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아시아의 관문에서 세계의 중심향으로 글로벌 허브항민 BUSAN PORT

01

Current Status of Busan Port

- 1-1. Economic & Geographical Strengths
- 1-2. Current Status of Busan Port
- 1-3. 3rd Largest Global Network

Located at the center of Northeast Asian economy



26% of Global GDP



22% of **Global Population**

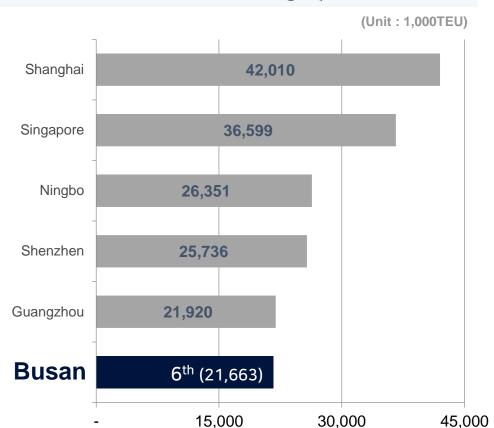


40% of Global Containers

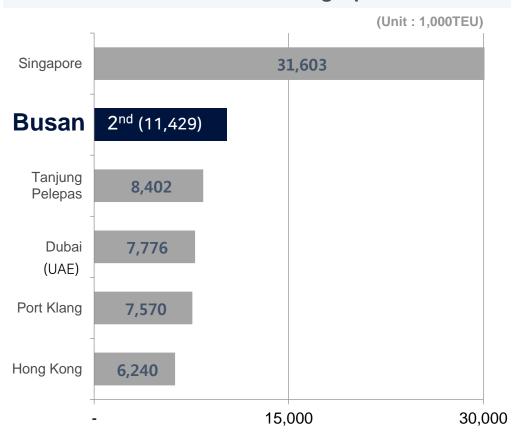


6th busiest container port & 2nd busiest transshipment port in the world

World's Container Port ranking by total volume

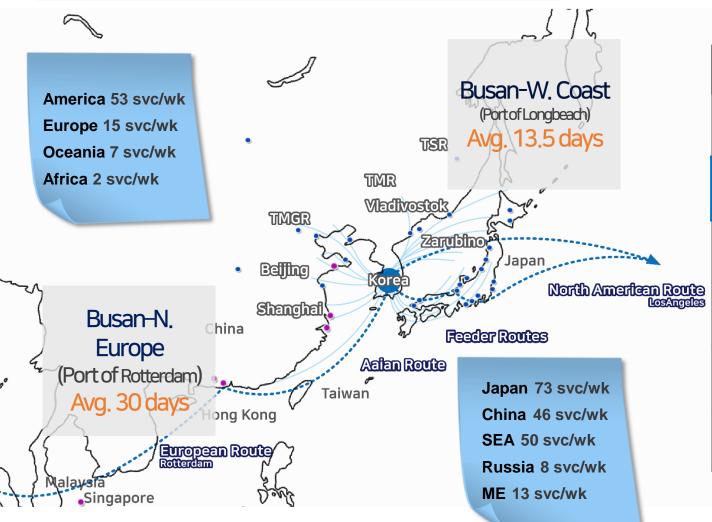


World's Container Port ranking by T/S volume



* Source: Drewry, Container Forecast & Annual Review 18/19 (Hong Kong Mid-Stream volume was converted from transshipment to export/import.)

2019 Busan Port's weekly service network



Change Trend of Main Port`s PLSCI

* PLSCI(Port Liner Shipping Connectivity Index)

6		
Rank		(1
5		(
1		SI (
2		Si (
3		Ho (
10		1
	1 2 3	Rank 5 1 2 3

2014							
Port (PLSCI)	Rank						
Busan (101.5)	4						
Shanghai (120.2)	1						
Singapore (111.1)	2						
Hong Kong (107.2)	3						
Ningbo (96.9)	5						

2019	
Port (PLSCI)	Rank
Busan (114.5)	3
 Shanghai (134.3)	1
Singapore (124.6)	2
Ningbo (114.4)	4
Hong Kong (102.8)	5

* PLSCI Standard : Hong Kong in 2006 ** Source : unctadstat,unctad.org

아시아의 관문에서 세계의 중심향으로 글로벌 허브항민 BUSAN PORT

02

Changes in NEA Trade Pattern

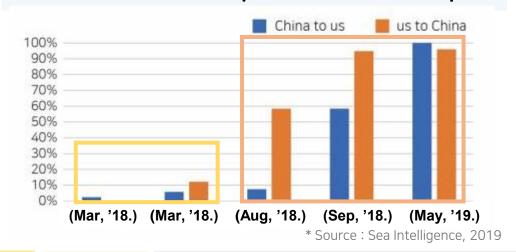
- 2-1. Prolonged US-China Trade Dispute
- 2-2. Prolonged Korea-Japan Trade Dispute
- 2-3. Signing of US-Japan Trade Agreement (USJTA)
- 2-4. China Eases Foreign Investment Regulation



25% tariff increase for 1,334 items

25% tariff increase for 106 items

Containers affected by US-China trade dispute



Minor

Before Mar, '18.

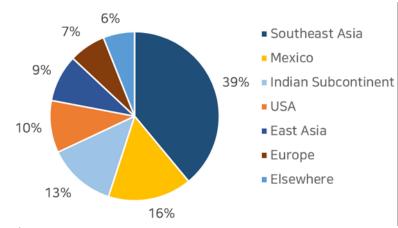
- US warns to impose tariff
- China warns to retaliate

Aug, '18.~ **Major** May, '19.

- (Aug, '18.) Mutual 25% tariff on \$16billion goods · (Sep,'18.) Start to impose tariff
- (US) 10% on \$200billion goods
- (China) 5~10% on \$60billion goods
- · (May, '19.) US, 4th tariff increase and China's counteraction

- (Mar. 2018) US signs Executive Order as trade sanction against China
- (Apr. 2018) China raises tariffs on US
- (May. 2019) US raises tariffs on China for the 4th time
- (May. 2019) China raises tariffs on US

Inclination of US companies in China to move their production base elsewhere



- 41% of respondents will consider to move their manufacturing base outside of China
- Among them, 39% said they will move to **Southeast Asian** countries.



* Source: The American Chamber of Commerce in China, 2019.5

[Major impact of trade dispute]

- 1 US-China service route reduction
- ② SEA(South East Asia) port calling & coverage increase
- ③ RFE(Russian Far East) Service increase (KOR, JAP, TAIWAN)
- 4 EU-US vessel & coverage increase



- · Remove Japan from whitelist
- "List Regulation" on 3 items
- Catch call regulation on 1,194 items

- (Jul. 2019) Japan strengthens regulation on 3 items (e.g. hydrogen fluoride)
- (Aug. 2019) Japan removes Korea from whitelist
- (Sept. 2019) No Japan Movement spreads among Korean public

Busan-Japan export/import volume

(Unit:1.000 TEU)

					(01116)	11,000 120)
Class (Full Con)	2017	2018	Change	2018.1~8	2019.1~8	Change
Import	290	286	1.4%	187	181	-2.7%
Export	373	372	-0.3%	247	242	-1.9%
Total	663	658	0.6%	434	423	-2.3%

* Source: Port-MIS

Busan-Japan Ferry passenger/cargo statistics

(Unit: 1,000 people, 1,000 ton)

	2017	2018	Change	2018.1~8	2019.1~8	Change
Passenger	1,404	1,432	2.0%	961	826	-14.1%
Cargo	2,226	2,012	-9.6%	1,251	1,243	-0.6%

(Unit: 1,000 people, 1,000 ton)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	
2018	129	126	104	134	116	106	110	138	
2019	123	129	123	120	117	101	71	43	+
Growth rate	-4.7%	1.7%	18.3%	-10.8%	1.0%	-5.2%	-35.4%	-68.6%	

* Source: BPA

- ① Import from Japan decreased due to boycott movement in Korea
- ② Passenger shipping/travel business suffer due to decreased travel to Japan
 - ③ Japan might import less Korean products (e.g. seaweed, kimchi) in the future



Lower automobile tariffs for Japan

Lower agricultural/livestock tariffs for the US

- (Sept. 2018) USJTA negotiation begins
- (Jun. 2019) 4th trade negotiation is held
- (Sept. 2019) USJTA is concluded at UN General Assembly
- * Tariff cuts on Agricultural&livestock products, industrial products, digital trade, etc.
- · (US) Tariff cuts on Japan's industrial products
- · (Japan) 90% of tariff cuts on US's agricultural&livestock products

Major trade partners of the US

(Unit: 1 million dollars, %)

	Major Exp	ort Country			Major Impo	jor Import Country			
Rank	Country	Export	Portion(%)	Rank	Country	Export	Portion(%)		
1	EU	320,183	19.1	1	China	540,431	21.1		
2	Canada	300,458	17.9	2	EU	489,780	19.1		
3	Mexico	265,999	15.9	3	Mexico	352,583	13.8		
4	China	120,829	7.2	4	Canada	325.017	12.7		
5	Japan	75,958	4.5	5	Japan	144,410	5.6		
6	Korea	57,617	3.4	6	Korea	75,011	2.9		
7	Brazil	39,349	2.4	7	India	54,460	2.1		
8	Hong Kong	38,228	2.3	8	Vietnam	49,212	1.9		
9	India	33,567	2.0	9	Taiwan	45,794	1.8		
10	Singapore	32,393	1.9	10	Switzerland	41,193	1.6		

Major trade partners of Japan

(Unit: 100 million yen, %)

	Major Exp	ort Country		Major Import Country			
Rank	Country	Export	Portion(%)	Rank	Country	Export	Portion(%)
1	China	158,977	19.5	1	China	191,937	23.2
2	US	154,702	19.0	2	EU	97,185	11.8
3	EU	92,092	11.3	3	US	90,149	10.9
4	Korea	57,926	7.1	4	Australia	50,528	6.1
5	Taiwan	46,792	5.7	5	Saudi Arabia	37,329	4.5
6	Hong Kong	38,323	4.7	6	Korea	35,505	4.3
7	Thailand	35,625	4.4	7	UAE	30,463	3.7
8	Singapore	25,841	3.2	8	Taiwan	29,975	3.6
9	Australia	18,862	2.3	9	Thailand	27,707	3.4
10	Vietnam	18,142	2.2	10	Indonesia	23,789	2.9

^{*} Source : KIEP(Korea Institute for Economic Policy)

- ① (US market) Competition with Japan for automobile, parts, TV, chemical products, etc. is expected to increase.
- ② (Japanese market) Competition with the US for epoxy, plastic plate/sheet/film, etc. is expected to increase

^{*} Source : KIEP(Korea Institute for Economic Policy)

- (Jun. 2019) Foreign investment & FTZ guideline are announced
- Wider access for the mining, manufacturing, water transportation, culture, entertainment industries

- 6 additional FTZs are established, Shanghai FTZ is expanded, import tariff reduction, etc.

China's negative list by year

	2017	2018	2019
Restricted items	35	21	17
Banned items	28	27	23
Total	63	48	40

* 2019 Negative list is assumed based on 2018 negative list as it doesn't classify restricted and banned items

National level	FTZ
 Total 40 items as of 2019 (23 banned, 17 restricted) 	 Total 37 items as of 2019 (20 banned, 17 restricted)
 In 2017, first introduced revised "Foreign Investment Industry List" on a national level *Industry for promotion + negative list (restricted and banned industry) In 2018, It was separated from the list 	 First introduced in Shanghai in 2013. There were 4 revisions since 2018, same negative list was applied for 12 FTZs in China. Openness is higher for foreign investment than the national level. Measures are first implemented at FTZs and expanded to other places.

^{*} Source: "Trends and Evaluation of China's policy for opening Foreign Investment Opening: focusing on Negative list(2018)", Table2, Korea Institute for International Economic Policy



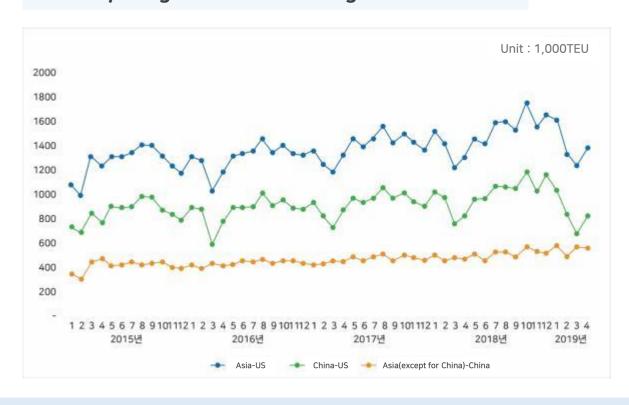
- ① Countries and manufacturing sectors that have less impact from US-China trade war can enjoy more opportunities to enter into the market
- 2 More opportunities for Korean companies in petrochemical, telecommunication, and service sectors to enter into the Chinese market

03

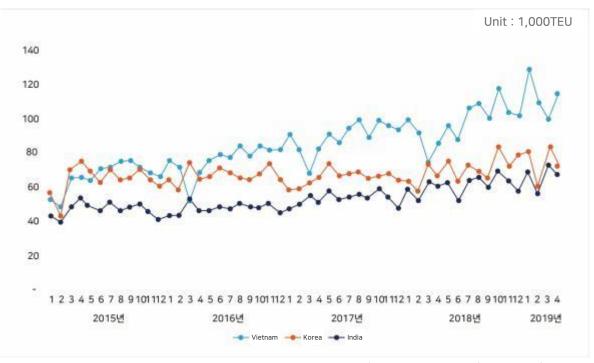
Busan Port's Throughput Changes & Forecasts

- 3-1. Container volume trend of Asia and North America
- 3-2. Busan Port's Throughput Changes & Forecasts
- 3-3. T/S Competitiveness Analysis
- 3-4. Diversification of Busan Ports T/S volume

Monthly Cargo Volume Heading North America



Trend of Cargo Volume after US-China Trade war

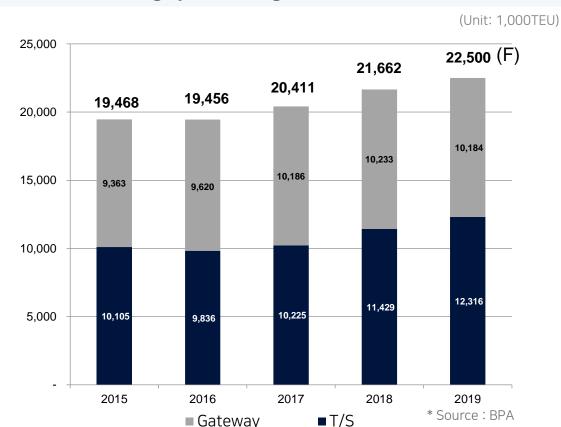


* Source: HIS-Markit PIERS data, KMI

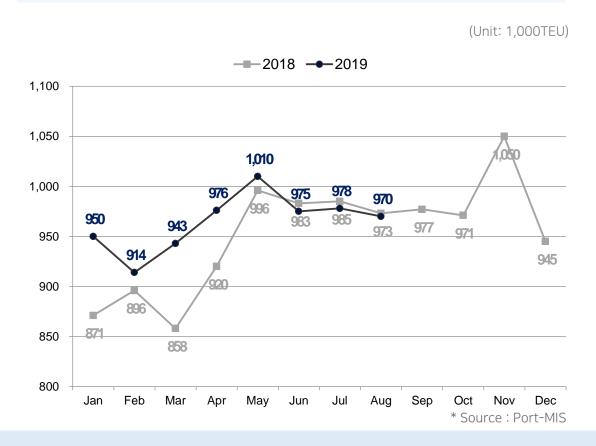
- ① No major changes in container volume between Asia and North America
- ② Gradual increase in the container volume in Asian countries except for China

- 1 Increased import from Vietnam, India after US-China trade war
- Diversified trade pattern
 - * Especially, import from South east Asian countries
- ** Import was too dependent on China before

Container Throughput Changes at Busan Port (In total)



Container Throughput Changes at Busan Port (T/S)



- ① Busan Port container throughput has increased gradually but volume growth is slowing down
- For recent 3 years, average growth rate of container cargo is about 3.6%
- ② T/S volume in 2019 could be very slightly increased compared to the previous year.
- -In 2018, T/S cargo increased 11.8% year on year and it is about 52.7% of total container cargo handled.

3-3. T/S Competitiveness Analysis

- Analysis by preferences of global shipping companies
- General review on port & unloading fees, connectivity, etc.

Port dues Competitiveness

TEU	Busan	Kaoh siung	Hong Kong	Kobe	Ningbo	Osaka	Qingdao	Rotte rdam	Shang hai	Singa pore
5,000	100	88	207	379	249	228	214	439	178	144

Stevedoring cost competitiveness(T/S)

Class.	Busan	Kaohsi ung	Shangh ai	Ningbo	Hong Kong	Osaka	Tokyo
Same terminal	100	148	74	50	121	256	230
Other terminal	100	84	86	87	100	146	131

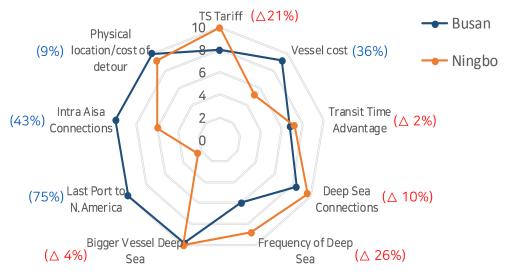
^{*} Stevedoring cost includes ITT, lashing, tally, etc.

T/S connectivity

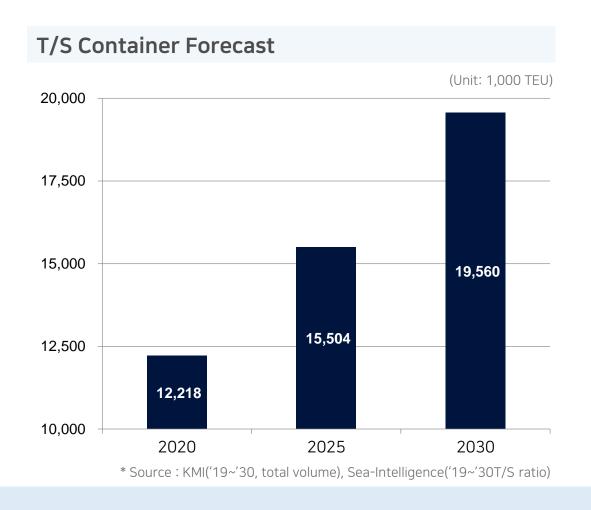
* '10' is the highest

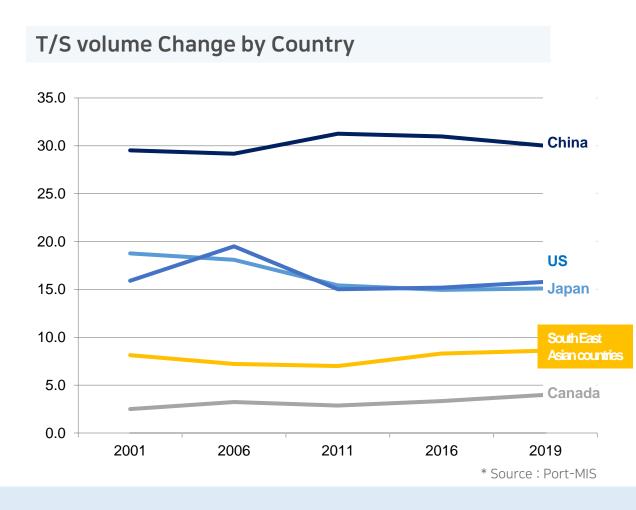
Connectivity	Busan	Kaohsi ung	Shangh ai	Singap ore	Hong Kong	Qingda o	Ningbo	Osaka	Tokyo
Connectivity	8.33	4.91	9.41	9.04	6.19	6.34	9.36	2.24	3.23
Ocean-going routes	6.05	3.05	9.20	7.07	4.53	3.80	8.63	1.18	2.28
Large vessel calling	9.64	9.21	9.83	9.56	9.51	9.28	9.99	5.46	6.99
Transportation time	7.01	4.92	7.30	8.22	5.72	5.12	7.21	2.82	4.22
Last Port	10.00	1.50	3.50	1.50	-	-	2.50	0.00	3.00

T/S competitiveness of Busan VS. Ningbo



- * Source : Sea Intelligence, 2019
- ① T/S competitiveness of Busan Port is at an excellent level
- ② Necessary to move towards higher cost competitiveness (terminal integration etc.)
 - ③Conduct marketing utilizing Busan port's global networks





- ① T/S volume at Busan Port is continuously increasing, but T/S volumes for East-West trade and direct routes between Japan-China are decreasing
- 2 T/S is diversifying to include South East Asia(e.g. Vietnam), away from traditional T/S Origin&Destination(China, US, Japan)
- Fundamental issues(terminal fragmentation, etc.) in Busan must be resolved to maintain and attract volume

04

Mid-to-Long Term Development Strategy

- 4-1. Infrastructure Expansion and Improvement Efficiency
- 4-2. T/S cargo service & productivity improvement
- 4-3. Expansion of global logistics hub
- 4-4. Strengthening Busan New Port Distripark and FTZs

New Port Expansion(~2030)

Depth



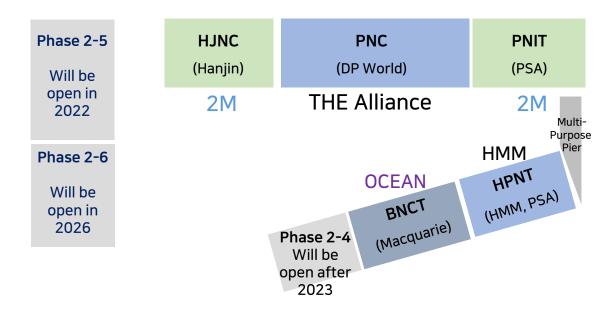
all and a second		-
		-
sent	Fut	ure
23 (21)	Berth (Container)	45 (34)
7.55km (7.25km)	Quay Length	14.71km
	23 (21) 7.55km	Sent Fut 23 Berth (21) (Container) 7.55km

Period

by 2030

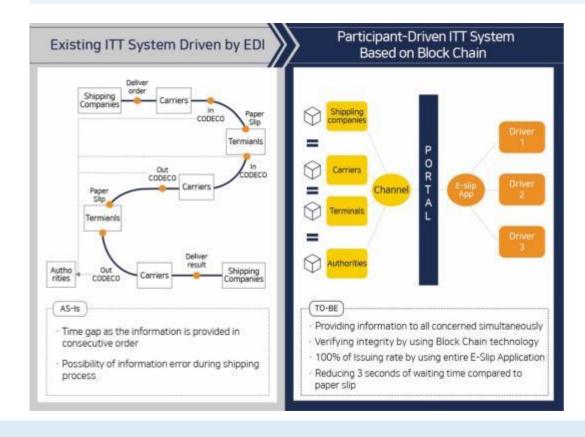
15~18m

Improvement Efficiency of terminal operation



▶ To overcome fragmented New port terminal structure, forming a kind of "Terminal Alliance" to handle each global shipping alliance's container

Building up ITT Service System based on Block Chain



Developing underlying infrastructure for T/S **Multi-transportation**



[Constructing new facilities in Busan Port to enhance T/S Competitiveness]

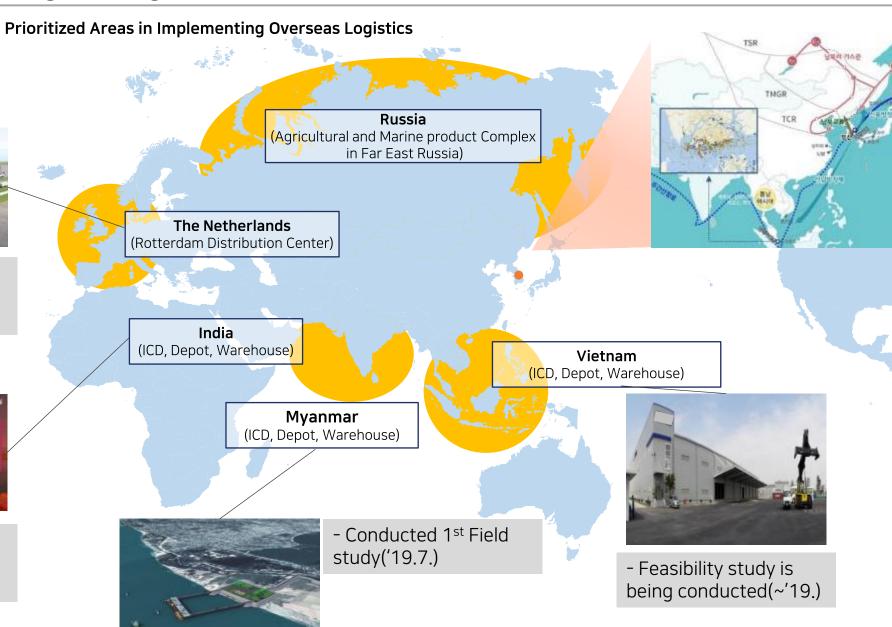
① T/S volume has been steadily increased because of the alliance changes, enlargement of container ship and etc.



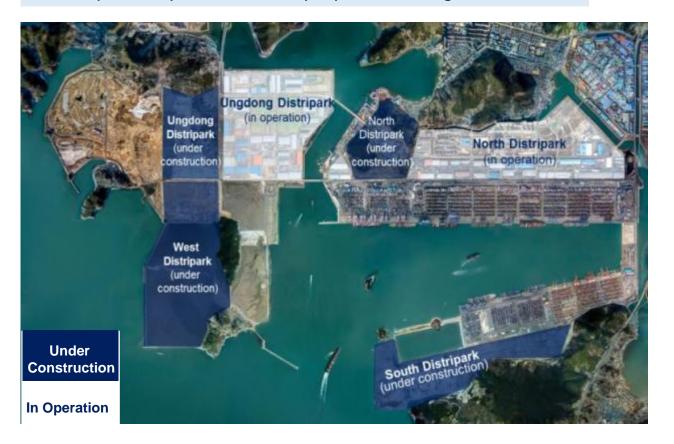
- Approved by Port Commissioner and government



- Signed an MoU with Adani Ports group ('19.7.18.)



Currently, 67 companies and 2,870 people are working on 4.2 million m



Phase	# companies	Investment by foreign companies	Developed Area(m²)	Creation of Jobs(2018)	Throughput (2018, TEU)
Northern	30	49	1.7million	1,343	1.1million
Ung-dong	37	44	2.5million	1,527	0.8million
Total	67	93	4.2million	2,870	1.9million

Enhancing competitiveness by enlarging FTZ

Status	Phase	Time	Area (million m²)	
	North(Phase 1)	2012	1.7	
Completed	Ung-dong(Phase 1)	2014	2.5	
	West(Phase 1) 2019		0.5	
	In total	4.7		
Planned	Ung-dong(Phase 2)	2025	1.1	
	South	2025	1.4	
	West(Phase 2)		0.3	
	West(Phase 3)	2030	0.4	
	North(Phase 2)		0.5	
	In total	3.7		

Plans:

- For Ung-dong(180,000m²) and West(300,000m²) Distripark, additional 6~7 companies will be selected until 2020

