td>
<td>TBD</td>
<td>Sydney-Narita</td>
</tr>
<tr>
<td>British Airways</td>
<td>1</td>
<td>TBD</td>
<td>London-Narita</td>
</tr>
</tbody>
</table>
Investment in railway access between Narita and Central Tokyo
Narita Rapid Railway Plan

- Total project cost: 1.5 billion US $ (6hundred million US $ from NAA)
- Planned opening year: 2010
- Nippori – Airport: 36 minutes
- New high-speed Skyliner service operated by Keisei Railway

Narita Rapid Railway Plan

Saitama

Tokyo

Chiba

Total project cost: 1.5 billion US $ (6hundred million US $ from NAA)
Planned opening year: 2010
Nippori – Airport: 36 minutes
New high-speed Skyliner service operated by Keisei Railway
New Keisei Rapid Train (Skyliner)
Rail Access between Airport and downtown

- Narita
- Kansai
- Haneda
- Amsterdam
- Frankfurt
- Paris
- New York JFK
- Los Angeles
- Chicago O'Hare
- Hong Kong
- Kuala Lumpur
- London
- Amsterdam
- Frankfurt
- Haneda
- Narita
Flights on Runways A & B combined (now)

* Runway A handles 135,000 flights a year but Runway B can handle only 65,000 due to taxiway layout and other restrictions.
* Capacity can be expanded by removing operational restrictions on Runway A.

Demand scarce in early hours

Runway A

<table>
<thead>
<tr>
<th>Hours</th>
<th>Traffic Movements</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>14</td>
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<tr>
<td>7</td>
<td>14</td>
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<tr>
<td>22</td>
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</table>

Runway B

<table>
<thead>
<tr>
<th>Hours</th>
<th>Traffic Movements</th>
</tr>
</thead>
<tbody>
<tr>
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<td>21</td>
<td>14</td>
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<tr>
<td>22</td>
<td>14</td>
</tr>
</tbody>
</table>

Firebreak: Maximum 80% slot capacity periods set twice a day to make room for aircraft delays.
Narita Airport’s Potential (Maximum Handling Capacity Possibilities) ~ How Far Can Narita Airport Expand? ~

Approx. 150,000 flights/year
Runway A (4,000m)
(Current) 135,000 flights/year
Runway can handle approx. 150,000 flights/year if operational limitations are removed.

Approx. 150,000 flights/year
Runway B (2,500m)
(Current) 65,000 flights/year
Runway B can handle the same volume of traffic as Runway A if operational limitations are removed.

Even by maintaining the current operating hours (6:00am-11:00pm), it will be possible for Runways A and B to handle up to 300,000 flights a year if environmental, facility and operational limitations are removed.
Future Capacity and Traffic Forecast in greater Tokyo

Narita airport
(Traffic movements (international + domestics))

Haneda airport
(Traffic movements (international + domestics))

Tokyo area
(Capacity)

Tokyo area (passengers (international + domestics))

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Conclusion

- Strong air transport demand in Asia
- Japan is the powerhouse among Asian countries
- Narita Airport is
  - Japan’s premier airport
  - The leading airport in Asia

Develop airport facilities with a view to demand in 10 years time
Thank you!!