

Air Freight Market and hub policy of Incheon International Airport

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Executive Summary

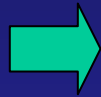
- The air freight industry has proven to be a growth industry. The cargo division would be more important part in aviation industry, and furthermore, the greater part of air cargo in airlines, the more efficient airlines.
- Business model of Incheon International Airport is that the Airport would have to combine global logistics function through the attraction of Logistics hubs for multinational company including integrated express company.

Introduction

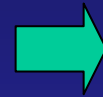
- All-cargo carriers developments are indicative of the optimism that the airline industry has concerning future growth in demand for international air freight services.
- Open skies are driven by passenger airline considerations, although these have a more direct beneficial spin-off on freighter operations.
- A number of new cargo airline initiatives are underway in China. China may need large domestic air freight networks in addition to air freight support for their export-driven economies.

Evolution of Air Freight by periodically

**Simple
Transport**



**Seamless
Transport**



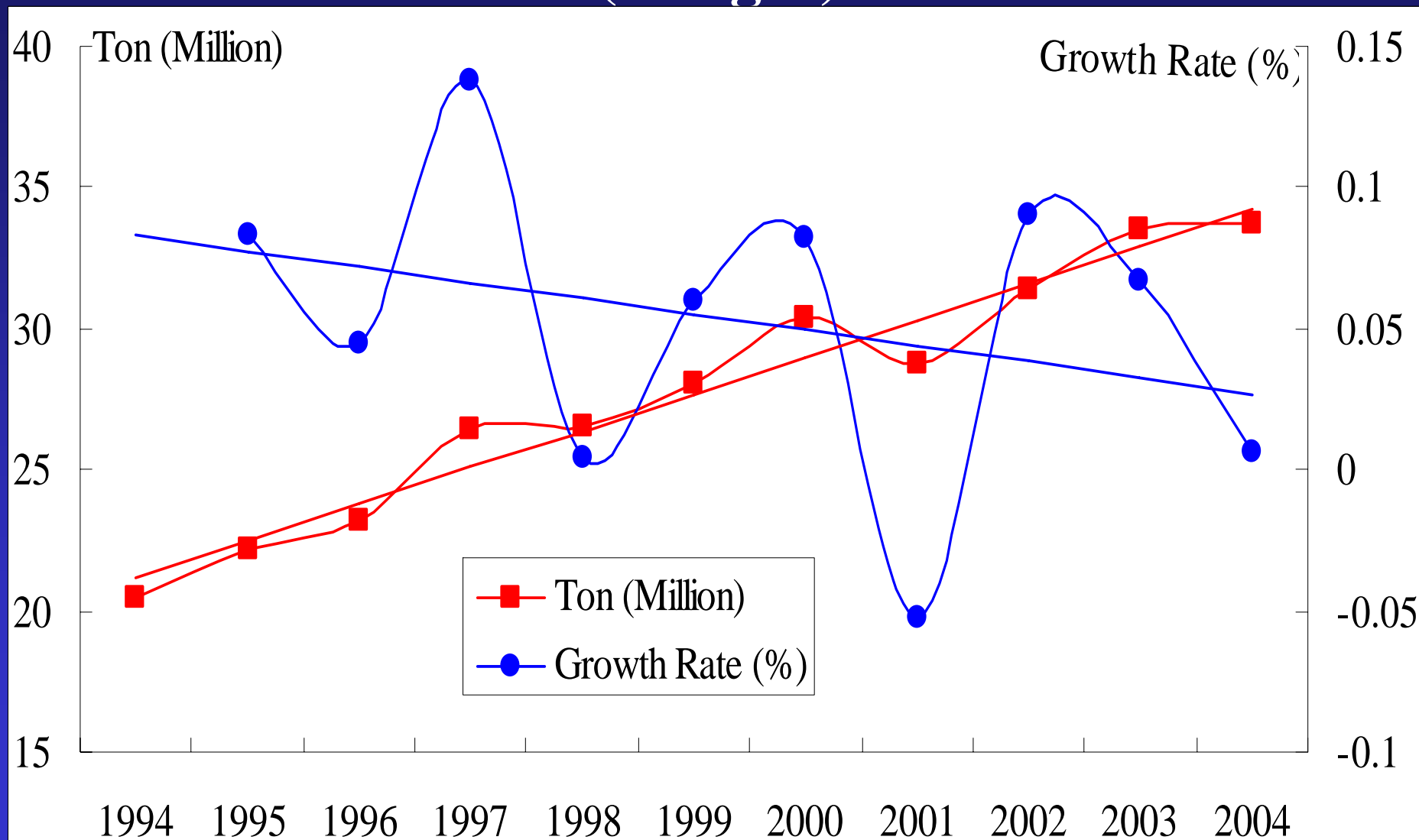
**Integrated
Logistics**



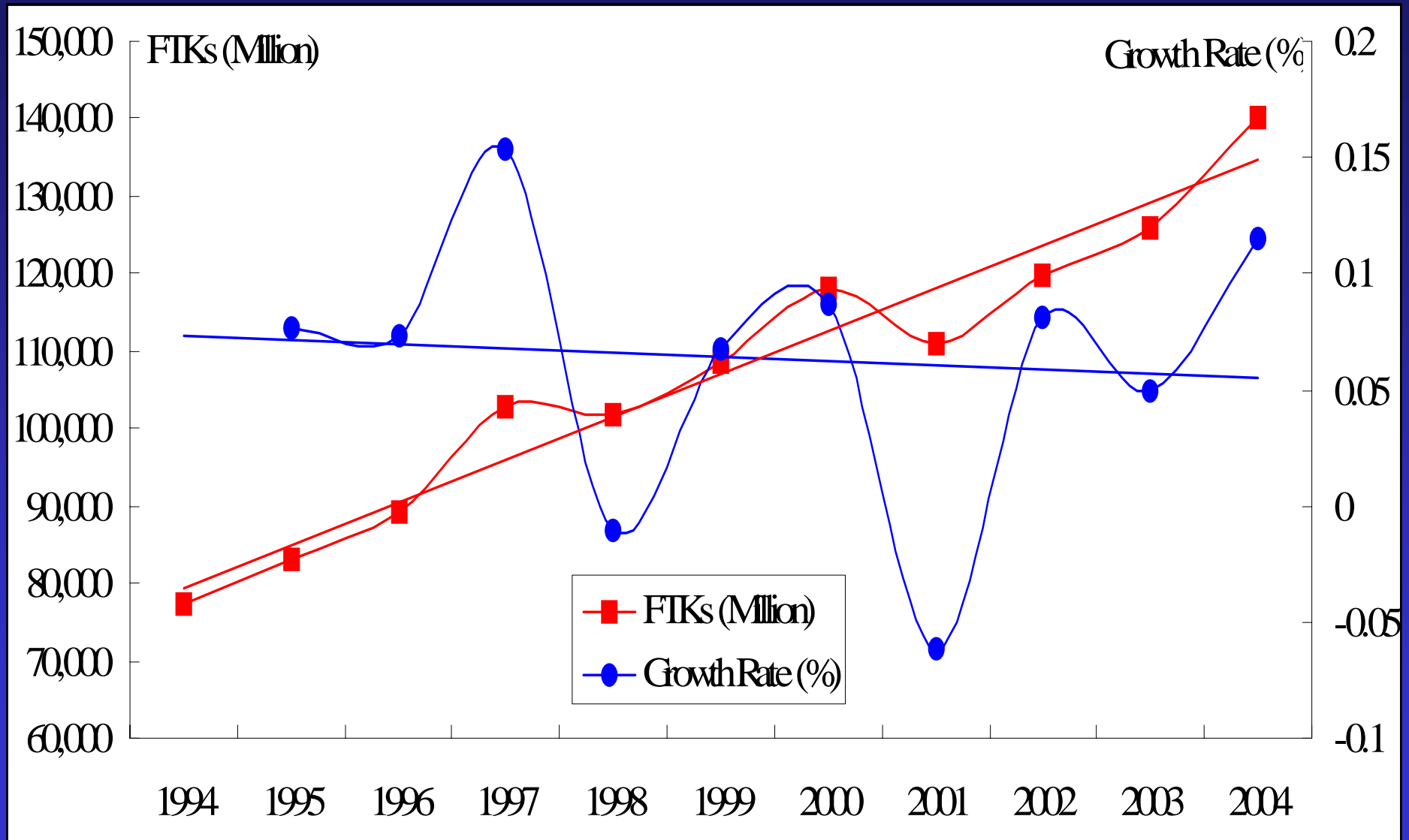
**Digital
Logistics**

	1970s	1980s	1990s	2000s
Service Provider	Transporter	Integrated Transporter	Integrated Logistics Providers (3PL, LLP)	Digital Logistics Providers (4PL)
Service Contract	Contract by every step of transport	Consistent Transport Contract	Transport + warehouse + Distribution Process	Integrated Logistics + IT
Scope of Service	Port to Port Service	Door to Door Service	Door to Door inventory management	Door to Door Inventory management + IT
Service Characteristic	Simple Transport Service		Integrated Logistics Service	Digital Logistics Service

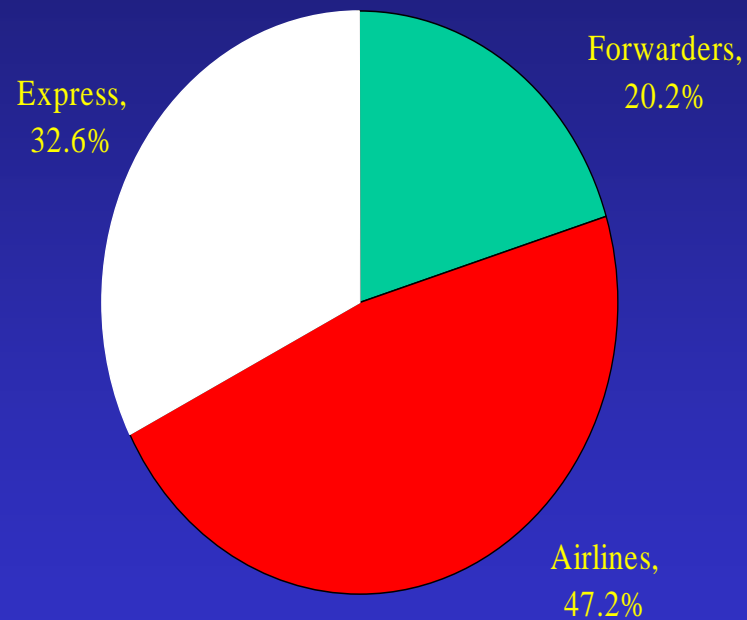
International Freight Traffic Trends (Weight)



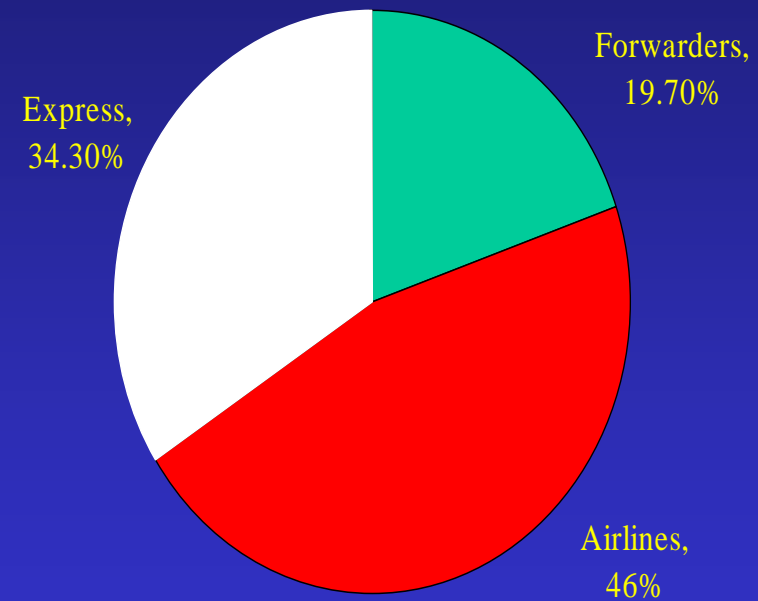
International Freight Traffic Trends (FTKs)



Global Market Revenue 2004 (Int'l Air Freight & Express)

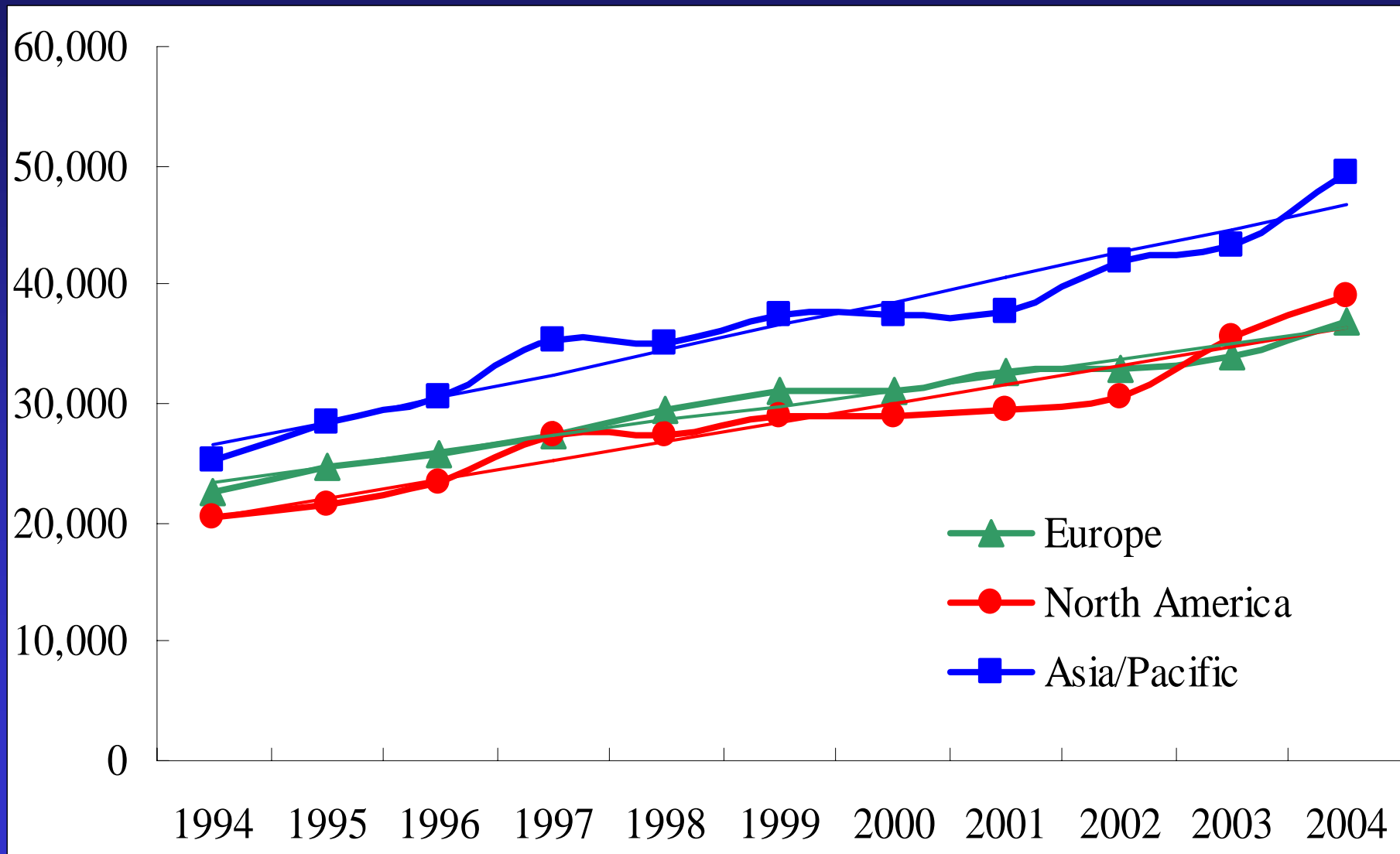


Source : ACMG, 2004



Source : ACMG, 2005

Freight Traffic Trends by Region (FTKs)



International Freight Traffic Trends

- Freight traffic growth exceeded 7% in most years during the 1990s. The worst years in terms of air freight growth in that decade were 1991 and 1998.
- The unprecedented drop in freight traffic that took place in 2001, with a 7% decline.
- Air Freight growth throughout the 1990s was fueled by the globalization of trade, the push by manufacturers worldwide toward more efficient supply chains and the expansion of e-commerce.
- A 5% increase in international freight traffic for 2002, and 3.5% increase 2003. As such, the 2002 and 2003 growth barely got the back to the level reported in 2000.

Freight Tonnes Carried by Countries

Unit: FTKs (Million)

Rank	1994			2004		
	Countries	FTKs	Rate (%)	Countries	FTKs	Rate (%)
1	USA	19,021	24.6	USA	37,450	26.7
2	UK	6,399	8.3	Japan	8,938	6.4
3	Japan	6,008	7.8	China	8,188	5.8
4	Germany	5,375	7.0	Germany	8,064	5.8
5	Korea	4,643	6.0	Korea	7,969	5.7
6	France	4,345	5.6	Singapore	7,193	5.1
7	Singapore	3,245	4.2	UK	5,698	4.1
8	Netherland	3,206	4.2	France	5,584	4.0
9	Australia	1,794	2.3	Netherland	4,779	3.4
10	China	1,714	2.2	Luxembourg	4,670	3.3
	Total	55,750	72.2	Total	98,533	70.3
Total of 188 countries		77,220	100		140,221	100

Note : Including International and domestic scheduled freight

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Airport's Performed comparing 1994 and 2004

Rank	1994		2004	
	Airports	Tonnes	Airports	Tonnes
1	Memphis	1,653	Memphis	3,554
2	Narita	1,605	Hong Kong	3,119
3	LA	1,545	Narita	2,373
4	New York(JFK)	1,449	Anchorage	2,252
5	Fankfurt	1,401	Incheon	2,133
6	Louisville	1,347	LA	1,913
7	Miami	1,332	Paris-CDG	1,876
8	Hong Kong	1,320	Frankfurt	1,838
9	Chicago	1,255	Singapore	1,795
10	London Heathrow	1,047	Miami	1,778

Note : Including domestic and international, Source : ACI, 1994 & 2005

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Comparison of HKG, NRT and ICN airports

Unit: 000 tonnes	2001	2002	2003	2004	Growth Rate(%)	Transshipment Rate (%)
HKG	2,100	2,505	2,669	3,133	9.0	21.0
NRT	1,681	2,002	2,155	2,373	6.0	19.0
ICN	1,197	1,706	1,843	2,133	7.5	46.0*
SIN				1,795		40.0

***: based on 2004**

Source : ACI

Freight Demand Forecast of ICN



Market Share by Carrier at ICN

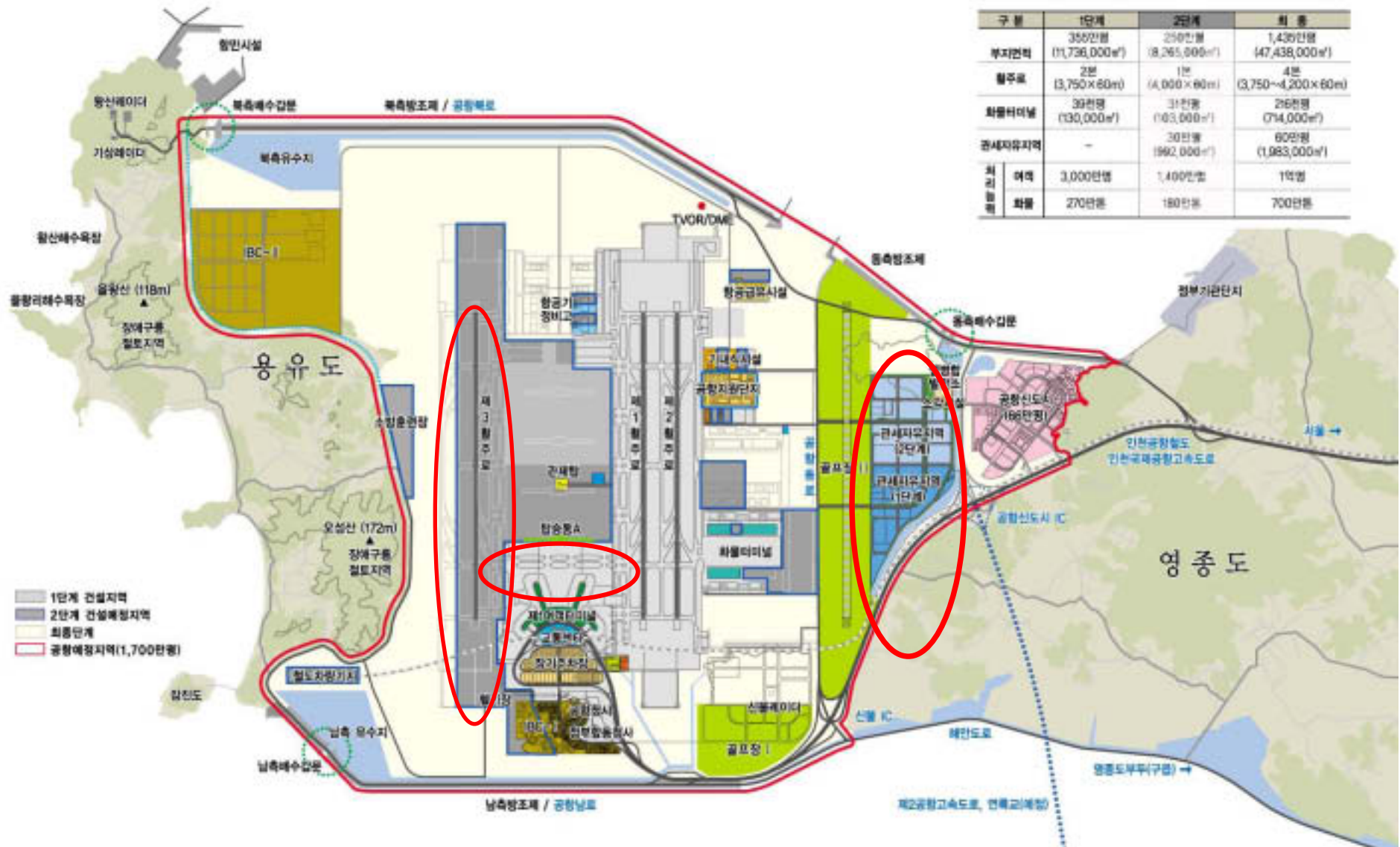
	2002			2003			2004		
	Weight (Ton)	Share (%)	Growth Rate (%)	Weight (Ton)	Share (%)	Growth Rate (%)	Weight (Ton)	Share (%)	Growth Rate (%)
KE	978,801	47.2	13.4	1,053,571	47.7	7.6	1,210,739	47.1	14.9
OZ	449,324	21.6	16.7	463,212	21.0	3.1	519,646	20.3	12.2
National Carriers	1,428,125	68.8	14.4	1,516,783	68.7	6.2	1,730,386	67.4	14.1
Foreign Carriers	648,681	31.2	5.4	692,011	31.3	6.7	838,747	32.6	21.2
Total	2,076,806	100	11.4	2,208,794	100	6.4	2,569,133	100	16.3

Cargo Characteristic at ICN

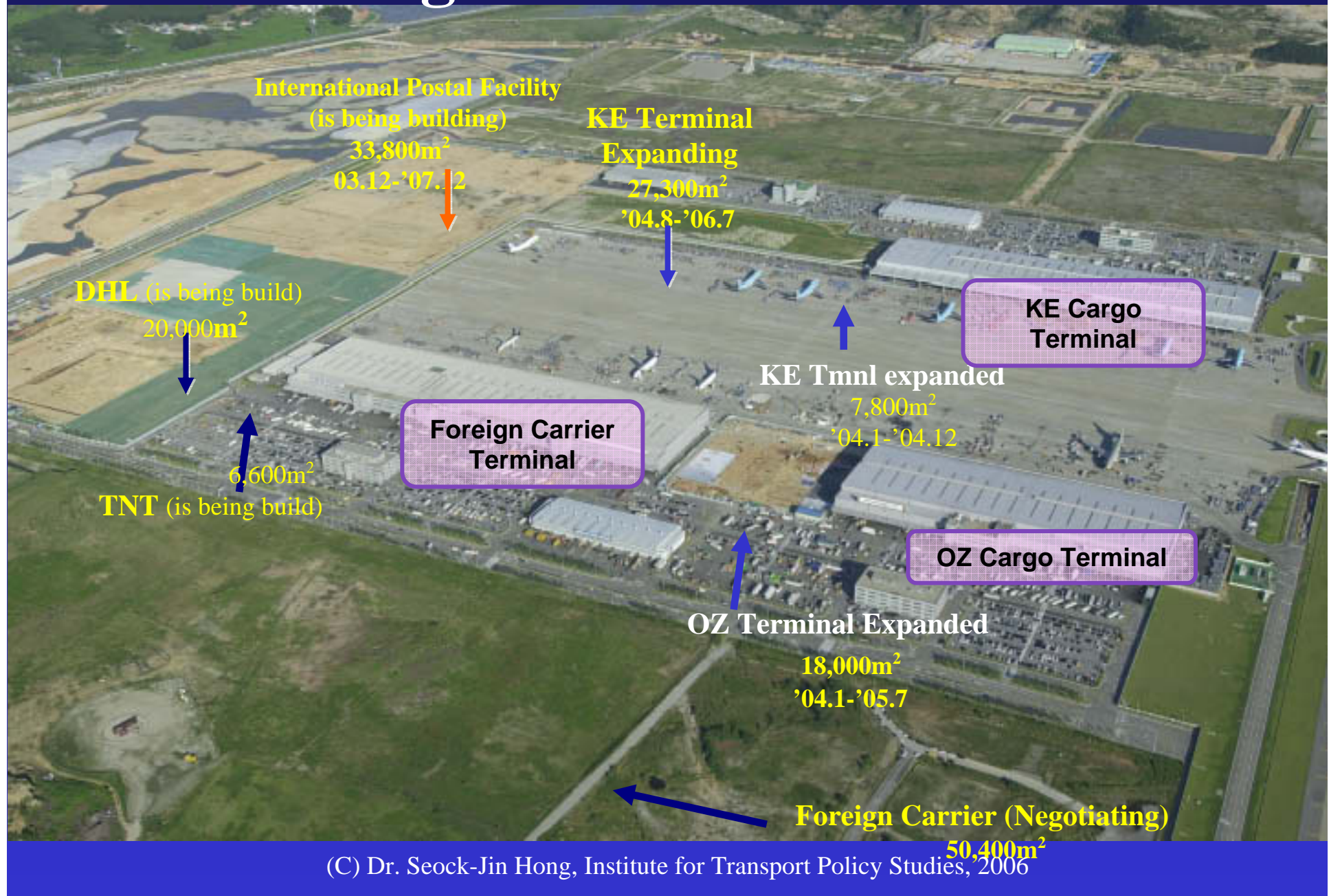
		2001	2002	2003	2004	2005
Cargo Performed (ton)	Total	1,533	1,705	1,843	2,133	2,150
	O/D Traffic	-	918	989	1,149	1,215
	Transshipment	-	787 (46.1%)	954 (51.8%)	984 (46.1%)	935 (43.5%)
Growth Rate (%)	Total	-	11.2	8.1	15.8	0.8
	O/D Traffic	-		7.7	16.2	5.7
	Transshipment	-		21.2	3.1	-5.0

Note : Including Postal

Incheon International Airport



Cargo Terminal of ICN



Airport Logispark of ICN

Logistics facilities area

물류시설지구

- 19 필지
- 70,031평(231,507 m²)
- 건폐율: 50%
- 용적율: 100%
- 고도제한: 15m 이하

공공시설

직반송로

Manufacturing area

생산시설지구

- 20필지
- 71,510평(236,396m²)
- 건폐율: 50%
- 용적율: 200%
- 고도제한: 30-45m

Free Trade Zones



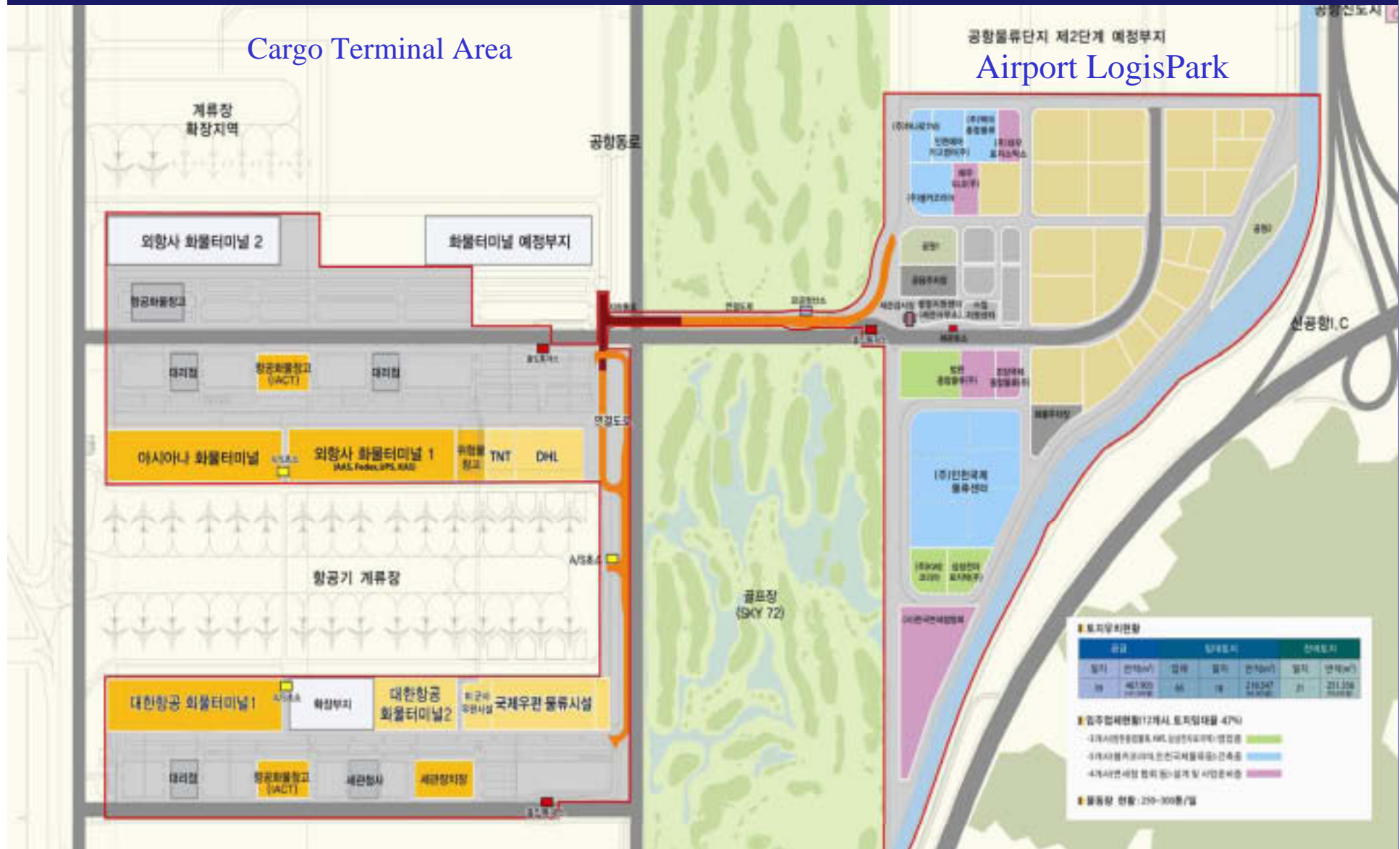
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Airport Logispark & Cargo Terminal of ICN

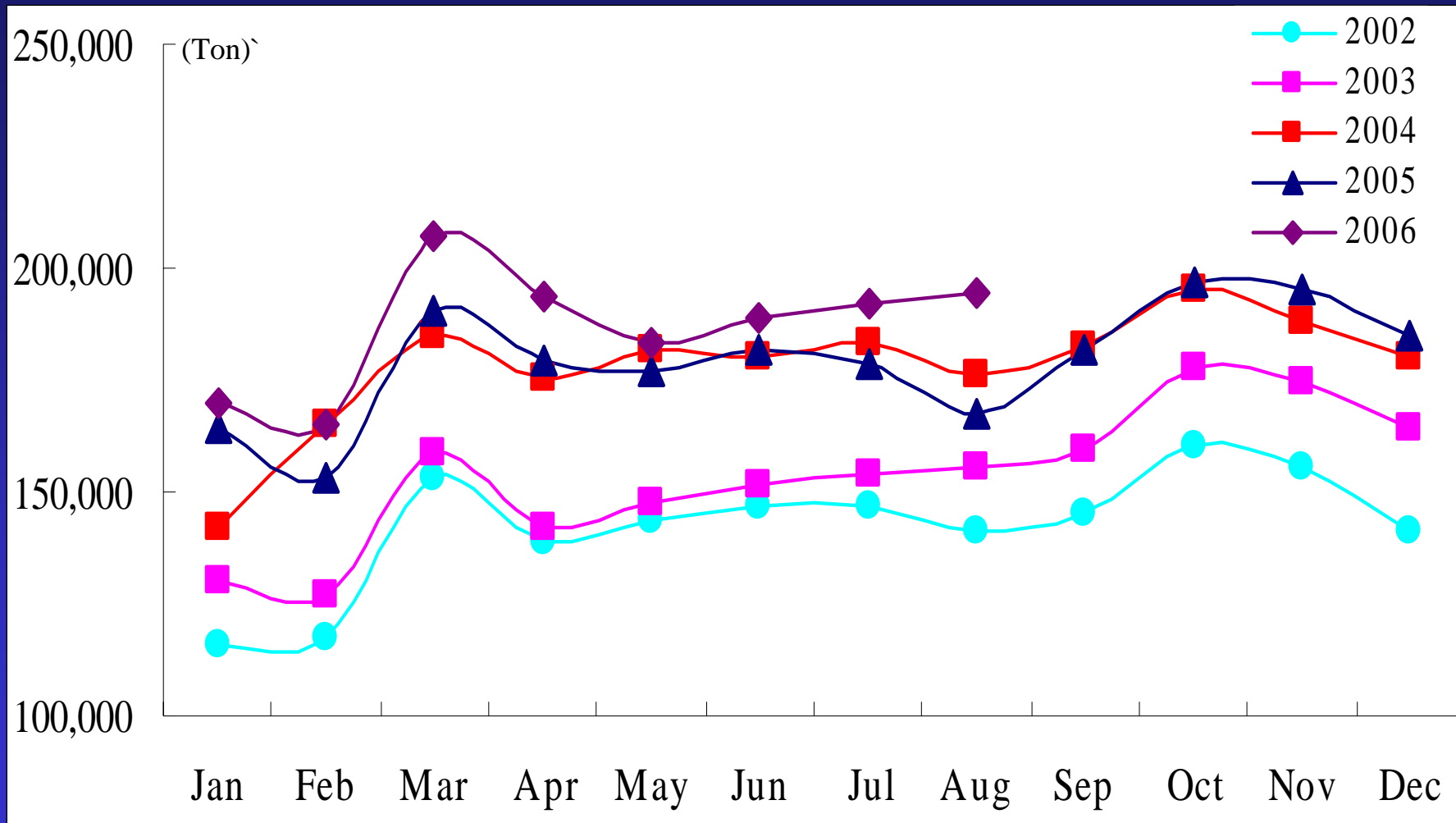


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Airport LogisPark & Cargo Terminal of ICN



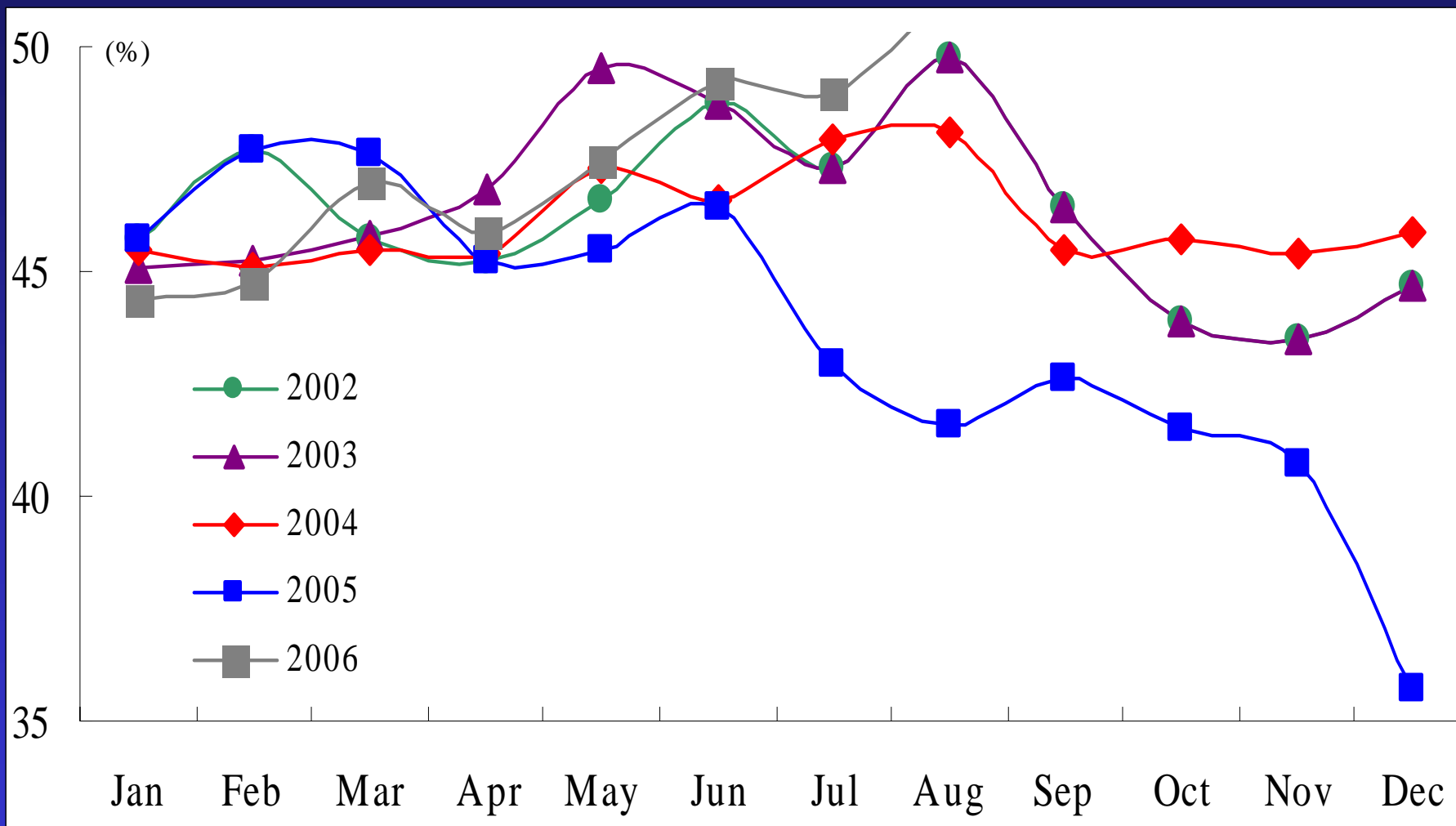
Freight tonnage at ICN by Month



From Jan 2002 to Aug. 2006

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Transshipment Rate at ICN by Month



From Jan 2002 to Aug. 2006

Ratio of Air Cargo on Total Korean Import and Export in the aspect of the amount and tonnage

	2001	2002	2003	2004	2005	2006 (Jan-Mar)
Ratio of amount of Air Cargo on Total Korean Im-Ex (%)	28.7	30.7	32.4	32.1	29.6	28.4
Ratio of weight of Air Cargo on total Korean Im-Ex (%)	0.2	0.2	0.2	0.2	0.5	0.4

Source : KITA

Transshipment Rate at ICN from Oct 2003 to Nov 2005

Unit: Ton	Oct. 2003			Oct. 2004			Oct. 2005		
	Cargo-TTL	Transshipment	Rate of Trans	Cargo-TTL	Transshipment	Rate of Trans	Cargo-TTL	Transshipment	Rate of Trans
ICN	177,776	80,339	45.2%	195,169	89,223	45.7%	196,587	81,532	41.5%
KE	99,459	44,952		112,630	51,471		109,917	45,615	
OZ	42,833	19,360		44,294	20,242		48,176	19,993	

Unit: Ton	Nov. 2003			Nov. 2004			Nov. 2005		
	Cargo-TTL	Transshipment	Rate of Trans	Cargo-TTL	Transshipment	Rate of Trans	Cargo-TTL	Transshipment	Rate of Trans
ICN	177,556	78,347	44.9%	187,952	85,214	45.4%	195,181	79,407	40.7%
KE	95,045	42,675		103,756	47,105		109,403	44,527	
OZ	42,787	19,211		45,694	20,745		46,900	19,088	

Transshipment by Region

(Oct. 2005)

Region	Weight (ton)	Rate (%)
Oceania	951	1.3
South-East Asia	16,091	22.1
America	21,613	29.7
Europe	10,605	14.6
Japan	11,826	16.3
China	10,719	14.7
Korea	767	1.1
Others	164	0.2
Total	72,736	100.0

Transshipment by A/C types

A/C Type	Weight (ton)	Rate (%)
Cargo A/C	44,482	61.2
Pax. A/C	27,620	38.0
Combi A/C	612	0.8
Total	72,714	100.0

- 67.8% of KE cargo imported and 74.9% exported by freighter.
- 71.3% of OZ cargo imported and 53.1% exported by freighter.

The duration from origin to destination

	Weight (ton)	Rate (%)
1 day	6,589	18.1
2 days	13,293	36.6
3 days	6,869	18.9
4 days	4,011	11.0
5 days	2,430	6.7
6 days and more	3,165	8.7
Total	36,357	100

- About 73.6% of air cargo was carried within 3 days and 91.3% within 5 days.

Transshipment flow (KE)

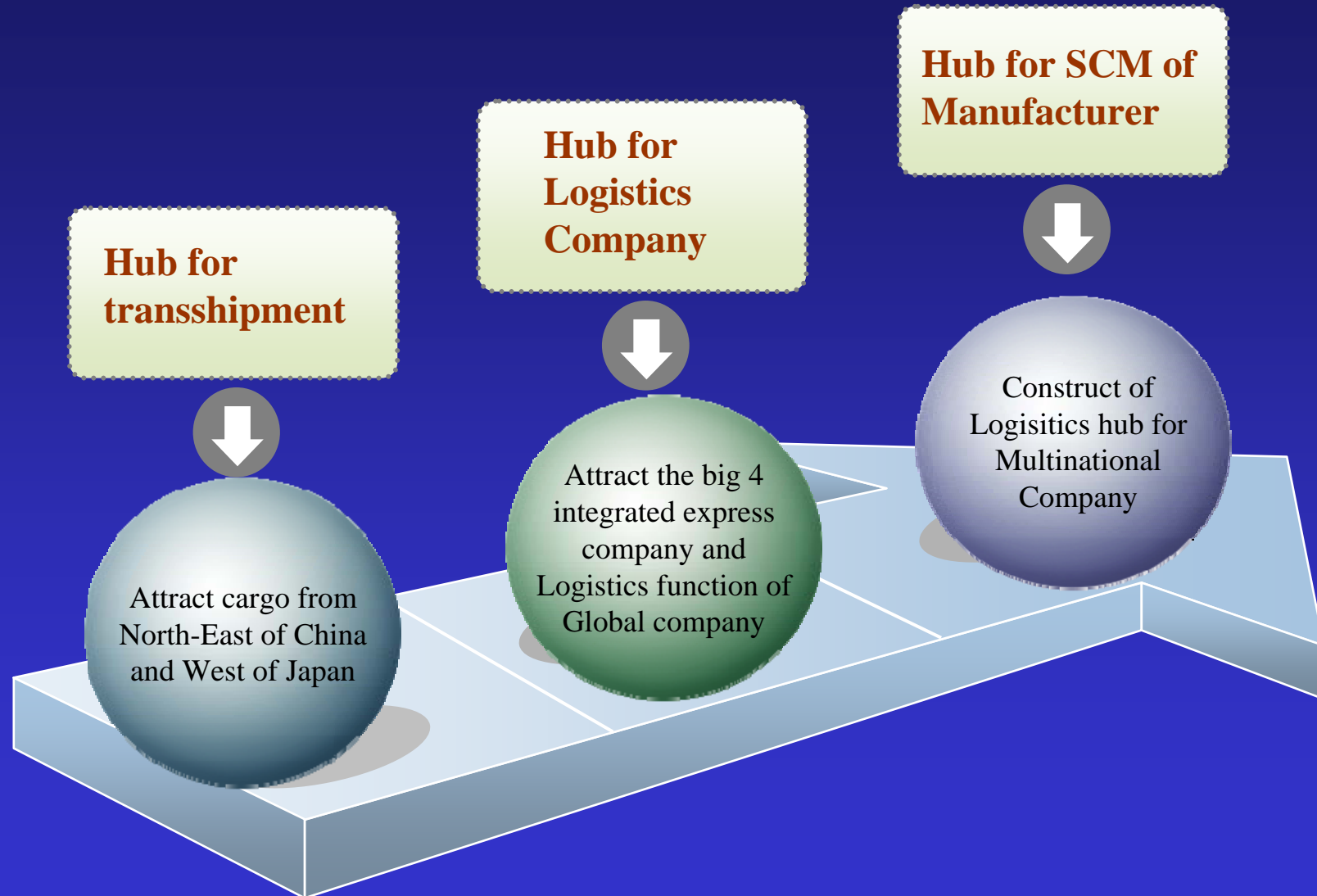
Route	Im. weight(ton)/ Unit weight (kg)	Ex. weight(ton)/ Unit weight (kg)	Import (%)		Export (%)		Avg. days
			Freight	Pax	Freight	Pax	
SE Asia- America	5,636(23.3%)/ 8.05	5,584(23.3%)/ 8.07	72.7	27.3	84.5	15.5	2.2
China- America	4,577(19.3%)/ 11.59	4,511(18.8%)/ 11.35	70.7	29.3	87.6	12.4	3.1
Japan- America	2,181(9.0%)/ 19.55	2,169(9.0%)/ 19.50	55.5	44.5	89.4	10.6	2.2
Japan- Europe	2,167(8.9%)/ 26.74	2,169(9.0%)/ 26.71	55.8	44.2	88.1	11.9	2.3
Europe- Japan	1,854(7.7%)/ 43.47	1,854(7.7%)/ 43.47	94.0	6.0	57.4	42.6	2.3
China- Europe	1,014(4.2%)/ 17.33	1,014(4.2%)/ 17.33	61.7	38.3	71.7	28.3	3.3
America-SE	781(3.2%)/40.15	781(3.3%)/40.15	90.5	9.5	73.5	26.5	3.3
Japan-SE	761(3.1%)/35.80	761(3.2%)/35.80	37.8	62.2	59.6	40.4	1.4

Note : the figure of () is a proportion of total.

Transshipment flow (OZ)

Route	Im. weight(ton)/ Unit weight (kg)	Import (%)		Export (%)		Avg. days in the route
		Freight	Pax	Freight	Pax	
SE Asia- America	3.113(25.4%)/10.74	27.51	72.49	58.24	41.76	2.4
China-America	2,217(18.1%)/23.64	16.53	83.47	50.88	49.12	2.9
SE Asia-Europe	1,094(8.9%)/11.34	6.77	93.23	76.94	23.06	1.2
Japan-America	798(6.5%)/26.74	58.30	41.70	56.84	43.16	2.3
China-Europe	738(6.0%)/13.35	16.53	83.47	50.88	49.12	3.1
Japan-SE Asia	754(6.1%)/34.31	17.11	82.89	17.26	82.74	1.4
America-SE	836(6.8%)/83.93	54.85	45.15	54.19	45.81	3.1
Europe-Japan	819(6.7%)/83.24	86.45	13.55	66.91	33.09	2.4

Business Model of ICN



Air Traffic and Cargo Flow among three countries

	Freq. per week	Passenger (000)	Cargo (000 ton)
Korea-Japan	439	7,320	432
Korea-China	592	4,630	354
Japan-China	592	6,450	432
Total	1,623	18,400	1,218

- Last June, Korean and Chinese government expanded their traffic route and liberalized between Korea and Sandung province. Furthermore, two countries agreed liberalize their aviation market by 2010.
- Liberalized bilateral with China that will allow more opportunity to make hub of Incheon international airport.

Questions and Answers

End of Presentation