



Connect Value
Navigate Growth



February
2021

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II. Market Outlook

I -1. Company Overview



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The Bridge To Your Dream

.....
Since its humble beginning with just three VLCCs in 1976, HMM has developed over the years, overcoming numerous crises, to become a leading light in the Korean maritime industry. HMM is now a world-renowned integrated logistics company, operating around 120 state-of-the-art-vessels, and broad range of global service-networks over 110 countries.

These significant achievements stem from steadfast support of our valued customers and shareholders.

Now, HMM is ready to take on another challenge to be a competitive and sustainable shipping company in any market environment. Also, HMM will contribute to Korea's economic development with a sense of duty and pride under systematic management and with the support of KDB, HMM's largest shareholder.

HMM's strategy is to keep moving forward and to create a partnership of cooperation with you. We intend to share our experiences and knowledge as a good partner of yours.

In addition, with due consideration for the social and environmental responsibilities entrusted to us, HMM will dedicated itself to furthering customer trust and confidence.

We will always do our best to meet your expectations. In order to build HMM into undisputed 'World's best' carrier, I sincerely ask for your continued support and confidence.

Thank you.

HMM CEO **Jae-Hoon Bae**

I -1. Company Overview

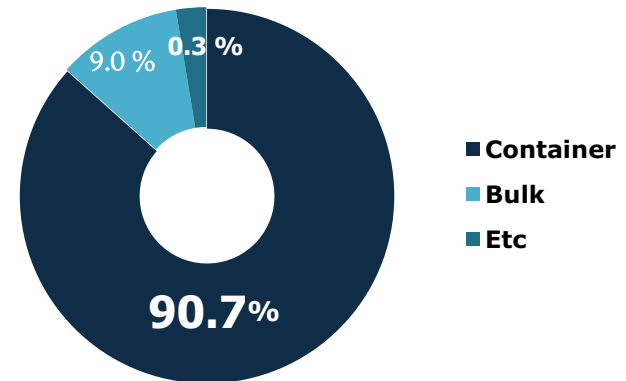
- Brand Identity

Connect Values



Navigate Growth

- Structure & Business Portfolio



(Based on FY 2018 result , Revenue %)

Organization

105 Offices in 28 Countries

Employees

Total	Ground	Crew
3,590	3,155	435

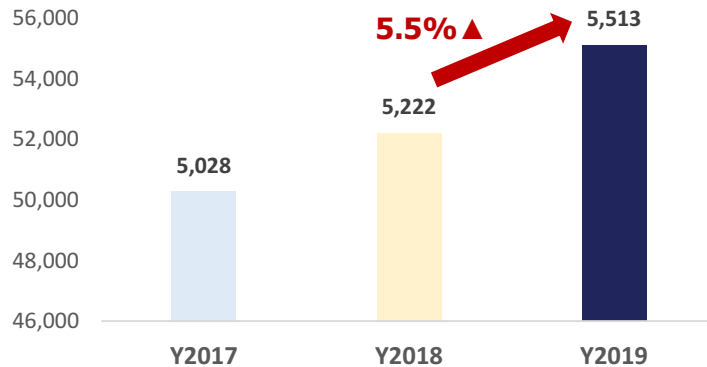
I -2. Financial Status



- Summary of HMM Business

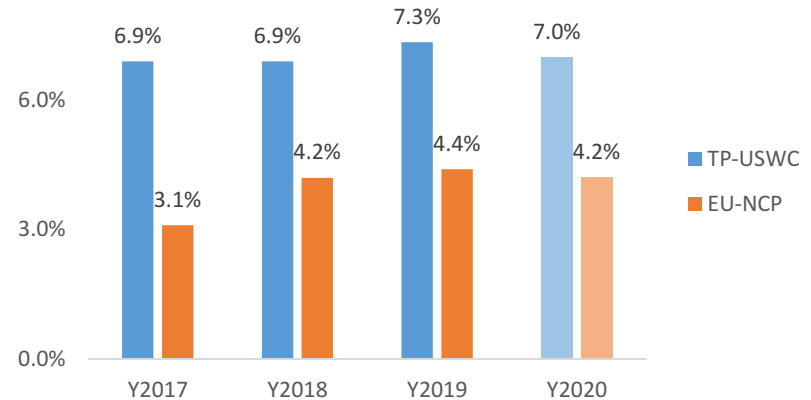
■ Revenue / Y2019 Review

(Unit : KRW Bn)



■ HMM Market Share(TP-USWC / EU-NCP)

9.0%



■ Governing structure

Share Holder	Share Ratio(%)	Remark
Major Shareholders	73.35%	
Korea Development Bank	36.99%	State-Owned Bank
Korea Ocean Business Corporation (KOBC)	36.36%	
Others	26.65%	
Total	100.00%	

» KOBC : Affiliated organization under Ministry of Oceans and Fisheries, Legal capital : 5 trillion won (4.5 bln USD)
Launched in July, 2018, investing in New ships, supporting shipping companies.



SMART SHIPPING

Global
Leading
Carrier

US\$10 Billion
Revenue
by 2022

Capacity,
One Million TEU
by 2021

Soft Ware

[Smart Asset Utilization / Oracle]

- Customized E-Service & Specialized Customer service
- Process Innovation : Cloud System (New-GAUS 2020, ISO 27001)
- Internet of Things(IoT), Blockchain(DCSA : Digital Container Shipping Association)
- Big Data(Vessel, EQ, Route Management)

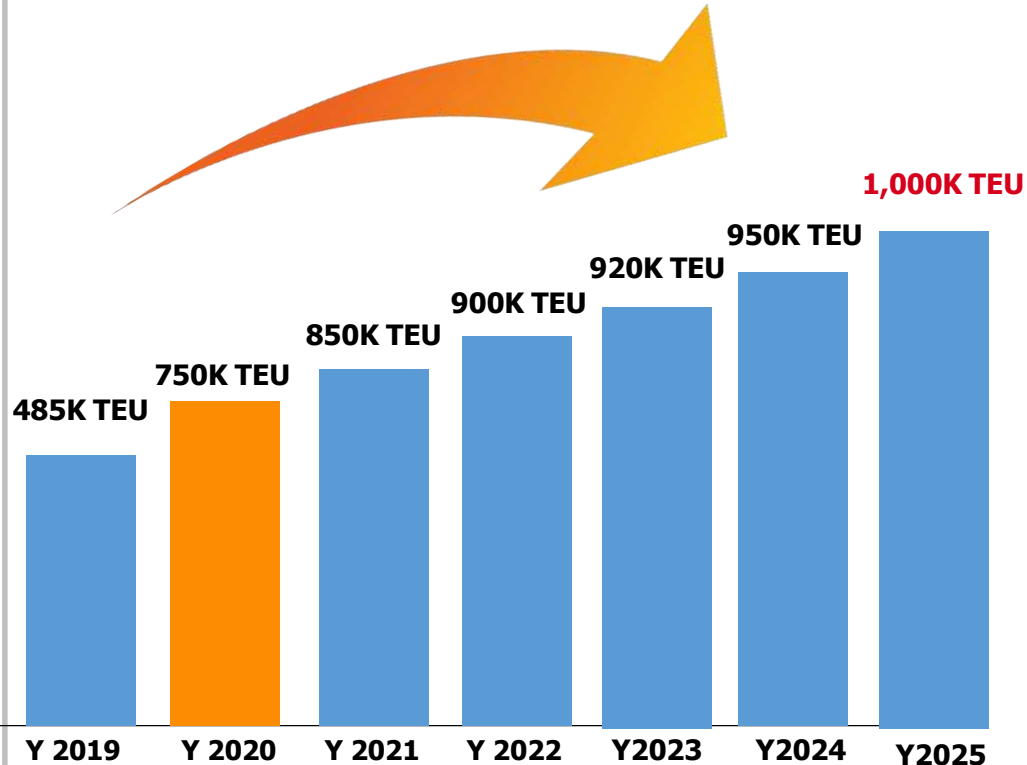
Hard Ware

[Smart/Eco/Mega Ship]

- 2018 : 11,000 TEU X 2
- 2019 : VLCC(300K DWT) X 5
- 2020 : 24K X 12
- 2021 : 16K X 8

I -3-②. Expansion Plan

- HMM Capacity Expansion Plan



FY2020
24K x 12

- HMM Algeciras
- HMM Copenhagen
- HMM Dublin
- HMM Gdansk
- HMM Hamburg
- HMM Helsinki
- HMM Le Havre
- HMM Oslo
- HMM Rotterdam
- HMM Southampton
- HMM Stockholm
- HMM St Petersburg

FY2021
16K x 8

- HMM Nuri
- HMM Gaon
- HMM Garam
- HMM Mir
- HMM Hanbada
- HMM Raon
- HMM Daon
- HMM Hanul

HMM in 2019

Capacity: **485,884 TEU**



HMM in 2025

Capacity: **1,000,000 TEU**

Eco-friendly Mega Containerships starts delivery

- Orders placed for twelve 24K & eight 16K mega containerships with scrubber installation in 2018
Seven 23,964 TEU at DSME
Five 23,820 TEU at Samsung Heavy Industries
Eight 15,986 TEU at Hyundai Heavy Industries
- Join THE Alliance FE-NE service

24K Special Feature

Increased energy efficiency abt **49%**, required by IMO (EEDI phase 1, Energy Efficiency Design Index)

Optimized hull shape enabling **less footprint(emission)**

Full spade rudder, Pre-swirl stator(DSME), Saver-fin(SHI)

Hybrid type Exhaust Gas Cleaning System(SCRUBBER)

Ready for retrofit to use Liquefied Natural Gas

Ballast Water Treatment System fitted

Ready for use shore electricity(internal system only)

Smart Navigation system

Advanced lashing system

LED Light



Active response in Sulphur Oxide regulation

- Sulphur Oxide regulation becomes strict not just global, but also domestic area -

- **Global Sulphur Oxide regulation comes into effect since Jan 1 2020**
- **In Korea and China, domestic Emission Control Areas are designated**
- **HMM sets up strict compliance method**
 - ▶ No violation reported from both internal audit and port state control
 - ▶ Global supply contract for securing compliant fuel oil
 - ▶ Flag approved Exhaust Gas Cleaning system onboard
 - ▶ Join R&D program for future fuel study

What is Exhaust Gas Cleaning System?

- In wet type, cleaning exhaust gas by pumping sea water to minimize Sulphur contents
 - ▶ Equivalent, which approved by flag state in accordance with the International Maritime Organization(IMO)'s guidelines
 - ▶ There are 2 types of exhaust gas cleaning system, namely wet type and dry type.
 - ▶ Mainly wet type is used, rather than dry type(which use chemical, not washing water)
 - ▶ Wet type is classified as either close, open or hybrid(both open and close system)
- Normally operate exhaust gas cleaning system in open mode
 - ▶ Even hybrid exhaust gas cleaning system is fitted, normally operate the system in open mode
 - ▶ Because there is restriction in NaOH, holding tank and etc, close mode operation is also limited
- In regard to any harmful effect of washing water to water quality, the IMO encourages member state to submit scientific evidence
 - ▶ Many reports submitted to the IMO contains evidence that washing water results not harmful effect in flowing water
 - ▶ Now the IMO focuses on enclosed or port area for any significant effect of washing water discharged
- Some port/coastal states prohibit the discharge washing water from exhaust gas cleaning system from the precautionary approach(or principle)
 - ▶ Which means there is no scientific evidence for their policy
 - ▶ HMM strictly complies local policy, don't use exhaust gas cleaning system, and to switch low Sulphur fuel oil
 - ▶ If hybrid type exhaust gas cleaning system is fitted, switch to close mode in such area.










I -3-③. Sustainability Report in 2019

1. Time line

1. Market Study	2. Strategy & Plan	3. Governance	4. Draft Report	5. Web-page
Done	Done	Done	Done	Done

2. HMM's Approach to each Item

Item	HMM's approach
 E nvironmental Management	- Green-house gas control, Environmental TFT
 I nnovation Management	- Eco-friendly Mega-vessels, Digitalization
 S upply Chain Management	- Partnership evaluation, Risk management
 E mployee Management	- Global competency training, Work & Life balance
 S afety and Health Management	- Industrial Safety and Health Act, DG center
 L ocal Communities	- Social contribution, Volunteer activity
 E thical Management	- Code of ethics, Inspection and Transparency

I -3-④. Carbon Emissions



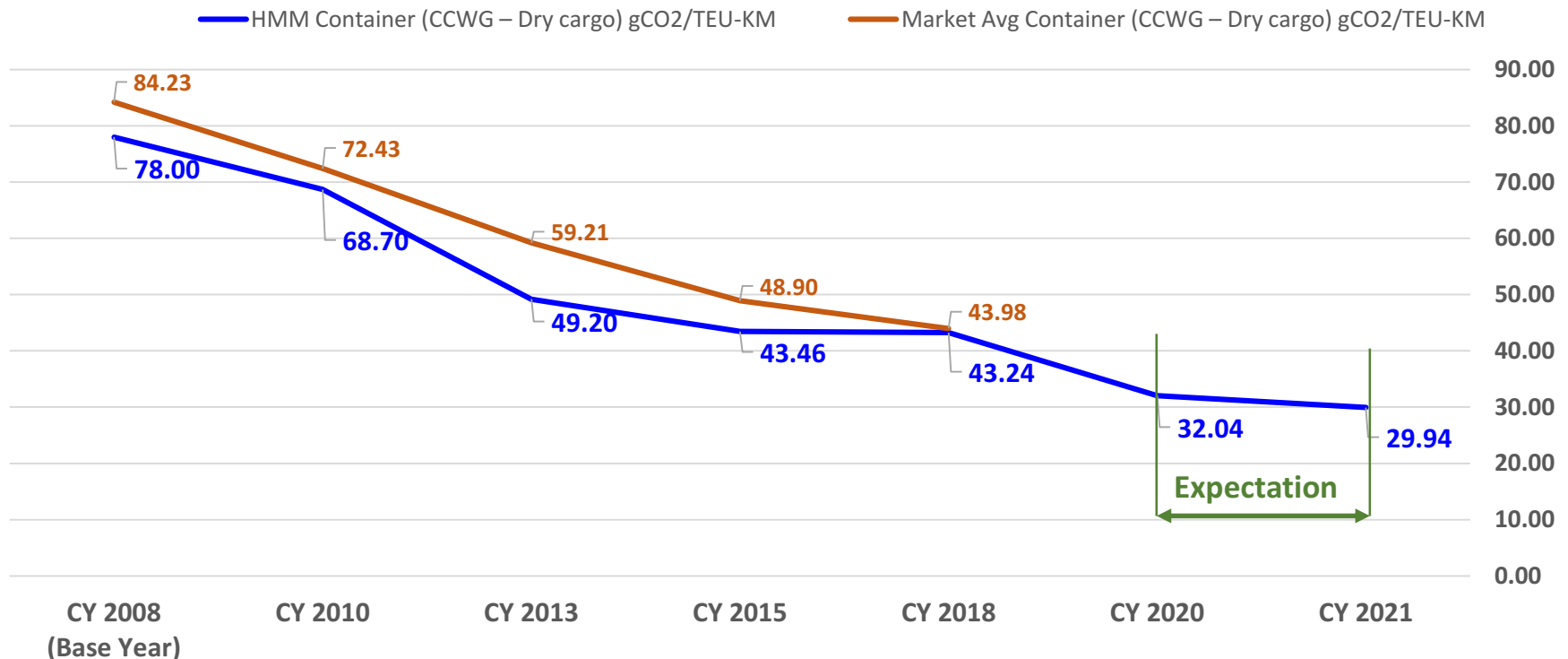
HMM : CCWG(Clean Cargo Working Group) member

⇒ a group of shippers and suppliers that aim to reduce their carbon footprints and Carbon emissions.

⇒ 2030 Target : Reducing carbon emission by 70%

⇒ [2050 Target : Carbon neutrality](#)

※ Container (CCWG – Dry cargo) gCO₂/TEU-KM



THE Alliance announces service network adjustments for 2021

2020-12-22

The members of THE Alliance have adjusted their current network to offer customers greater capacity on trade lanes for which there is greater demand.

The setup of THE Alliance's network has been evaluated and reconfigured to ensure even better frequency, more competitive transit times and comprehensive port coverage. The enhanced service setup will be in effect from April 2021.

In addition, subject to regulatory authority's approval, they will be launching the East Coast Loop 6 (EC6), the first service within THE Alliance network to directly and seamlessly connect the US Gulf with important ports in Asia.

Another important change is the deployment of larger ships for the most frequented services. A key example is the merger of the EC1 and EC3 through the use of 13,500 TEU vessels.

The enhanced service network of THE Alliance will have the following rotations:

Transpacific – East Coast (via Panama and Suez Canals)

- **EC1** Kaohsiung – Hong Kong – Yantian – Shanghai – Pusan – (Panama) – Manzanillo – Savannah – Charleston – Norfolk – Manzanillo – (Panama) – Rodman – Kaohsiung
- **EC2** Qingdao – Ningbo – Shanghai – Pusan – (Panama) – Cartagena – New York – Norfolk – Wilmington – Savannah – Charleston – Cartagena – (Panama) – Pusan – Qingdao
- **EC4** Kaohsiung – Hong Kong – Yantian – Cai Mep – Singapore – (Suez) – New York – Norfolk – Savannah – Charleston – New York – (Suez) – Singapore – Kaohsiung
- **EC5** Laem Chabang – Cai Mep – Singapore – Colombo – (Suez) – Halifax – New York – Savannah – Jacksonville – Norfolk – Halifax – (Suez) – Jebel Ali – Singapore – Laem Chabang
- **EC6** Kaohsiung – Hong Kong – Yantian – Ningbo – Shanghai – Pusan – (Panama) – Houston - Mobile – New Orleans – (Panama) – Kaohsiung

Transpacific – West Coast

- **FP1** remains as Pendulum of Asia – Europe and Asia – Transpacific West Coast trades
From Europe – Singapore – Kobe – Nagoya – Tokyo – Los Angeles/Long Beach – Oakland – Tokyo – Shimizu – Kobe – Nagoya – Tokyo – Singapore – To Europe
- **PS3** remains as Pendulum of Asia – Indian subcontinent and Asia – Transpacific West Coast trades
Nhava Sheva – Pipavav – Colombo – Port Kelang – Singapore – Cai Mep – Haiphong – Yantian – Los Angeles/Long Beach – Oakland – Pusan – Shanghai – Ningbo – Shekou – Singapore – Port Kelang – Nhava Sheva
- **PS4** Xiamen – Yantian – Kaohsiung – Keelung – Los Angeles/Long Beach – Oakland – Keelung – Kaohsiung – Xiamen
- **PS5** Ningbo – Shanghai – Los Angeles/Long Beach – Oakland – Tokyo – Ningbo
- **PS6** Qingdao – Ningbo – Pusan – Los Angeles/Long Beach – Oakland – Kobe – Qingdao
- **FP2** remains as Pendulum of Asia – Europe and Asia – Transpacific West Coast trades
From Europe – Jeddah – Singapore – Laem Chabang – Cai Mep – Hong Kong – Yantian – Los Angeles/Long Beach – Oakland – Hong Kong – Laem Chabang – Cai Mep – Singapore – Colombo – To Europe
- **PS8** Shanghai – Kwangyang – Pusan – Los Angeles/Long Beach – Oakland – Pusan – Kwangyang – Incheon – Shanghai
- **PN1** Xiamen – Kaohsiung – Ningbo – Nagoya – Tokyo – Tacoma – Vancouver – Tokyo – Kobe – Nagoya – Xiamen
- **PN2** Singapore – Laem Chabang – Cai Mep – Haiphong – Yantian – Tacoma – Vancouver – Tokyo – Kobe – Singapore
- **PN3** Hong Kong – Yantian – Shanghai – Pusan – Vancouver – Seattle – Pusan – Kaohsiung – Hong Kong
- **PN4** Qingdao – Ningbo – Shanghai – Pusan – Prince Rupert – Tacoma – Vancouver – Pusan – Kwangyang – Qingdao

2020-12-22

Asia and North Europe

- **FP1** remains as pendulum of Asia – Europe and Asia – Transpacific West Coast trades
From TPWC – Shimizu – Kobe – Nagoya – Tokyo – Singapore – (Suez) – Rotterdam – Hamburg – Le Havre – (Suez) – Singapore – Kobe – Nagoya – Tokyo – To TPWC
- **FE2** Busan – Shanghai – Ningbo – SPRC – SPRC – Singapore – (Suez) – Tangier – Southampton – Le Havre – Hamburg – Rotterdam – Tangier – (Suez) – Singapore – SPRC – Busan
- **FE3** SPRC – Xiamen – Kaohsiung – SPRC – (Suez) – Rotterdam – Hamburg – Antwerp – Southampton – (Suez) – Jebel Ali – Singapore – SPRC – SPRC
- **FE4** Qingdao – Pusan – Ningbo – Shanghai – SPRC – (Suez) – Algeciras – Rotterdam – Hamburg – Antwerp – Rotterdam – Algeciras – (Suez) – Singapore – Qingdao
- **FP2** remains as Pendulum of Asia – Europe and Asia – Transpacific West Coast trades
From TPWC – Hong Kong – Laem Chabang – Cai Mep – Singapore – Colombo – (Suez) – Rotterdam – Hamburg – Antwerp – London Gateway – (Suez) – Jeddah – Singapore – Laem Chabang – Cai Mep – Hong Kong – Yantian – To TPWC

Asia and the Mediterranean

- **MD1** Qingdao – Pusan – Shanghai – Ningbo – SPRC – Singapore – Jeddah – (Suez) – Damietta – Barcelona – Valencia – Genoa – Damietta – (Suez) – Jeddah – Singapore – SPRC – Qingdao
- **MD2** Pusan – Qingdao – Shanghai – Ningbo – Kaohsiung – SPRC – Singapore – (Suez) – Piraeus – Genoa – La Spezia – Fos – Barcelona – Piraeus – (Suez) – Singapore – SPRC – Pusan
- **MD3** Pusan – Ningbo – Shanghai – SPRC – Singapore – Jeddah – (Suez) – Ashdod – Istanbul – Izmit – Aliaga – Mersin – (Suez) – Jeddah – Singapore – Kaohsiung – Pusan

Asia and the Middle East / Red Sea

- **AG2** Shanghai – Ningbo – Xiamen – Shekou – Port Kelang – Jebel Ali – Hamad – Umm Qasr – Hamad – Jebel Ali – Singapore – Shanghai
- **AG3** Qingdao – Pusan – Shanghai – Ningbo – Kaohsiung – Shekou – Singapore – Jebel Ali – Dammam – Hamad – Jubail – Abu Dhabi – Sohar – Port Kelang – Singapore – Hong Kong – Qingdao
- **AR1** Pusan – Shanghai – Ningbo – Shekou – Singapore – Port Kelang – Jeddah – Aqaba – Sokhna – Jeddah – Singapore – Pusan

Twelve 24,000 TEU ships fully laden with containers

2020-10-05

Containers transported on each 24K vessel (Headhaul)

Vessel Name			Vessel Name		
	TEUs			TEUs	
1	HMM Algeciras	19,621	7	HMM Hamburg	19,536
2	HMM Oslo	19,504	8	HMM Southampton	19,545
3	HMM Copenhagen	19,490	9	HMM Helsinki	19,484
4	HMM Dublin	19,459	10	HMM Stockholm	19,551
5	HMM Gdansk	19,513	11	HMM Le Havre	19,526
6	HMM Rotterdam	19,567	12	HMM St Petersburg	19,529

(Source : HMM)



[Photo] HMM St Petersburg, the last of HMM's twelve 24,000 TEU containerships, departed from the Port of Yantian, China on 30 Sep to set sail on its maiden voyage with 19,529 TEUs on board.

HMM announced that all of its twelve 24,000 TEU containerships have been entirely filled with cargoes on their first voyage. On 30 September, HMM St. Petersburg, the last of the 24K-class series, departed for Europe from the Port of Yantian, China with 19,529 TEUs loaded on board.

Consequently, all 24,000 TEU ships delivered by HMM have made their maiden voyage with a full load of cargoes, starting with HMM Algeciras which carried a total of 19,621 TEUs last May.

In particular, HMM Algeciras and its two sister ships, HMM Oslo and HMM Copenhagen, embarked on their second journey full of export shipments from Asia to Europe. Considering the safety of vessel operations and cargo weight, the maximum loadable capacity of each 24,000 TEU ship stands at around 19,300 TEUs on average.

Jae-hoon Bae, President & CEO of HMM, said, "This is a major milestone for us to expand our presence in the global market in close cooperation with THE Alliance." and added, "I am delighted that our efforts and dedication have come to fruition, which gave us a much needed uplift. We will take a big step forward to prove what we are capable of in the years ahead."

HMM has returned to profit in the second quarter of this year, achieving an operating profit of USD 115 million and a net profit of USD 23 million, despite high volatility due to the Covid-19 pandemic. HMM will seek to enhance its profitability based on the seamless operation of 24,000 TEU ships, the realignment of service routes, and a string of cost-cutting measures.

Meanwhile, HMM has led an effort to stabilise the logistics flow by deploying extra tonnage to the market where a swift delivery of cargo is required and fully operating its entire fleet without idle container vessels in the face of the recent surge in cargo demand.

HMM opens Fleet Control Centre

2020-09-23



- Fleet Control Center

HMM unveiled its land-based 'Fleet Control Centre' located at the HMM R&D facilities in Busan, South Korea. This centre has been newly designed to effectively monitor and control the operation of HMM's modern fleet including twelve 24,000 TEU and eight 16,000 TEU container vessels.

HMM has completed the delivery of its twelve 24,000 TEU containerships in September 2020, while eight 16,000 TEU vessels will be included in its fleet in the second quarter of 2021. All twenty ships feature the latest smart ship solutions.

The newly-launched Fleet Control Centre provides an integrated platform for vessel-to-shore data and increased connectivity. Its real-time monitoring system offers plenty of information with full visibility including vessel performance, locations, fuel consumption, ocean weather and cargo information etc. The vessels also can benefit from a remote control system which supports a wide range of vessel operations including inspection and repair works on the machinery on ships.

In addition, each vessel is encouraged to identify and react to an unexpected threat or obstacle both on board and around the ship by sharing information with the Fleet Control Centre in a timely manner.

HMM will continue to analyse the operational efficiency and explore the commercial viability of autonomous ships based on big data collected from the centre.

Jae-hoon Bae, President & CEO of HMM, said, "Digital capabilities have become a key element in securing a competitive edge. We will accelerate efforts to enhance operational excellence and efficiency in our fleet management." and that, "We will also gradually apply the smart ship solutions not only to our newbuilds but also to the other ships already in operation."

HMM cooperates with SHI to develop smart ship technology

2020-09-08



SAMSUNG HEAVY INDUSTRIES

About SVESSEL: SVESSEL is the latest smart ship solution designed by Samsung Heavy Industries in the face of increasing demands for digital transformation. SVESSEL aims to expedite the transition from analog-based conventional ships into "Intelligent and Life-cycle managed Ships" through the convergence between ICT and Ship Operational Technology. This solution provides a variety of features such as vessel & fleet tracking, onboard data analysis, collaborative maintenance, monitoring of propulsion performance and so on.
(Source : <https://shi.svesSEL.com/>)

HMM has signed a Memorandum of Understanding (MoU) with Samsung Heavy Industries (SHI) on smart ship technology. Under the MoU, HMM and SHI will collaborate in the research, development and innovation in the field of smart ship solutions.

The MoU mainly covers the development of eco-friendly technologies applicable for smart ships and the enhancement of technological competence related to the digitalisation of ships.

As part of this partnership, HMM has adopted 'SVESSEL', the most advanced smart ship solution developed by SHI. The cloud-based 'SVESSEL' has been applied to five out of twelve 24,000 TEU mega containerships delivered to HMM this year. HMM will test operational data on its own container vessels.

HMM official said, "Both digitalisation and decarbonisation have become integral factors on the pathway to sustainable growth. HMM has concentrated on the exploration of new technologies for the future and has actively participated in various discussions with the parties concerned." and that "We look forward to taking this partnership to the next level with great synergy."

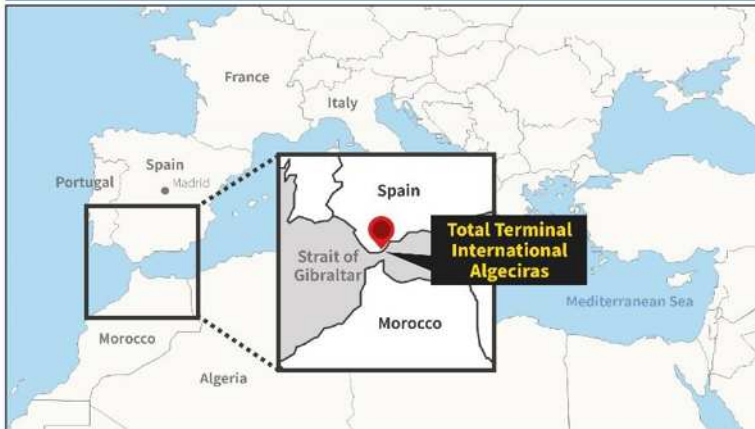
In addition, HMM is preparing to operate a 'Smart Ship Control Centre' that enables to monitor the safety and efficiency of ships in real time based on an extensive range of data including cargo information, service routes, locations, ocean weather and vessel conditions.

The centre is scheduled to be in full operation from mid-September this year.

HMM joins forces with CMA CGM on TTI Algeciras operation

2020-08-10

Total Terminal International Algeciras, Spain



(Source: HMM)



News Article :

HMM announced that the company has signed a sales and purchase agreement with CMA CGM for the sale of its 50% stake minus one share in Total Terminal International Algeciras (TTI Algeciras), a container terminal in the south of Spain.

Shares of TTI Algeciras are owned by HMM and HT Algeciras which is a special purpose company wholly controlled by HMM. HMM directly owns a stake of 50% minus one share, with the remaining 50% stake plus one share held by HT Algeciras.

HMM has decided to sell its own 50% stake minus one share but still maintains its position as the largest shareholder through HT Algeciras. The financial details including the price of the deal were not disclosed. HMM expects a great synergy effect based on strategic cooperation with CMA CGM in terms of enhancing profitability and operational capabilities by securing additional cargoes.

HMM official said, "TTI Algeciras has a great geographical advantage to play an integral role as a trans-shipment hub located at the centre of containerised cargo flow on main trade lanes. We believe TTI Algeciras will take centre stage in the Gibraltar area as it has a high potential for future growth and development. We are expecting more business opportunities in the years to come based on stable operations of the terminal."

This transaction, subject to regulatory approval, is expected to be completed in Q4 2020 for joint operations to be started. Meanwhile, TTI Algeciras was formerly operated by Hanjin Shipping but HMM acquired a 100% stake in the terminal in 2017.

HMM Names World's Largest Container Vessel, 'HMM Algeciras'

2020-04-23

- **Vessel Particulars of HMM Algeciras :**
LOA- approx. 399.9m, Beam : 61.0m, Depth : 33.2m

News Article :

HMM held a naming ceremony for a 24,000 TEU-class containership 'HMM Algeciras', the world's largest containership, at the DSME (Daewoo Shipbuilding & Marine Engineering)'s Okpo shipyard in Geoje, Korea.

About 160 distinguished persons attended the ceremony, including [Moon Jae-in \(President of the Republic of Korea\)](#), Hong Nam-ki (Deputy Prime Minister and Minister of Economy and Finance), Moon Seong-hyeok (Minister of Oceans and Fisheries), Eun Sung-soo (Chairman of Financial Services Commission), Lee Dong Gull (Chairman and CEO of Korea Development Bank), Hwang Ho-seon (President of Korea Ocean Business Corporation) and Bae Jae Hoon (President and CEO of HMM).

In particular, First Lady Kim Jung-sook served as godmother who cut the ropes to officially name the ship during the ceremony. 'HMM Algeciras' is the first of twelve 24,000 TEU-class vessels scheduled to be sequentially delivered until September, 2020. In September 2018, HMM signed a formal contract for its twenty eco-friendly mega container vessels with three shipyards – DSME, HHI(Hyundai Heavy Industries) and SHI(Samsung Heavy Industries) in an effort to take proactive actions towards market change as well as form a sustainable profit-generating structure.

"For me, it is very meaningful that HMM takes delivery of the most technologically advanced containership in this difficult time. I would like to celebrate it and hope that HMM continues to secure a competitive advantage as a Korean national flagship carrier.", says Moon Jae-in, President of the Republic of Korea.

"HMM will strive to expand its presence in the global shipping industry based on optimised fleet management and new cooperation with THE Alliance." adds Bae Jae Hoon, President & CEO of HMM.



I -4. HMM News (7/10)



'Hyundai Merchant Marine' rebrands as 'HMM'

2020-03-31

News Article :

HMM announced that the company has decided to stop using the name 'Hyundai Merchant Marine' as its official corporate name and brand, starting on 1 April 2020.

The decision was approved at the 44th annual shareholders meeting of the company, which was held at HMM headquarters, Seoul, on 27 March.

The name 'Hyundai Merchant Marine' has been used for 37 years since the company changed its name from the 'Asia Merchant Marine' in 1983.

'HMM', the new official name, has been widely known as the acronym for 'Hyundai Merchant Marine' to date. However, for the record, 'HMM' itself becomes the sole corporate name and brand to represent the company, not standing for 'Hyundai Merchant Marine'.

HMM has reviewed the introduction of its independent brand since the company was completely separated from Hyundai Group in August 2016 as part of enhancing its brand equity. The launch of a new Corporate Identity(CI), which was unveiled in May 2019, was also in line with this rebranding initiative.

Jae Hoon Bae, President & CEO of HMM, said, "This is another step in our company's bright future. I believe it is vital for us to rebrand ourselves in the course of a huge leap forward in 2020" and added, "Most of our customers and employees will not be confused as the name 'HMM' has already been recognised and familiar to the global market".

Mr. Bae also stressed "HMM will continue to expand its business coverage and develop more capabilities to successfully serve our valued customers."



Before	Hyundai Merchant Marine Co., Ltd. HMM Co., Ltd(Acronym)
After	HMM Co., Ltd

Deploys Underwater Robots for Hull Cleaning

2020-03-02

- Underwater robots help to prevent industrial accidents and cut environmental pollution

HMM announced that it plans to replace human labourers in a risky environment with underwater robots when it comes to hull cleaning work on its vessels.

As part of the plan to use the automated robots to clean underwater parts of hull surfaces, HMM has signed a cooperation agreement with TAS GLOBAL CO., LTD., a domestic manufacturer specialising in underwater robots.

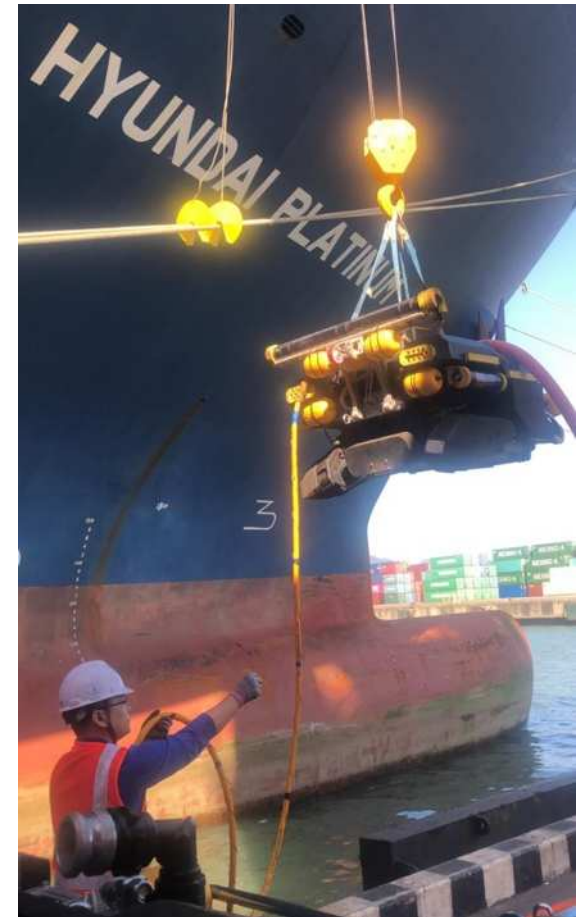
Fouling on the hull such as barnacles, seaweed, moss, etc. is widely known to decrease the speed of vessels and increase fuel consumption by creating additional friction. Therefore, shipping companies have made an effort to improve fuel efficiency and reduce greenhouse gases through periodic underwater hull cleaning performed by divers sent down under a vessel in many instances.

The diver-free alternative adopted by HMM is expected to not only prevent industrial accident but also contribute to protect ocean life. Several countries are currently prohibiting *in-water cleaning** of vessels in their waters due to the high risk of *aquatic invasive species(AIS)*** being easily transferred across the oceans as well as toxic hull paints which jeopardise the marine ecosystem.

However, underwater robots are designed to capture hull fouling and transfer it to shore refining facilities through a filtration system connected to their main body. This robotic technology enables to prevent environmental hazards caused by the transfer of aquatic invasive species.

It is also expected to lower costs by as much as 40% with substantially reduced working hours and to perform a more precise cleaning process without damage to hull coatings.

HMM will continue efforts to incorporate sustainability into every aspect of its business in terms of environmental footprint.



[Photo] A underwater robot is deployed to clean the hull of the 5,000-TEU container ship M/V Hyundai Platinum.

HMM joined THE Alliance

2020-01-16



From left to right : The CEO of HMM, HLC, ONE, YML

Name of Alliance	THE Alliance
Member Line	HMM, Hapag Lloyd, Yang Ming Ocean Network Express,
Scheme	Full Membership
Duration	10 Years (April / 2020~March/2030)
Scope	Asia - North America West Coast Asia - North America East Coast (via Panama and Suez Canal) Asia - North Europe Asia - Mediterranean Asia - Middle East

Dear Valued Customers,

We are pleased to announce that Hyundai Merchant Marine will have a new beginning with "THE Alliance" as a full member from April 2020. The members of THE Alliance have also decided to establish a new cooperation with four members and a term until 2030. The actions were agreed in Taipei on 19 June 2019. Subject to the necessary regulatory approvals, the new contract between the four lines will start on 1 April 2020.

In an initiative aimed at stronger capability and leverage in the global shipping market, we will organize closer cooperative relationship with new partners, that is, Hapag-Lloyd, Yang Ming, and Ocean Network Express (ONE). HMM's participation in 'THE Alliance' will enable the whole members to enjoy win-win strategy working out a further development of higher-quality service and sales power.

HMM has ordered twelve 23,000 TEU vessels which will be delivered in the second quarter of 2020. Additionally, eight 15,000 TEU new buildings will join HMM's fleet in the second quarter of 2021. HMM's 23,000 TEU new buildings will be deployed in the Far East – North Europe trade and will further strengthen THE Alliance's service portfolio.

HMM's membership will significantly strengthen the competitiveness of THE Alliance towards the other two alliances. Being a full member of THE Alliance gives us a lot of pride. We are convinced that we will be successful and generate additional value for our customers, employees and shareholders with combined experience, strategic skills, competitive fleet and strong focus on our clients' needs."

Thank you.

Yours Sincerely,
Hyundai Merchant Marine Co., Ltd.

HMM joins “Getting to Zero Coalition”

2019-11-18

On 18 November 2019, HMM announced its participation in “Getting to Zero Coalition,” a powerful alliance of nearly 100 organizations within various industrial sectors to achieve significant reduction of greenhouse gas (GHG) emission in the maritime industry.



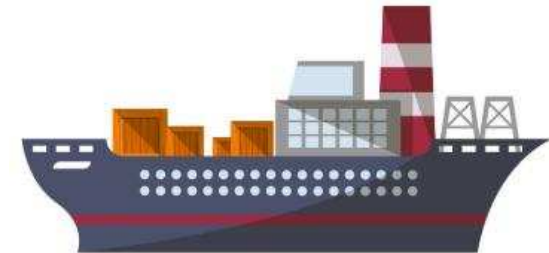
“Climate change is a defining issue of our time and the scale of the environmental regulation we are facing is unprecedented. In order to ensure sustainable growth on the pathway to decarbonisation, all players need substantive reaction to the technological solution of ZEV (Zero Emission Vessel) as well as the development of carbon neutral fuels. HMM is well prepared to cooperate with relevant authorities and institutions within the Coalition,” says Jae-Hoon Bae, President & CEO of HMM.

HMM is committed to reducing carbon emission by 70% by the year 2030 compared to 2008 levels and thereby reach carbon neutrality by 2050 for its entire container fleets. HMM already reorganized R&D team to accelerate a range of research studies including the exploration of the commercial viability of hydrogen-powered system and collaboration with DSME for smart ship development.

HMM official said, “HMM’s carbon emission target is ambitious, but achievable. Along with “Getting to Zero Coalition”, HMM expects to make a better contribution to overall industry in moving towards carbon neutrality,” and added “HMM’s achievement and progress in line with its environmental roadmap can be found in the corporate sustainability report scheduled to be published next month.” - END -

I -5. E-Business Solution (1/5)

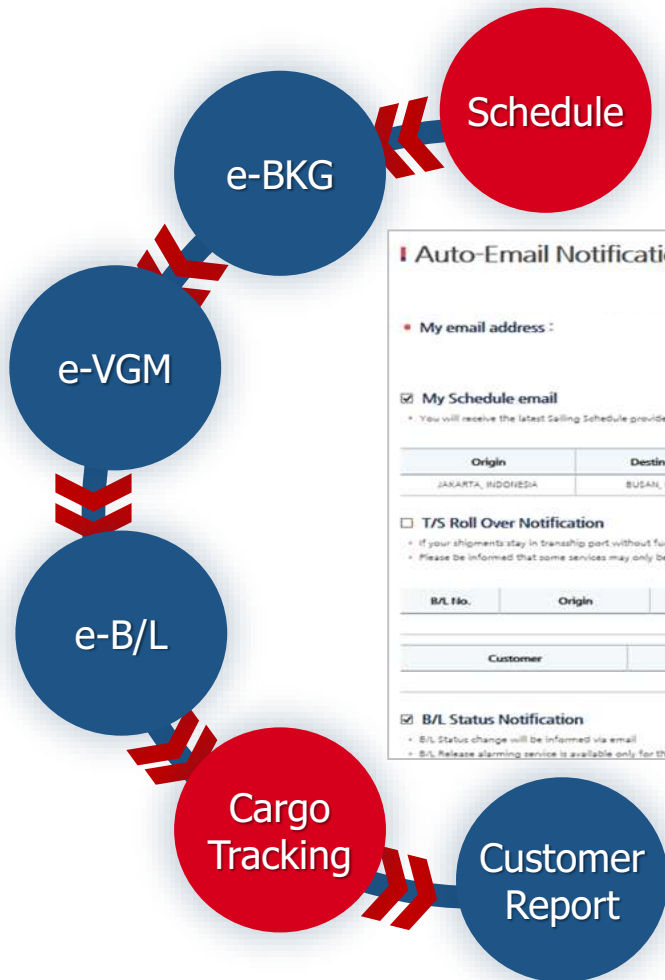
- Connect your value via HMM e-Service



I -5. E-Business Solution (2/5)



- HMM-SPECIALIZED FUNCTION



Auto-Email Notifications

Auto-email notifications for
Vessel Schedule,
T/S Roll,
B/L status,
Cargo Tracking,
Customer Report

Auto-Email Notifications

My email address :

☒ My Schedule email
You will receive the latest Sailing Schedule provided by HMM main system.

Origin	Destination	Duration	Recipient list	Control
JAKARTA, INDONESIA	BUSAN, KOREA	Monthly, 10	hmmidpry@hmm21.com	Modify / Delete

☐ T/S Roll Over Notification
If your shipments stay in tranship port without further movement for any reason, you will be informed via your registered email.
Please be informed that some services may only be available once you have advanced registration.

B/L No.	Origin	Destination	Over day	Recipient list	Control
No Data					

☒ B/L Status Notification
B/L Status change will be informed via email.
B/L Release alarming service is available only for those customer who prints out their original B/L via HMM website.

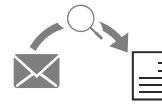
Setup total recipient list

Setup total receipt list

Email Address	
1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>
5	<input type="text"/>
6	<input type="text"/>
7	<input type="text"/>
8	<input type="text"/>
9	<input type="text"/>
10	<input type="text"/>

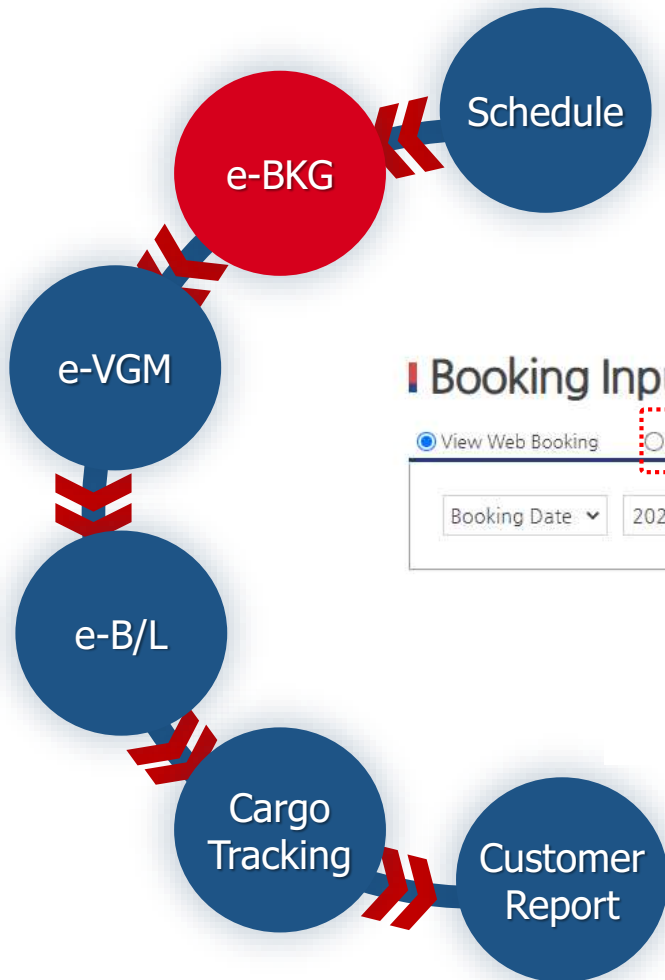
Save Cancel

- HMM-SPECIALIZED FUNCTION



EDI and Manual Booking on Webpage

EDI and even Manual Booking can be handled on Webpage as if those booking requests are received thru HMM Webpage



Booking Input/Update/Inquiry

☒ View Web Booking

☐ View EDI Bookings Transferred to Web

Booking Date

20200818

~

20200825



1 Week

All Status

Trade (All)

Inquiry

Booking Input (NEW)

Inquiry & Update

Booking Note

Create S/I

Surcharge Inquiry

Track & Trace

Export

Booking Input/Update/Inquiry

BKG Inquiry(Incl.EDI/EML BKG)

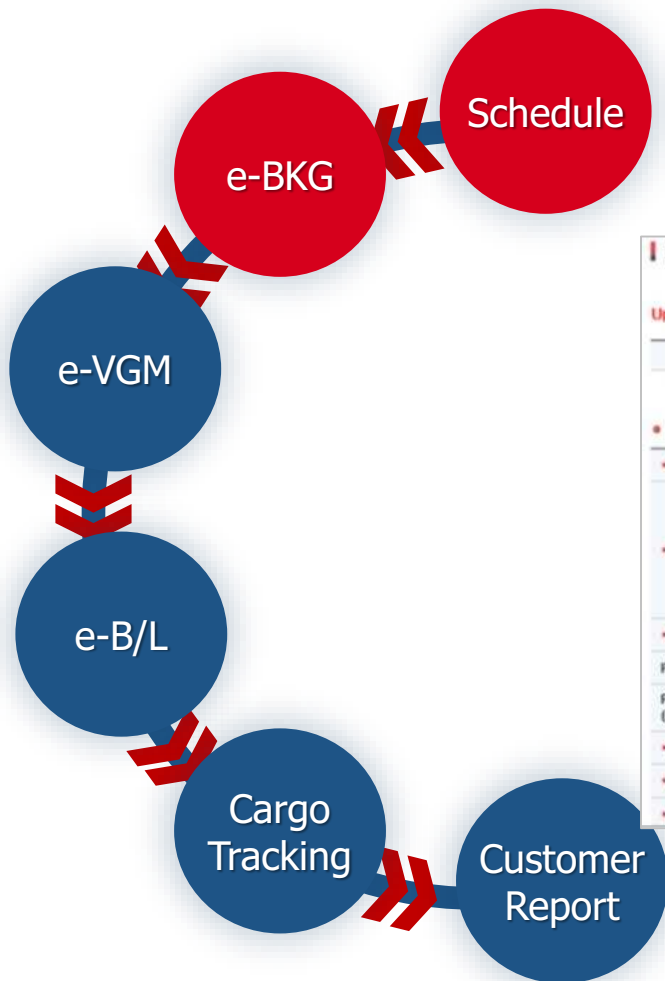
I -5. E-Business Solution (4/5)



- HMM-SPECIALIZED FUNCTION

 Live Chat in Homepage (US, CN only)


Customer can inquire BKG, B/L related information HMM WEB and receive answer in prompt manner



Booking Input/Update/Inquiry [Video Tutorial](#) [Manual](#)

Update

Booking number	CALB764398		
Location & Vessel			
Trade Lane	North America to Asia <input checked="" type="checkbox"/> Frequently Used Locations Only		
Place of receipt	<input checked="" type="radio"/> U.S.A. <input type="radio"/> Canada <input type="radio"/> Argentina <input type="radio"/> Brazil <input type="radio"/> Chile <input type="radio"/> Colombia <input type="radio"/> Ecuador <input type="radio"/> Mexico <input type="radio"/> Peru <input type="radio"/> Uruguay		
Place of receipt	LONG BEACH, CA		
POI Mode	US West Coast	Route	All
Place of Loading (Optional)	LONG BEACH, CA		
Place of Discharging (Optional)	BUSAN, KOREA		
Place of delivery	BUSAN, KOREA		
Departure	2018 09 10		
Duration	8 weeks		



Richard
Support Agent

Richard 11:35
Welcome to HMM !
What can I help you ?

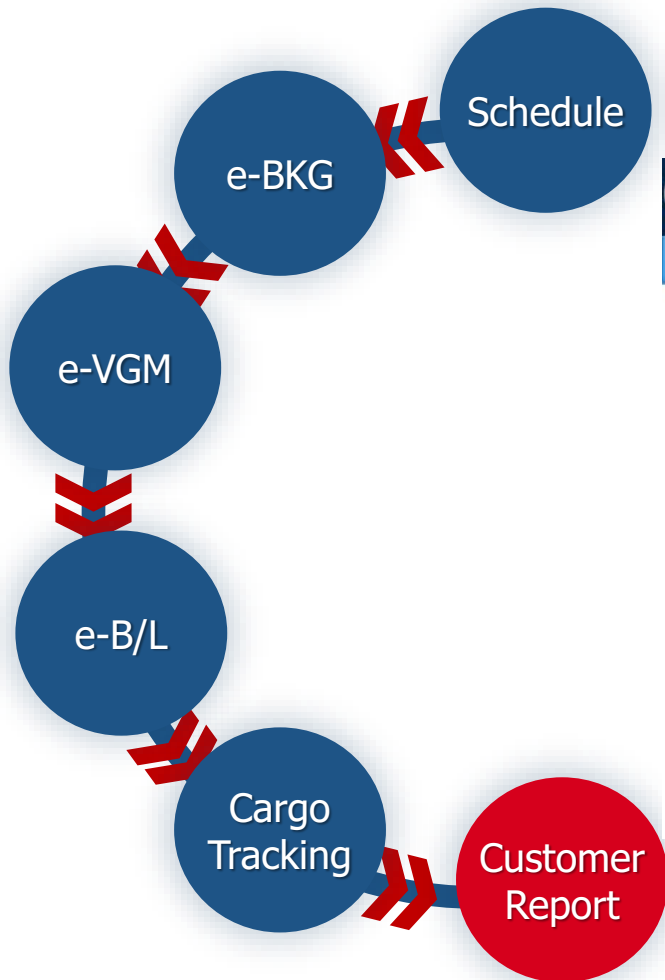
John Kim 11:35
Hello, I would like to know what the latest vessel sailing LA to Pusan is

Type your message here and press Enter to send

I -5. E-Business Solution (5/5)



- HMM-SPECIALIZED FUNCTION



Customer report

Customized report for BKG, B/L and tracking data
Report will be automatically sent to customer's contact point

Customer Report

[New Report](#)[Standard Report](#)[My Report](#)[Auto email Setup](#)[Item Description](#)

Pre-made reports with often used item fields that you can edit as needed.

01. Basic Report (Most frequently used items)

Report includes basic and essential shipment information of the most frequently used items. (18 Items)

[Go](#)

BL No.	Container No.	Container Size	Container Type	Shipper	Current Location	POR (Place of Receipt)
BULBXXXXXX	HDMUXXXXXX	40	DC	OOOOO	-	BUSAN, KOREA
XGWBXXXXXX	HDMUXXXXXX	40	RF	OOOOO	CHICAGO	XINGANG, CHINA

02. Cargo detail Report

Report contains more cargo detail information including commodity, package count, weight etc. (25 Items)

[Go](#)

BL No.	Container No.	POR (Place of Receipt)	POL (Port of Loading)	Vessel Name	Voyage Number
BULBXXXXXX	HDMUXXXXXX	BUSAN, KOREA	BUSAN, KOREA	HYUNDAI INDEPENDENCE	115E
YNWBXXXXXX	BHCUXXXXXX	YANTIAN, CHINA	YANTIAN, CHINA	HYUNDAI INDEPENDENCE	115E

I -5. Special Cargo Business (1/6)

- Reefer Container

• HMM Reefer Service – What we carry



I -5. Special Cargo Business (2/6)



- Special Reefer Container

• CA (Controlled Atmosphere) Container



► What is CA container?



Controlled Atmosphere has become an effective way to secure and preserve cargo quality by managing the amount of CO₂.

HMM has our own CA containers to keep fruits and vegetables fresh, which allows them to have a longer shelf life by preventing early ageing and ripening.

► Benefits of CA for fresh product



Delay of ripening, ageing, decay and related changes prolongs the shelf life of products



Reduction of water loss and weight shrinkage



Longer transit time becomes possible



Higher sales price for the retail trade

► Main Commodity



AVOCADO



BERRIES



ASPARAGUS

I -5. Special Cargo Business (3/6)



- Special Reefer Container

• UF (Ultra Freezer) Container



►What is UF container?

Ultra-freezer is very advanced technology of maintaining the interior of a container below -60°C . All live products usually stop their natural decaying process below -60°C . No matter how far away you are, Ultra Freezer containers allow us to deliver high value fresh products preserving first-day product freshness and taste.



►Benefits of UF

Controlling the percentage of inside liquid is the key to maintaining the quality of tuna. This is why Ultra Freezer is needed in order to keep your cargo fresh when it's traveling long distances.

►Main Commodity



TUNA



DIPPIN DOTS

I -5. Special Cargo Business (4/6)



- OOG & Break Bulk Business

All solution and state of the art
know-how for Project cargo handling

Pricing : special offer

- OOG & Break Bulk
- EPC Project

Space & EQ Coordination

- Guaranteed space
- New van order

Consulting

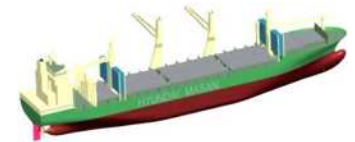
- Loading & Discharging
- Safety first



I -5. Special Cargo Business (5/6)

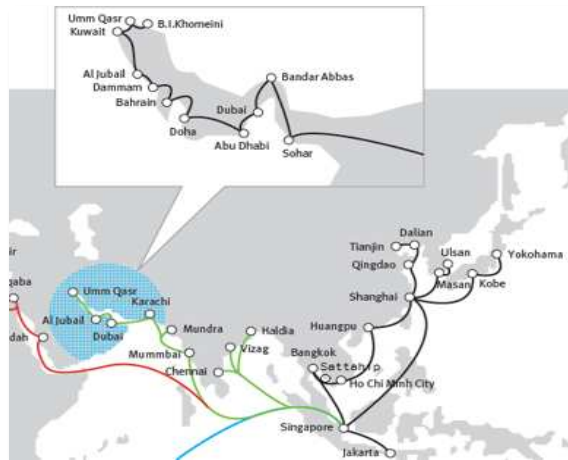


- Heavylift Business



Vessel	Built	Dwt	Crane
Dalian	2004	30,000	Max 640T (320T x 2)
Hyundai Masan	2010	30,000	
Hyundai Ulsan	2011	30,000	
Hyundai Dubai	2011	30,000	
Hyundai Antwerp	2011	30,000	

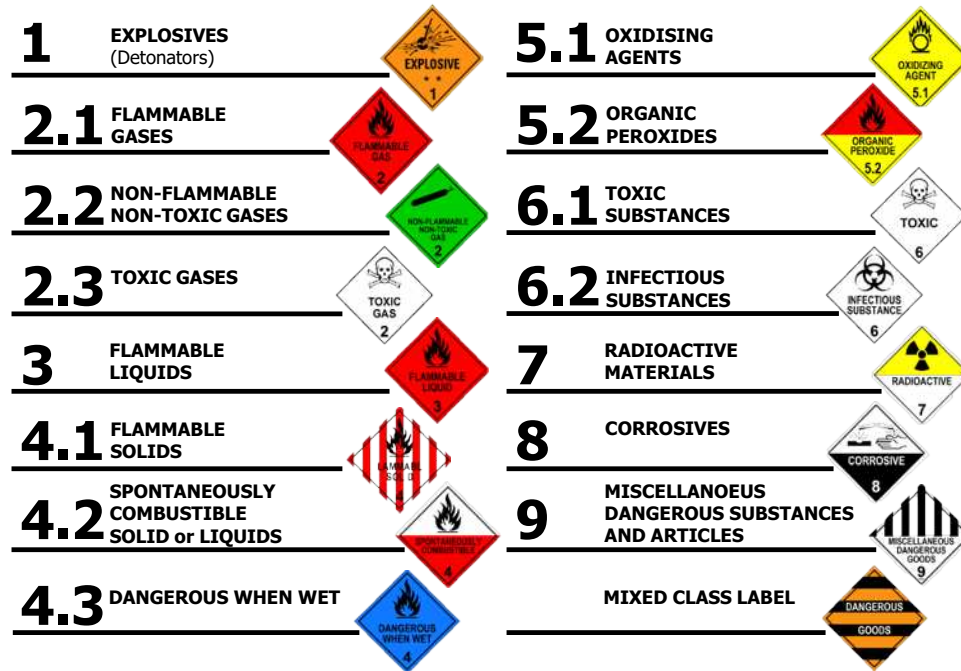
- Launched service in 2007
- 5 Heavy-lift vessels with lifting capacity up to 640MT.
Commodity : Project-related equipment and Plant
- Far East ⇔ Middle East, South East Asia
(2~3 sailings per month, for detailed service refer to the appendix)
- Project cargoes for Refinery, Petro-Chemical, Power Plant, etc.
- Customized – tailored solution with 3D solution system
in terms of cargo size and specific requirement of each cargo.
- Overseas Offices : Shanghai, Singapore, Dubai



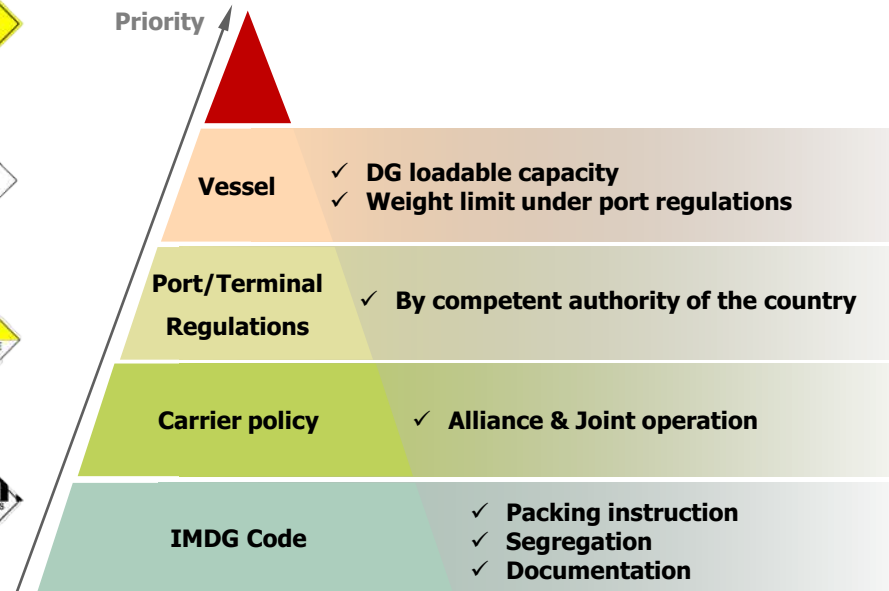
I -5. Special Cargo Business (6/6)

- DG Cargo Business

• 9 Classes of IMDG Code Classification system



• Regulations



• Dangerous cargo loading process



Shipper

Classify & Declaration

- IMDG Classification
- DG Declaration
- Compliance with packing instruction

Loading & Securing

- Segregation
- Proper securing
- DG Label & Placard

Documentation

- DG Cert(DGD)
- MSDS
- Tank inspection Cert
- Others

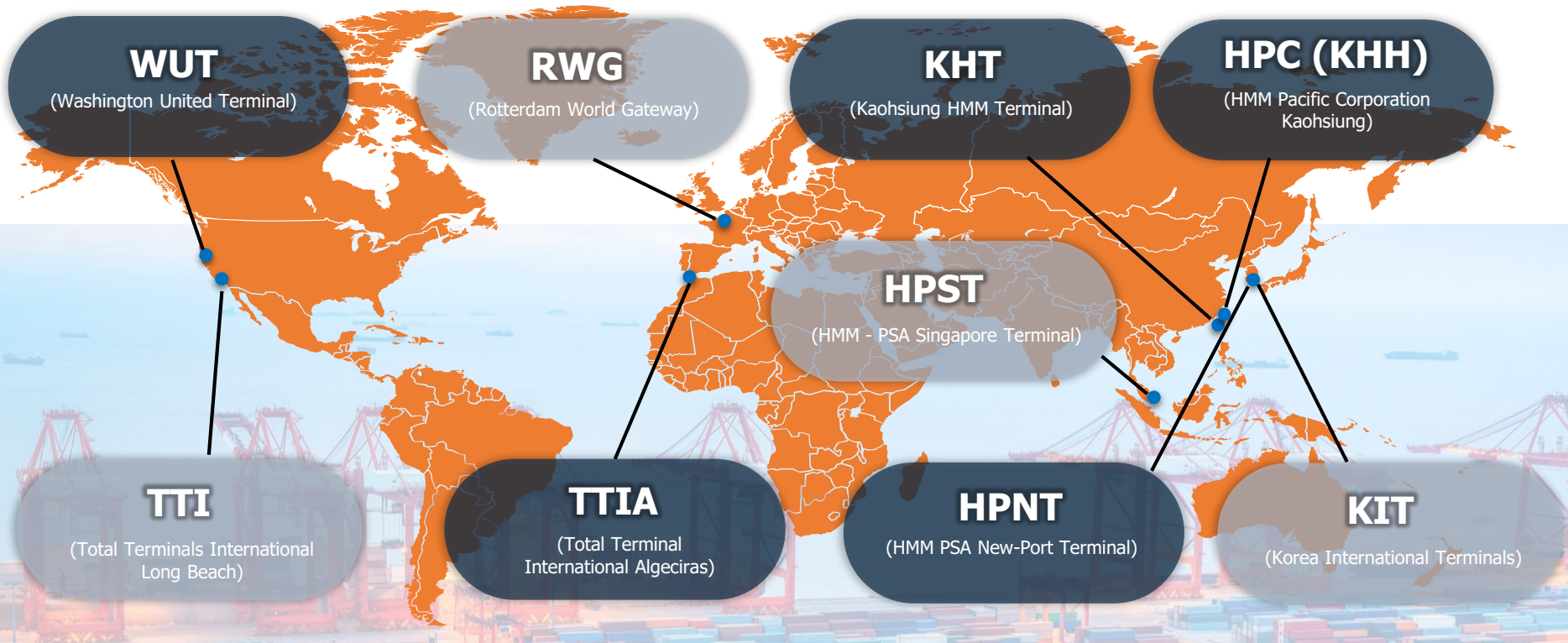
Loading



Carrier

✚ Classification of dangerous cargo shall be made by the shipper/consignor with full responsibility

I -5. HMM Terminals



< Benefits from key terminals >

- **Cost Saving**
 - Logistical expense reduction
- **Stable berth operating**
 - Reduction of waiting time and expense
- **Additional benefits from new terminal business**
 - Business extension to the 3rd party via terminal business

Acquired HJS Core Asset : TTIA, HPC, TTI

HMM
Own Terminal

Share
Participation
Terminal

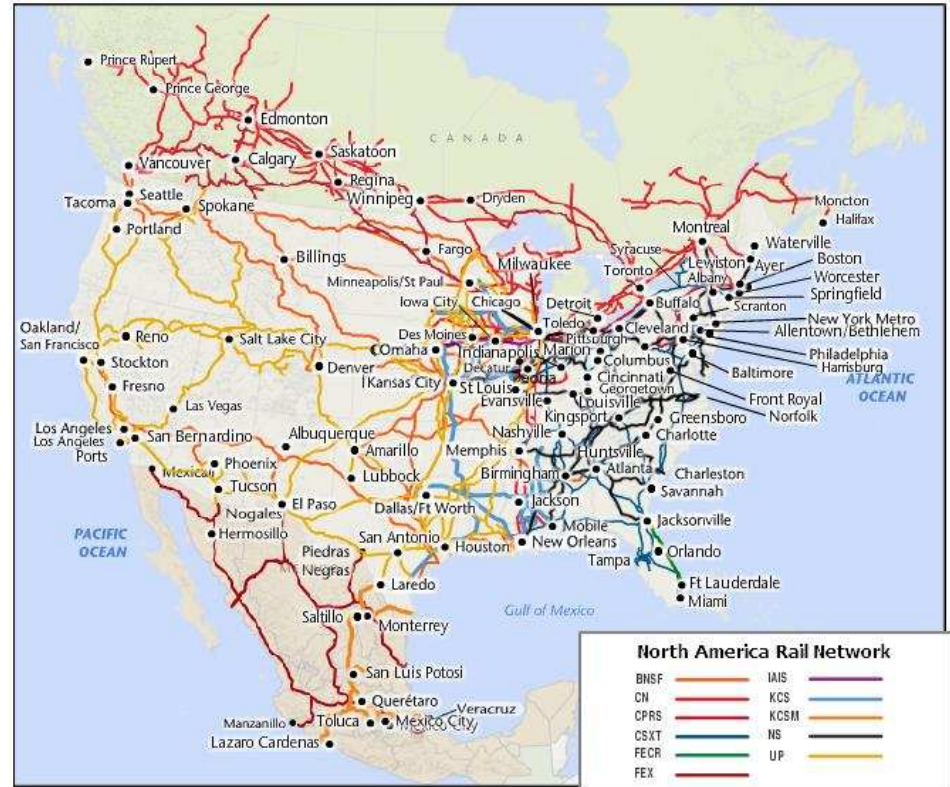
I -5. Intermodal & Feeder Networks (1/2)



- Intermodal Network in N. America

- Providing North America intermodal service optimized with HMM's gateway/service products
- Connecting major North America hub points served by Class 1 railroads

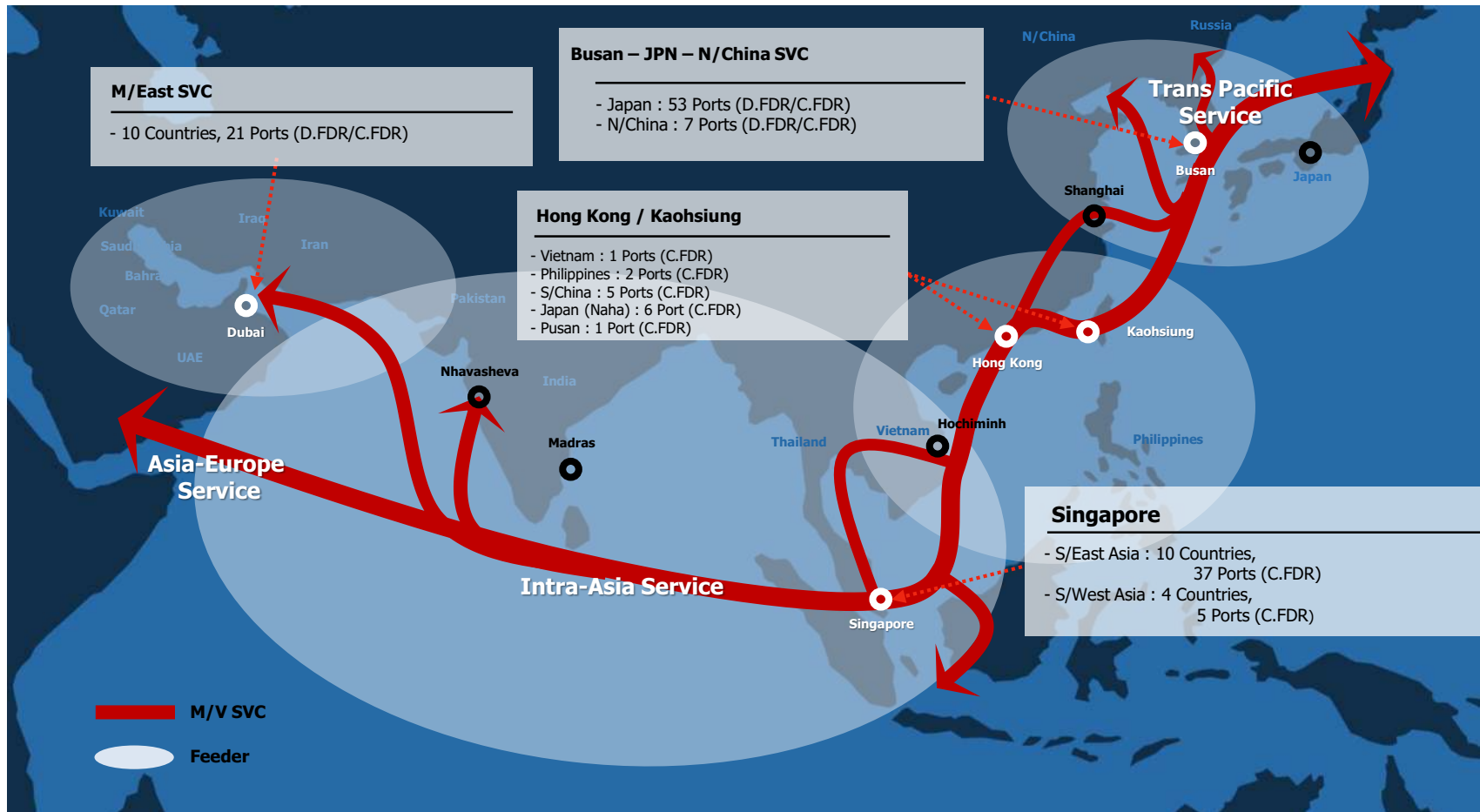
	U.S. West Coast	U.S. East Coast	Canada
Rail Service Provider			
Coverage	U.S. Pacific Coast to/from Chicago, Midwest, Gulf, Memphis, South East	From/To East Coast, Chicago/Mem-phis Beyond svc via I/C with Western Railroads	Western Canada to Canada inland and U.S. Midwest (Chicago, Minneapolis, Detroit)



HMM Advantage

- » Superior Transit time extending PN/PS service routes in/out to Inland points
- » Seamless Rail Service with volume handling WC terminals as APMT LA, TTI LGB, WUT(Tacoma)
- » Tailor made Service with Western/Eastern railroads combination

I -5. Intermodal & Feeder Networks (2/2)



- » HMM provides comprehensive & feeder network services through timely & seamless connection with main haul routes.
- » For more detailed information, please find appendix "Feeder Service" on the last page

I -5. Regulation & Safety Rules –Green Operation

HMM maintains Eco-Friendly Policies,
such as preventing marine & atmospheric
pollution, minimizing waste products and
making economical use of resources & oil zero
spills,
to preserve the environment



» HMM Execution and Plan for International Polices for Fuel Sulfur Limits

Region	Restricted Area	Allowed Fuel	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020		
Global Limit	World Wide	All Kind Fuel	Under 4.5%	Under 3.5%								Under 0.5%		
EU	Baltic/ North Sea		Under 1.0%						Under 0.1%					
	EU Port		Under 0.1%											
US	Within 24 miles coast of California	LSGO	Under 1.0%						Under 0.1%					
	Within 200 miles USA/Canada/Hawaii						Under 1.0%							
ASIA	Hong Kong	All Kind Fuel	Under 0.5%						Under 0.5%					
	Shenzhen Area		Under 4.5%	Under 3.5%						Under 0.5%				
	Yangzhou Area		Under 4.5%	Under 3.5%							Under 0.5%			
	Main 12 China Port										Under 0.5%			
	All China Port												Under 0.5%	
	Taiwan												Under 0.5%	



I. About HMM

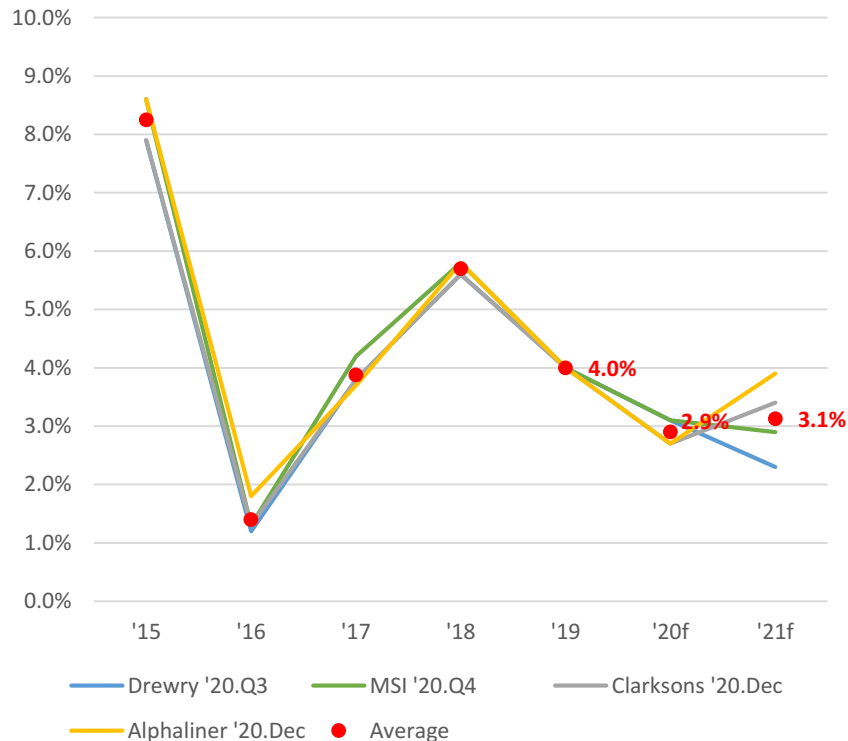
II. Market Outlook

1. Supply & Demand	-----	41
2. Market Issue	-----	47

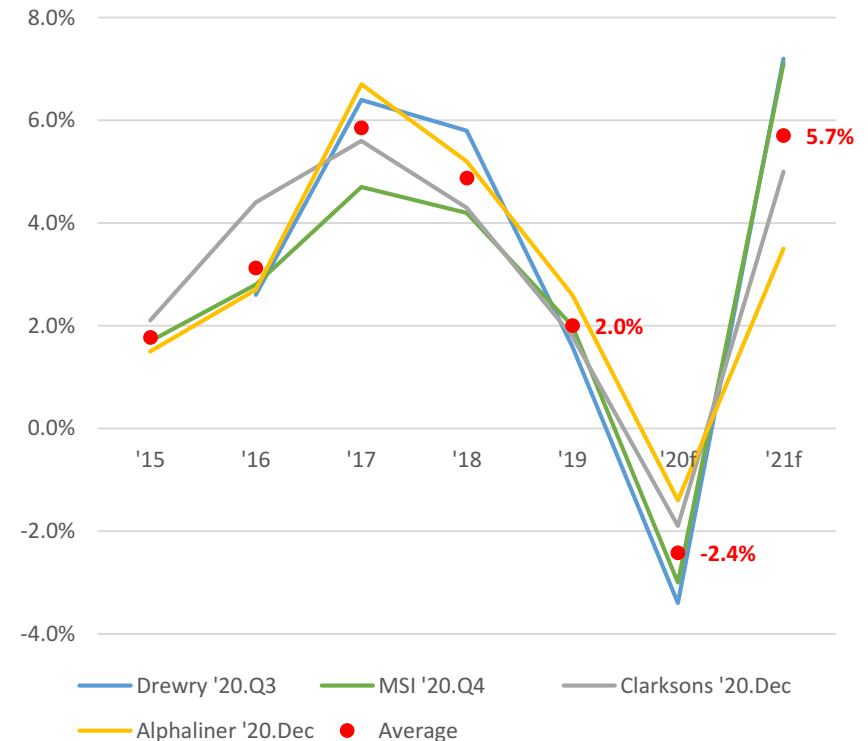
II -1. Supply & Demand (1/3)



Supply Growth Rate Forecast



Demand (Container Trade) Growth Rate Forecast



- After a tumultuous first half of the year the containership fleet expanded in Q3 2020 as an upturn in demolitions failed to keep pace with an acceleration in deliveries.
- As at the end of Q3 2020, the containership fleet had grown by 2.5% relative to the fleet size at end year-2019.
- Annual fleet growth through 2023 is expected to be held at 2-3%.

- Container demand trends have strengthened markedly and above expectations over the second half of 2020.
- Amid a resurgent global pandemic, the fourth quarter of 2020 will very likely see the highest volume of container trade industry history.
- A broader upswing in economic growth and sentiment will support container trade next year.

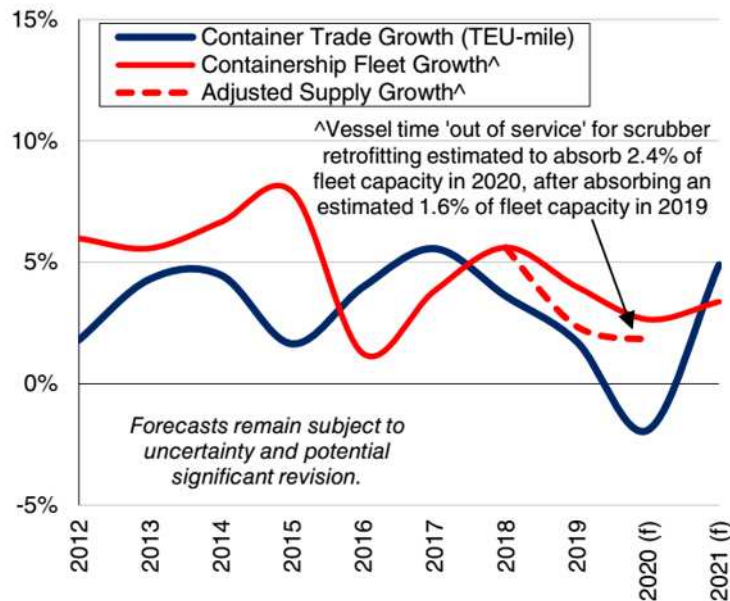
(Source: MSI Q4, Drewry Q3, Clarkson's Dec, Alphaliner Dec, 2020)

II -1. Supply & Demand (2/3)



- Containership Supply-Demand Trends

Containership Supply-Demand Trends



- 2H 2020 has seen major improvements in box shipping markets and container trade. Risks remain, but the short-term outlook appears promising.

- Clear demand side improvement have been apparent in recent months, on the back of a range of factors, including quicker than expected improvements in some economies, inventory restocking and frontloading in key regions and PPE shipments.

- Global box volumes were up by 4.6% y-o-y in Oct, only slightly slower than the 6.4% y-o-y increase in Sept.

- Boxship supply appears manageable; underlying capacity growth is set to slow to a moderate 2.7% in 2020. The orderbook remains limited at 9% of the fleet, though newbuild interest is now increasing.

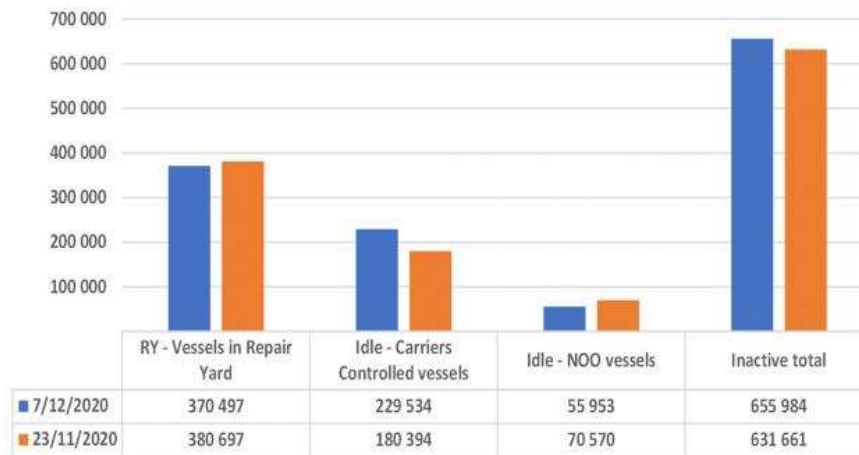
- The 'base case' outlook remains for a firm 'rebound' in trade growth in full year 2021.

(Source: Clarksons Container Intelligence Monthly, Dec 2020)

II -1. Supply & Demand (3/3)

- Inactive Containership Capacity (2000-2020f)

Container ships : inactive fleet teu capacity by 'type of inactivity'



- ❑ The inactive fleet capacity remains stable at 600k TEU.
- ❑ The global inactive containership fleet continued to reduce in size as it entered the month of December.

TEU Range	Units Inactive ^A	Trend	Idle**		RY*
			Carrier Units	NOO Units	
< 1 Kteu	30	↘	3	13	14
1-2 Kteu	36	↘	7	16	13
2-3 Kteu	26	↔	9	3	14
3-5.1 Kteu	19	↘	4	3	12
5.1-7.5 Kteu	18	↗	8	1	9
7.5-12.5 Kteu	17	↘	4	0	13
12.5+ Kteu	12	↗	7	0	5
Total units	158	↘	42	36	80

*RY: Normal maintenance, emergency repair, retrofit, and etc.

- ❑ Inactive Containership Fleet (Dec 7, 2020) :
158 Units / 655,984 TEU / 2.8% of total fleet

(Source: Alphaliner Weekly Newsletter, Issue 50)

II -2. COVID-19 Impacts (1/3)

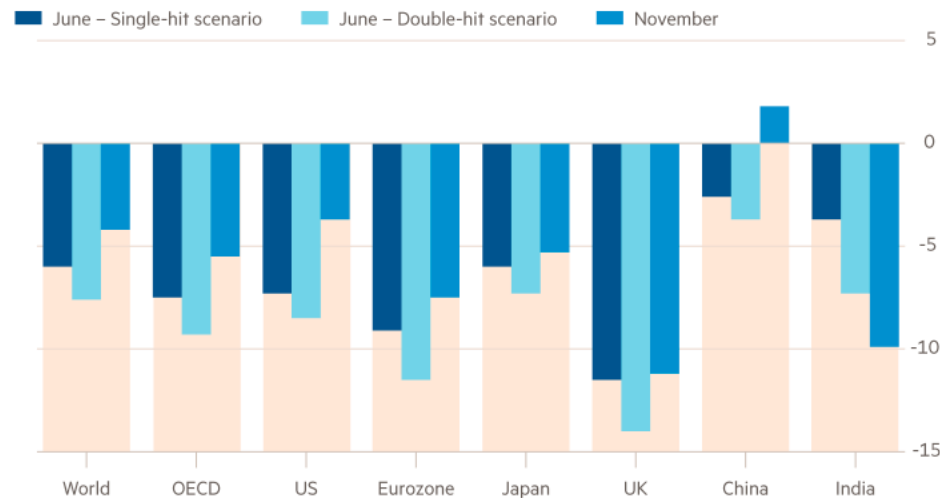
- COVID-19 Impact on Economy <<

❑ The news on vaccines is really encouraging

- The latest Economic Outlook from the OECD is less gloomy about the immediate economic impact of Covid-19 than it was in June.
- Global gross domestic product is still forecast to shrink by 4.2% this year, while the GDP of OECD members is forecast to shrink by 5.5% this year. This recession will be the worst since the Depression.
- Yet the outcome might have been worse. The US forecast to shrink by 3.7% this year, against June's forecast decline of 8.5% in the double-hit scenario. And China forecast (amazingly) to expand by 1.8% this year.

For most big economies, the forecast for 2020 has improved since June

OECD forecasts for GDP growth in 2020 (%)



Source: OECD
© FT

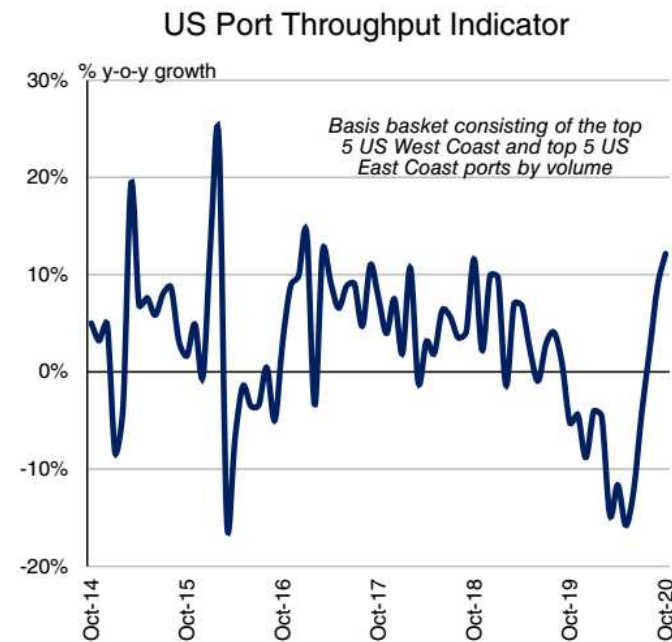
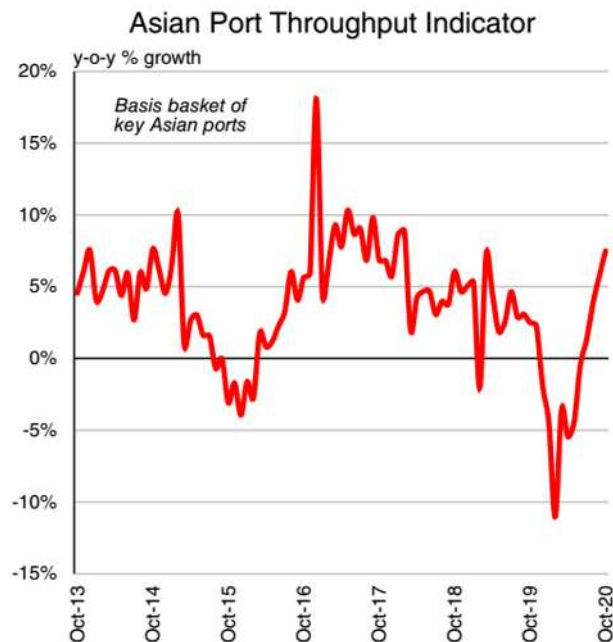
(Source: "A light shines in the gloom cast by Covid-19," Financial Times, Dec 2, 2020)

II -2. COVID-19 Impacts (2/3)

- COVID-19 Impact on World Container Ports

□ **World Port News** (Dec, 2020)

- Global containership port calls increased by 2.7% y-o-y in November, and by 3.0% in terms of capacity.
- In the US, containership port calls were up by 9.0% y-o-y in November, up from growth of 4.9% y-o-y in October.
- In Asia, the number of containership port calls increased by 2.5% y-o-y in November, down slightly from growth of 6.4% in October.



(Source: Clarksons Container Intelligence Monthly, Dec 2020)

II -2. COVID-19 Impacts (3/3)



- COVID-19 Impact on Supply Chain



[Photo] Kaohsiung HMM Terminal(KHT)



❑ **Box shortage to last at least until Chinese New Year**

Shippers exporting from China are likely to face equipment shortages for another six to eight weeks.

The coronavirus backdrop has pushed the container supply chain to breaking point.

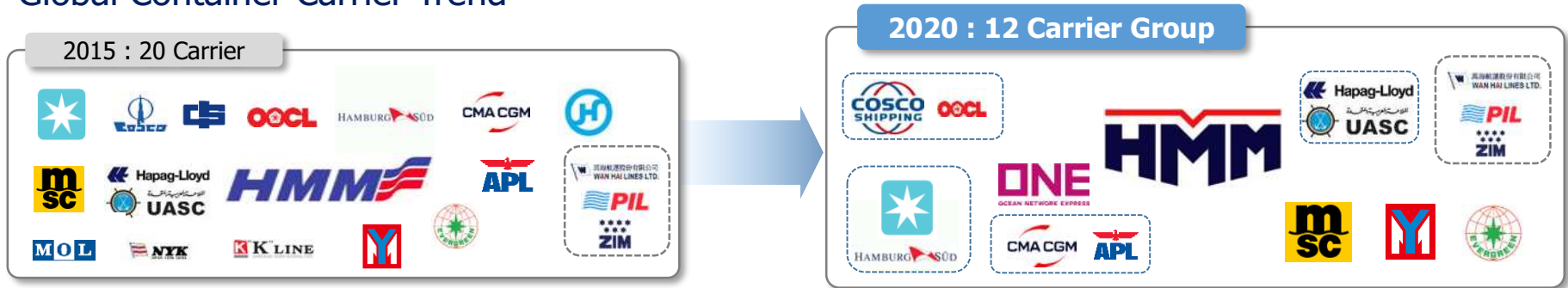
Port congestion and a shortage of containers are likely to remain in place through to early February, meaning it will affect shipments during the pre-Chinese New Year demand spike.

The problem has been compounded by congestion in ports and by higher volumes, which combined had caused delays.

(Source: Lloyd's List, Dec 10, 2020)

II -2. Market Issue (1/5)

- Global Container Carrier Trend



- ❑ Market Player Decreased : Active consolidation (Top **20** Carrier → **12** Carrier Group)
- ❑ Fleet Enlargement : Capacity increasing trend by each carrier(M&A and new ULCV delivery)
- ❑ Competition among nation : 1 nation 1 carrier (China, Japan and etc.)

- CURRENT



II -2. Market Issue (2/5)

- Carrier Plan on IMO 2020 Sulphur Cap

NEW SHIPPING PARADIGM – Environment Regulation

1 January 2020

When **IMO 2020** comes into force

80%

IMO's Global Sulphur reduction target

3.5%

Current maximum fuel Sulphur limit

0.5% & 0.1%

New maximum fuel Sulphur limit



Mandatory options for carrier to comply with IMO2020

SCRUBBER INSTALLATION

Sulphur(on engine exhaust) reduction device on the Vessel

LOW SULPHUR FUEL

Sulphur with 0.5% limited Fuel 50%△
Expensive than High Sulphur Fuel



IMO 2020 impact on shipping industry

Higher fuel price and operation expense to comply with IMO 2020 regulation

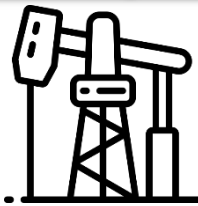


High Sulphur Fuel (HFO)

\$200 ~ 350/TON Price Higher



More Expensive



Supply Shortage



Low Sulphur Fuel (LSFO)



LNG FUEL

Charter LNG VSL or Convert existing VSL to LNG VSL

II -2. Market Issue (3/5)

- LSFO Quality Issues Resurfaced

☐ **Industry on alert as off-spec IMO 2020-compliant fuel oil is detected**



- Samples of fuel oil complying with the IMO 2020 sulphur limit supplied out of Rotterdam, were found containing sediment levels above a limit set by an industry standard.

Fuel oil product with off-spec sediment content have resurfaced in the Amsterdam-Rotterdam-Antwerp region after a similar high-sediment level problem was found at the start of the year, as well as in Singapore.

Concerns about such off-spec bunkers have heightened following the implementation of the IMO 2020 regulations imposing a 0.5% limit on sulphur content in marine fuels. (Lloyd's List, Aug 2020)

☐ **Quality crisis: Alarm after bunker survey uncovers safety issues with new fuel supplies**

- Nearly 30% of respondents (56 out of 192) said they had experienced bunker fuel products whose sulphur content may exceed 0.5%.

A bunker survey by prominent shipping organizations has painted an alarming picture for vessel operators, with many maritime professionals still encountering marine fuel not meeting required standards.

"The transitions to IMO 2020 compliant fuel oil has not been without problems," Bimco, Intertanko, Intercargo and the International Chamber of Shipping said in the survey report. (TradeWinds, Aug 2020)

II -2. Market Issue (4/5)

- Transpacific carriers planning 'unprecedented' boost to capacity

☐ **Box lines add record capacity in fourth quarter**



- Transpacific weekly capacity is set to increase by 20% in the fourth quarter as carriers seek to service high levels of demand.

"The major deepsea trades all see a reversal from capacity contractions in the third quarter to capacity growth in the fourth quarter," said analysts at Sea-Intelligence. "However, the transpacific trade stands out, with a capacity growth pattern that has not been seen before."

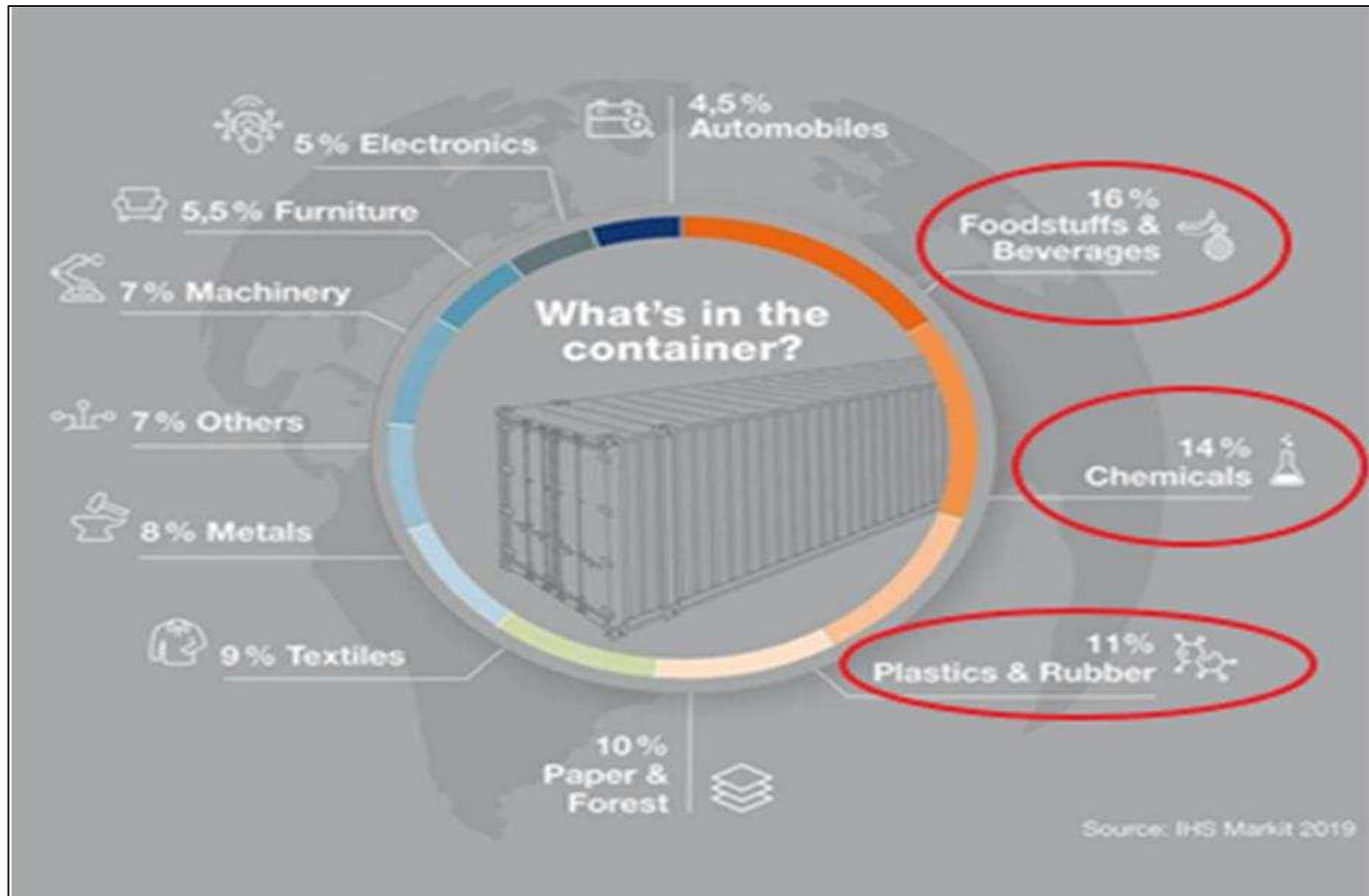
The data shows that container lines have not been holding back capacity to increase rates, and have instead not only been re-instating capacity but are increasing it at a 'historically high pace,' Sea-Intelligence said.

While the transpacific had seen the most significant changes in capacity, Asia-Europe and Asia-South America were also seeing capacity being re-injected into the market. (Lloyd's List, Oct 2020)

II -2. Market Issue (5/5)

- Vessel transport 90% of what we buy

What are the most common shipped products?



Smart Shipping



**“Thanks for
your attention.”**



More information available in our web-site:
<https://www.hmm21.com>