

# Prospect of Transport Market Integration in NE Asia

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## I. Introduction

### Objective

To answer the Questions....

- What has been done?
- Is it Possible?
- How can it be accomplished?
- What is to be done?

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### Methods

- Review of the Researches
  - Identification of the Barriers
  - Elimination of the Barriers
  - Case Study of the EU, NAFTA, ASEAN
- Categorization of the Issues raised
  - Infrastructure Provision
  - Development of the Industry
  - Institutional/Regulatory Barriers
  - Network Competitiveness
- Ordering and Elaboration of the Issues
  - Sequential Ordering
  - Elaboration of Key Issues

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## II. Air Transport Market

### Issues

- *Difference in Competitiveness among Airlines*
- *Competition for the Air Hub among Airports*
- *Capacity Problem in Some Airports*
- *Difficulty of Streamlined Process especially in Cargo Transport*
- *Other Institutional Barriers in Each Country*

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## What Has Been Done?

### Direction

- *Towards the "Open Market"*
- *Strengthen the Competitiveness of Each Country*

#### □ Infrastructure Provision

##### ○ China

- Until 2002, CAAC surrendered all airport control to each local government, except Beijing Airport and Tibet Airport, which aims to induce more investment from local government and to promote the market-oriented management
- In 1993, CAAC established "Fund of Infrastructure Construction for Civil Aviation", to which 10% of domestic revenue and 4~6% of international revenue are contributed by domestic airlines
- Construction of Pudong Airport(1999) : 80 million passengers/ 1.8 million tonnes
- Construction of Shenzhen Airport(Early 1990's)
- During 1986~1992, 46 airports were Built, upgraded, or expanded, in which 31 were invested by local government

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### Infrastructure Provision(cont'd)

- Japan
  - Major airport construction is controlled by central government through 5 year plan and Airport Development Special Account
  - Construction of the Kansai Airport(1994)
  - Chubu Airport near Nagoya is to be constructed by 2005
  - Expansion plan of Narita was completed in 2002, but has no effect on the capacity of international air transport
  - In the 1970s and 1980s, Japanese government spent too much resources to airport construction in local area due to the policy of balanced growth, which entails capacity shortage in international transport
  
- Korea
  - Airport construction is controlled by central government
  - Construction of Chungju Airport(1997)
  - Construction of Incheon Airport(2001)
  - Muan Airport is under construction
  - But, Korea is suffer from excess capacity, especially after the construction of the KTX

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### Development of the Industry

- China
  - Currently, Chinese carriers are merging into “big three” airline groups
  - These “big three” Chinese carriers are striving to build hub capacity around their hubs: Beijing for Air China, Shanghai for China Eastern, and Guangzhou for China Southern
  - CAAC allows foreign investor to hold the share of Chinese airlines up to 49%, which is aimed at encouraging Chinese air carriers to merge and thus enhance operational efficiency
  - But, Chinese carriers still suffer from operational inefficiency and stay under the protective umbrella of central government
  - Operational inefficiency: safety problem, schedule delay, lack of human capital and management with international experience, etc.
  - Protective policy: “One route, one carrier” policy, conservative attitude to the ASAs
  - Especially, air cargo market is blocked with many regulatory and institutional barriers other than air service barriers

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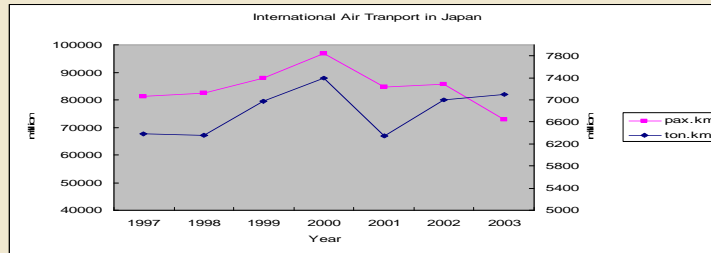
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Development of the Industry(cont'd)

○ Japan

- Japanese air industry consists of 3 major carriers and 7 other scheduled carriers
- Among 3 major carriers, JAL and JAS are supposed to be merged by 2004
- Japanese carriers have suffered from competitive disadvantage over other carriers in neighboring countries, mainly due to the high operational cost and shortage of slot in major airport
- In result, international passenger transport is rapidly decreasing and cargo transport is not increasing from 2000



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Development of the Industry(cont'd)

○ Korea

- Korean air industry consists of 2 scheduled carriers and they are very proactive in extending their business boundary in NE Asia
- It is based on the cost advantage over Japanese carriers and the comparative advantage in operational efficiency over Chinese carriers
- Moreover, the strategy for NE Asian transport hub led by central government is accelerating the aggressive activities of flag carriers
- For example, Korea made an ASA with the US in 1998 for the first time among NE Asian countries, even allowing 'change of the gauge', because it is considered to be helpful in realizing the national strategy
- But, one of the serious problems is the limited domestic market, which becomes major obstacle for the reciprocal negotiation with neighboring countries

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## □ Institutional/Regulatory Barriers

### ○ China

- One of the serious problems of China in accomplishing the integrated transport market is that there remains so many institutional or regulatory barriers, especially in cargo transport market
- First, there is no single regulatory and administrative body
- Second, There is an exclusive license system for domestic companies, which keep foreign-owned company from accessing cargo market(ground transportation, warehousing, custom clearance) without joint venture with domestic firm
- Third, there is a limitation in participating the courier service to just commercial documents or cargo below a certain value
- Fourth, there are so many 'red tapes', such as difficulty in obtaining visas, excessive documentation requirements, time-consuming custom clearance process, etc.

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## ↳ *Institutional/Regulatory Barriers(cont' d)*

### ○ Japan and Korea

- Japan, or Korea is not different with China as far as institutional barriers are concerned
- In Korea, so many license system makes foreign-owned companies difficult in accessing the domestic ground transport or warehousing market
- Difficulty in issuing visas is the problem hung on both countries

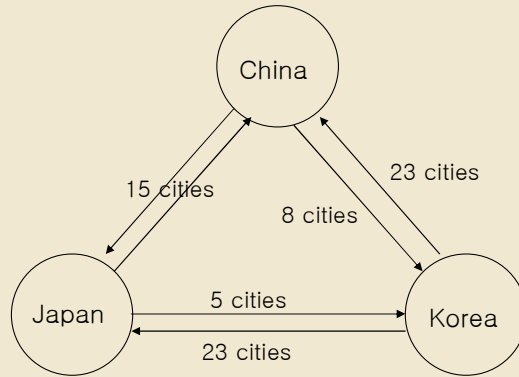
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□ Network Competitiveness

○ Network among 3 countries



↳ Network competitiveness(cont'd)

○ Market Share in 3 countries(2003, %)

|           | Korea-China |       | Korea-Japan |       |
|-----------|-------------|-------|-------------|-------|
|           | Korea       | China | Korea       | Japan |
| Passenger | 59.9        | 40.1  | 65.7        | 34.3  |
| Cargo     | 67.7        | 32.3  | 60.8        | 39.2  |

- Korea has the competitive advantage in all air transport area within NE Asia over China and Japan
- Japan has the competitive advantage over China in Japan-China route
- Because of that, China insists the reciprocity principle based on actual market share and compensation schemes equivalent to its share of bilateral operations
- As the share of Korea has increased, China couldn't exhaust the capacity allotted, which resulted in the "ghost rights"



### Network competitiveness(cont'd)

#### ○ Network with other Regions

|              | China | Japan | Korea |
|--------------|-------|-------|-------|
| 3 Countries  | 23    | 20    | 46    |
| Other Region | 47    | 75    | 53    |
| Total        | 70    | 95    | 99    |

- Except the network among 3 countries, Japan has the competitive advantage, especially with Europe and Southeast Asia
- China is less competitive than 2 countries in network connectivity, due to the reluctant attitude toward ASA's based on protectionism of the flag carriers
- For example, China only allowed code sharing with 2 U.S. carriers in 1998, and opened 3 airports(Shanghai, Beijing, Shenzhen) for U.S. cargo-only carriers

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### Network competitiveness(cont'd)

#### ○ Market Share in the World(2001, %)

|           | China | Japan | Korea |
|-----------|-------|-------|-------|
| Passenger | 3.61  | 5.54  | 2.01  |
| Cargo     | 3.62  | 6.55  | 6.03  |

- Japan is the leading country on the aspect of market share both in passenger and in cargo
- Korea is even behind China in passenger market share, but considering domestic volume and distance, the share of Korea is rather bigger
- As for the cargo market share, the transshipment rate of Korea is almost 50%, whereas that of other 2 countries under 10%, which means Korea is leading in commercial cargo transport business

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## Is It Possible?

### □ Assessment of Competitiveness of 3 Countries

|                     | China | Japan | Korea |
|---------------------|-------|-------|-------|
| Infrastructure      | △     | X     | ○     |
| Industry            | X     | △     | ○     |
| Network             | △     | ○     | ○     |
| Domestic Market     | ○     | ○     | X     |
| Government Attitude | △     | △     | ○     |

- Each country has its own unique weak point: Industry competitiveness in China, insufficient infrastructure in Japan, small market size in Korea
- These keep 3 countries from initiating market integration
- But, integration of Japan and Korea can complement each other's weak point
- And Korea is less threatening to Chinese than Japan in industry competitiveness considering the market size

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### □ Review of Major Issues in Bilateral ASA's among 3 Countries

#### ○ China-Korea

- Compensation scheme: China insisted that a commercial agreement is established between the designated carriers for compensation scheme before services could be launched
- "One route one carrier" policy: China stuck to this principle except Seoul-Beijing route for 4 years, but recently it was resolved on some major routes
- Market attractiveness: Due to the size of the market in Korea, Chinese carriers refused to open new air cargo routes contracted (Beijing, Tianjin, etc.), but some of them resolved recently


#### ○ Japan-Korea

- Slot allocation of Narita Airport: Slot allocation issue is raised partly due to facility shortage, but, in another sense, Japan is reluctant in expanding capacity because U.S. carriers might enlarge NE Asia network through unlimited 5th freedom
- Restriction of 6th Freedom: Japanese carriers and government is concerned about the role of Incheon airport as the NE Asian hub, hence they want to restrict the 6th freedom of Korean carriers
- Opening local gateway: Japan proposed to open local cities as the gateway, but Korea refused, which is the matter of "economies of scope"

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↳ *Review of Major Issues in ASA's(cont'd)*

○ China-Japan

- Bermuda Style Agreement: as in the case of Japan-Korea and China-Korea, China-Japan treaty is also Bermuda style agreement, which doesn't bring about different issues from 2 treaties above
- The 5th Freedom: China looks for American routes and Japan, SE Asian and Europe routes through 5th freedom, which leads to the slot allocation problem, especially in the Narita Airport

▢ *Possibility of resolving disputes*

*: Each agreement has minor issues related with reciprocity, and national interest. But there are no serious problems which can't be resolved as the competitiveness of carriers in each country is strengthened and infrastructure is provided sufficiently*

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## How can It be Accomplished?

*It May not be Done in Near Future, But...*

▢ Northeast Asian Trading Bloc Approach

○ Scheme

- As the Northeast Asian Open-Skies club is not likely to be successful in near future due to the difference of interests, efforts to tie Northeast Asia in a free trade bloc including open skies should be pursued
- It is easier to achieve because the difference of interests in open sky agreement can be compensated by the free trade of other sectors

○ Consideration

- Negotiation may be more complicated and time-consuming due to the diversified issues raised from various sectors

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❑ Sector-/Area-specific Agreement Approach

○ Scheme

- Phased-in approach starting from the sectors or regions which can be easily reached an agreement by each country and moving to another part
- Sector: Cargo Transportation Market, Chartered Flight Market..
- Area : Several Local Airports in each country...

○ Consideration

- Agreement may be left in those specific sectors or areas and no more progress is made in other sectors or areas

❑ Extended ASA's and Strategic Alliance Approach

○ Scheme

- Extending existing agreements through new negotiations and strengthening the alliance among flag carriers through code-sharing

○ Consideration

- It has been underway from 1980s

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## What Is to be Done?

**Direction**

- *From Soft to Hard, from Internal to International*
- *Combining the Proposed Approaches in a Sequence of Practice*

❑ Phase 1: Elimination of Country-specific Barriers

○ China

- Elimination of several license, documentation, etc.
- decentralization and privatization of major flag carriers

○ Japan

- Expansion of airport infrastructure
- Decentralization of type A airports to local government

○ Korea

- Decentralization of airports to local government
- Induce foreign capital to carriers and airport facility and operation

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□ Phase 2: Strengthening the Alliance with Carriers in Neighboring Countries

- Extension of code-sharing with other flag carriers, especially with Chinese carriers
- JV for the establishment of cargo-only carriers by spinning-off cargo sector of existing carriers
- Strengthening the alliance with Hong Kong carriers as the starting point for the integration with Chinese market

□ Phase 3: Sector- or Area-specific Agreement

- Negotiation for the Free Chartered Flight Agreement combined with the open-sky in local airports
- cf) Initiative declaration on free access to local airports in Korea may be helpful
- Multilateral negotiation for the Open sky agreement of cargo-only flight market

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□ Phase 4: Integrated Negotiation for Overall Open Sky Agreement combined with other Sectors

- First, Japan-Korea Open Sky Agreement
- Second, China-Korea Open Sky Agreement
- Third, Multilateral Agreement

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### III. Maritime Transport Market

#### Issues

- *Achievement of Streamlined Cargo Transport*
- *Expansion of Routes and Increase in Frequency*
- *Cost- and Time- Effective Management of Ports*
- *Cooperation of Port Operation*
- *Elimination of Other Institutional Barriers in Each Country*

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### What Has Been Done?

- Infrastructure Provision
  - China
    - Due to the depth limitation of existing ports, Container ports development is now proceeding rapidly, especially Dalian and Tianjin in the north, Shanghai and Ningbo in the central coastal area and in the Pearl River Delta in the south
    - Because of the lack of financial ability to fund the required infrastructure, China has sought the foreign investment through joint venture led by municipal government
    - These plan is backed by “the National Economic and Social Development(Ninth Five Year) Plan and 2010 Vision Program” in 1996
    - But, these may cause an excess capacity and a chaotic conditions of cut-throat competition

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## Foreign Investment in Chinese Ports

| Company      | Ports                 | No. Terminal | Length of Berth | Capacity |     |
|--------------|-----------------------|--------------|-----------------|----------|-----|
| APM Miller   | Dalian                | 1            | 1,461           | 1.5      |     |
| Hutchison    | Shanghai              | 2            | 2,081/900       | 1.7/1.8  |     |
|              | Yantian               | 1            | 2,350           | 3.0      |     |
|              | Xianen                | 1            | 640             | 0.6      |     |
|              | Hutchison Delta Ports |              |                 | 2,611    | 1.2 |
|              | Ningbo                | 1            | 900             | 1.2      |     |
| P&O          | Qingdao               | 1            | 766             | 1.0      |     |
|              | Shekou                | 1            | 650             | 0.8      |     |
| PSA          | Dalian                | 2            | 1,461/555       | 1.5/0.3  |     |
|              | Fuzhou                | 1            | 519             | 0.4      |     |
|              | Guangzhou             | 1            | 1,299           | 1.4      |     |
| CSX Terminal | Tianjin               | 1            | 640             | 1.0      |     |

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## Infrastructure Provision (cont'd)

### ○ Japan

- Japanese ports, especially Kobe, had been No. 1 in NE Asia until the Kobe Disaster in 1995, but, after then, many routes from/to North America and Europe were reorganized and port calls dropped
- Nowadays, cargo throughput in most major ports are under their capacity except Tokyo Port
- Nevertheless, Japanese central and local government have tried to expand port facilities, which is the effort to construct the deep sea ports to cope with the change of vessel size and to meet the need of 'modal shift' of domestic cargo

|          | Port capacity<br>(1000 TEU) |         | No. of berths |         |       |
|----------|-----------------------------|---------|---------------|---------|-------|
|          | existing                    | planned | Existing      | Planned | Total |
| Tokyo    | 2,370                       | 3,439   | 13            | 3       | 16    |
| Yokohama | 3,828                       | 6,679   | 21            | 8       | 29    |
| Osaka    | 2,552                       | 3,621   | 14            | 3       | 17    |
| Kobe     | 6,745                       | 10,308  | 37            | 10      | 47    |

*<Port Expansion Plan until 2015>*

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### ↳ Infrastructure Provision(cont'd)

- Korea
  - Korea has tried to increase the port capacity as a strategy to be the maritime hub in NE Asia
  - Based on the “Two Port System” strategy, New Pusan Port and Gwangyang Port are under construction and many other ports along the Yellow Sea coast are trying to expand their capacity to meet the demand from Northern China
  - But, as the capacity in Chinese ports is expanded, the demand from China is being weakened, which draws a gloomy attention among Korean decision makers

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### □ Development of the Industry

- China
  - Chinese maritime industry is developing quickly along with the above average growth rate in Chinese economy
  - COSCO, Chinese No. 1 maritime company, is ranked No.6 in the world, which is the outcome in 10 years, after China started to have its container terminals in 1994
  - But is criticized to be based on severe protective policy by government, such as the rate discrimination between domestic and foreign shipping line, cargo waiver system, etc
- Japan
  - Japanese shipping industry is creeping due to the competitive disadvantage caused by high input cost compared with Chinese and Korean shipping line
  - Major policies of Japanese government are concerned with domestic shipping line rather than international shipping line, as well

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#### ↳ *Development of the Industry(cont' d)*

- Korea
  - Korea has 2 major shipping line, Hanjin and Hyundai, which is No. 4 and No. 18 in 2002, respectively
  - Many medium- and small- size shipping lines are operating especially based on the China-Korea, China-Japan, and Japan-Korea routes

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#### □ Institutional/Regulatory Barriers

- Overall
  - Most of major barriers are eliminated through the WTO accession
  - But, in spite of free market, 3 countries have blocked foreign shipping lines from free operation in the region though bilateral negotiation
  - Limitation on domestic logistics market through license system, inconvenient custom clearance, lack of integrated EDI system
- China
  - There is a barrier for foreign shipping lines to operate in domestic shipping lines
  - China still has the cargo waiver system in some important items even after the accession of the WTO
- Japan
  - The most important barrier is “the prior consultation system” by the Japan Harbor Transportation Association

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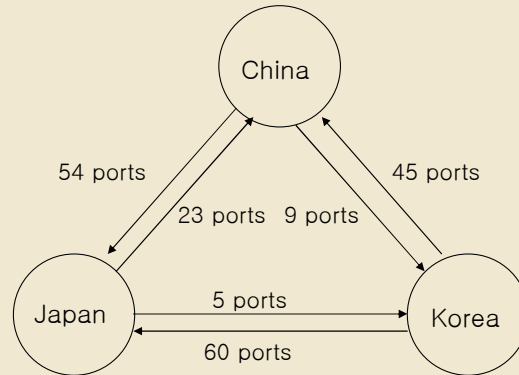
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□ Network Competitiveness

○ Network among 3 countries



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↳ Network competitiveness(cont'd)

○ Market Share in 3 countries(2002, %)

|       | Korea-China |       | Korea-Japan |       | China-Japan |       |
|-------|-------------|-------|-------------|-------|-------------|-------|
|       | Korea       | China | Korea       | Japan | China       | Japan |
| Cargo | 62.2        | 37.8  | 95          | 5     | 95.3        | 4.7   |

- Korea has the competitive advantage in all maritime transport area within NE Asia over China and Japan
- China has the competitive advantage over Japan in Japan-China route
- Actually, china and Korea has agreed to deploy the same number of ships to the Korea-China routes, which is the limitation of free market

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Network competitiveness(cont'd)

Network with other Regions (2001, calls/week)

|           | North America | Europe | SE Asia | NE Asia | Round the World | Total |
|-----------|---------------|--------|---------|---------|-----------------|-------|
| Hong Kong | 62            | 59     | 125     | 40      | 4               | 290   |
| Inchon    | 0             | 1      | 5       | 5       | 1               | 12    |
| Gwangyang | 12            | 4      | 7       | 8       | 0               | 31    |
| Pusan     | 41            | 19     | 23      | 110     | 2               | 195   |
| Yokohama  | 45            | 21     | 80      | 110     | 3               | 259   |
| Kobe      | 37            | 18     | 72      | 112     | 2               | 241   |
| Dalian    | 1             | 2      | 3       | 23      | 0               | 28    |
| Qingdao   | 7             | 5      | 3       | 24      | 0               | 38    |
| Tianjin   | 1             | 1      | 1       | 1       | 0               | 4     |
| Shanghai  | 15            | 13     | 7       | 46      | 0               | 80    |

- In the aspect of total calls per week, Japan has the competitive advantage over China and Korea
- considering the port call to Japanese port is just to treat Japanese own cargo for trade, Pusan's connectivity as the hub is stronger than any other ports except Hong Kong
- The fact that direct call to the northern Chinese ports is increasing rapidly is worth draw attention

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Network competitiveness(cont'd)

Market Share (2001, thousand TEU)

|               | Singapore | Hong Kong | Pusan | Gwangyang | Tokyo | Shanghai |
|---------------|-----------|-----------|-------|-----------|-------|----------|
| Total         | 15,571    | 17,800    | 7,907 | 846       | 2,800 | 6,340    |
| Transshipment | 12,768    | 5,287     | 2,899 | 163       | 280   | 63       |
| %             | 82.0      | 29.7      | 36.7  | 19.2      | 10.0  | 1.0      |

- As for the rate and the size of the container transshipped, Pusan is the leading port in NE Asia
- But, considering the number of direct calls and total container throughput in northern Chinese ports are increasing, the position of Pusan as the hub port is very precarious

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## Is It Possible?

### □ Assessment of Competitiveness of 3 Countries

|                     | China | Japan | Korea |
|---------------------|-------|-------|-------|
| Infrastructure      | ◎     | ○     | ○     |
| Industry            | △     | X     | ○     |
| Network             | ○     | ○     | ○     |
| Domestic market     | ◎     | ○     | X     |
| Government Attitude | ○     | △     | ◎     |

- Japan and Korea have their own unique weak points: Industry competitiveness in Japan, small market size in Korea
- Especially Korea suffers from small domestic market size whereas the industry competitiveness is strong, which drives Korea proactive toward the market integration
- But, China wants to protect its flagship from competition for the time being
- Nevertheless, the market integration is inevitable under the WTO sooner or later

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### □ Review of Major Issues in Bilateral Negotiations

#### ○ China-Korea

- Container shipping between northern ports in China and western ports in Korea : Due to the lack of the container lines, the shipping charge is too high compared with northern ports-Pusan route
- Accessing Chinese domestic market : JV is necessary to enter the Chinese domestic market

#### ○ Japan-Korea

- Participation of Japanese lines into Korea-Japan Trade Route: From 1996, Japanese line entered into K-J route, but there remains continuous excess capacity of ship space
- Elimination of Prior Consultation System : Employment of designated domestic stevedoring company

#### ○ China-Japan

- Price war : Due to many small lines involved and short-sea shipping, cut-throat competition among lines resulted in severe operational deficit, which makes the Japanese lines faded out

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## What is to be done?

*There remains some redundant tissues, But NE Asian maritiem market will be integrated in near future...*

- ❑ Streamlined Logistics Service
  - Development of 3 PL logistics and specialized logistics firm
  - Improvement of inter-modality
  - Equal access to domestic market
  - Introduction of combined EDI system
  
- ❑ Revitalization of JV on Infrastructure and Industry among 3 country
  - Cross investment on port facilities
  - Establishment of JV on Chinese-Korea lines and Chinese-Japanese lines

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## IV. Conclusion

- *As the integration of air transport market needs some more time, phased-in strategy is to be prepared*
- *Issues on maritime market integration should be resolved based on the WTO standard*
  
- ☞ **Establishment of the regional body to negotiate overall interests of each country and to draw effective decision is recommended**

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