

# Green & Digital Shipping Corridors (GDSC)



# MPA's Mission & Roles

## Premier Global Hub Port

- Port Authority
- Port Regulator
- Port Planner

## International Maritime Centre

- IMC Promoter
- IMC Developer

## Advance & Safeguard Singapore's Maritime Interests

- National Maritime Representative at IMO and other regional / international organisations / fora



# Green and Digital Shipping Corridors to Accelerate Decarbonization and Digital Transformation



## Clydebank Declaration for Green Shipping Corridors

In Apr 2022, Singapore became the **23<sup>rd</sup> signatory** to the **Clydebank Declaration**.

Signatories would support the establishment of at least 6 green corridors by the middle of this decade.



## World's longest Green & Digital Corridor (GDSC)

In Aug 2022, Singapore signed its first MoU with the Port of Rotterdam to establish the **world's longest GDSC to enable low and zero carbon shipping**.



## Public-Private Collaboration between MPA, Port of LA, Port of Long Beach & C40

At COP27, MPA announced the commencement of discussions with Port of Los Angeles, Port of Long Beach and C40 on a **potential Green and Digital Shipping Corridor between Port of LA, Port of Long Beach and Singapore**.

# Aspirations

## GREEN SHIPPING CORRIDORS

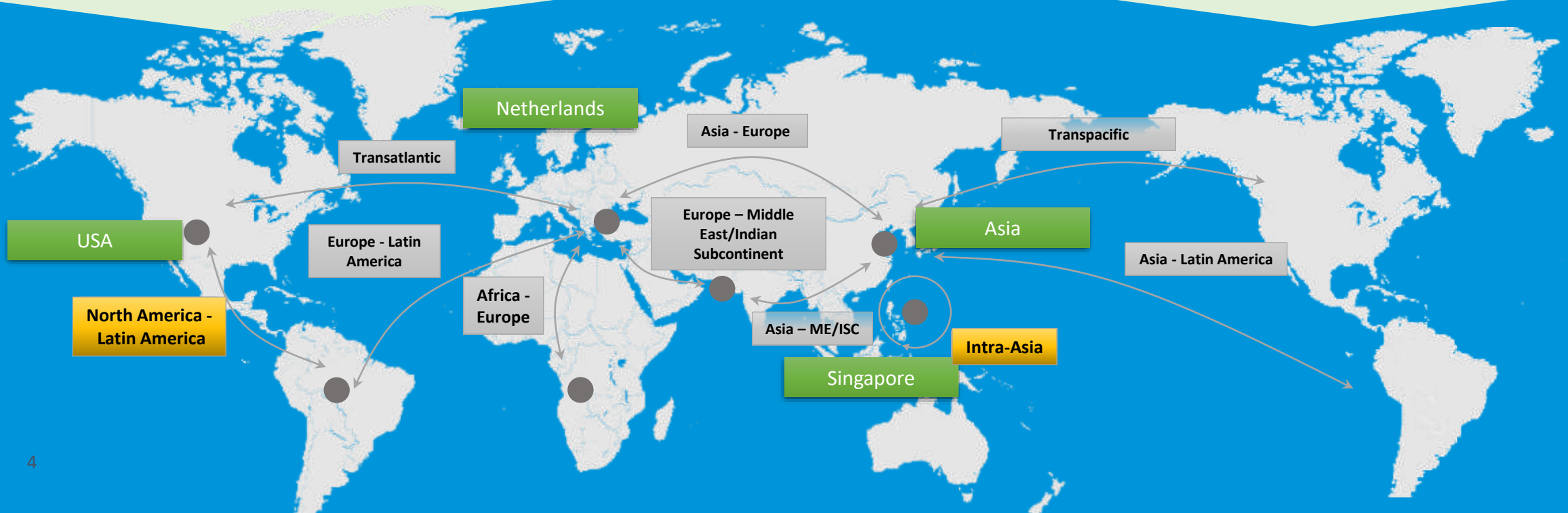


Accelerate decarbonisation of the Shipping industry by working with stakeholders to provide low or zero carbon fuels and bunkering infrastructure in Singapore and like-minded partners over the next few years and deliver solutions at scale by 2030.



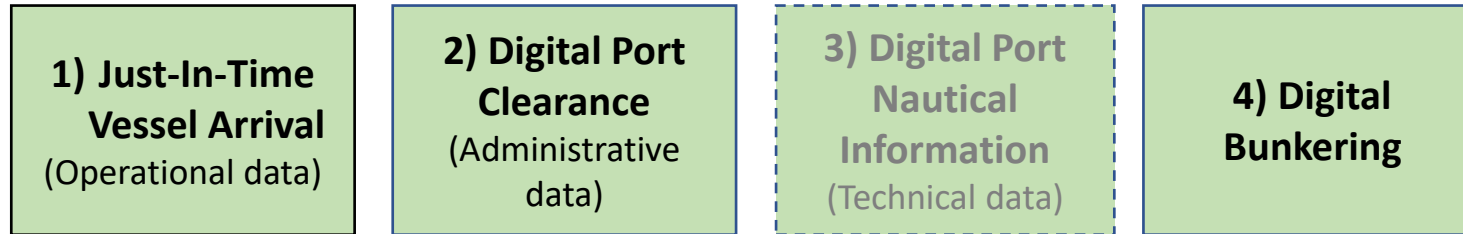
## DIGITAL SHIPPING CORRIDORS

Accelerate the adoption of solutions and global standards to facilitate efficient port call and flow of goods, and paperless handling through the Port of Singapore and like-minded partners.

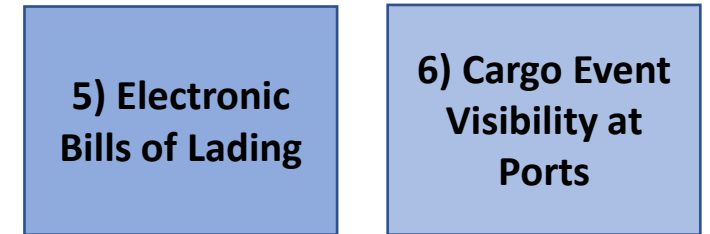


**Digital Corridor:** "Accelerate the adoption of solutions and global standards to facilitate efficient port call and flow of goods, and paperless handling through the Port of Singapore and like-minded partners."

### Digital Port Services



### Trade Facilitation



### Enablers

#### Standards and Interoperability

- Non technical standards are in accordance with the IMO FAL Compendium, UN/CEFACT, UNCITRAL, etc
- Technical standards are in accordance with ISO, ASTM, etc

# JIT Vessel Arrival

Just-in-time vessel arrival facilitates **direct berthing on arrivals and on-time departures**, enhancing ship turnaround time, scheduling of port resources and reducing carbon emissions

digitalPORT@SG™ is an **integrated digital platform** for the industry to facilitate the booking of JIT marine services in Singapore

digitalPORT@SG™

## Just In Time Planning and Coordination Platform

Adopting a **customer service journey** perspective to optimise the port stay for ships that call at the Port of Singapore.

### Berth Planning

Ship agents are required to **submit berth applications** to the terminals for **planning and clearance**. The terminals will provide the **Estimated Time of Berthing (ETB)** in advance through the JIT Platform.



### Monitoring of Vessel Arrival

The JIT platform will inform ship agents if there are changes to the vessel arrival time. This is for the ship agents to **make changes** to the itinerary if necessary. If there are no changes to the arrival time, the ship agents will **confirm the itinerary**.



### Departure of Vessel

The **Estimated Time of Unberthing** will be shared with all stakeholders to ensure timely departure of vessel.

The **Estimated Time of Departure** will be captured upon disembarkation of the pilot from the vessel.



### Planning & Coordination of Vessel Activities

The JIT platform facilitates direct berthing on arrivals and on-time departures to **enhance ship turnaround time** as well as to **reduce dwell time** at anchorages.

All vessel activities will be **captured in real time** on the JIT platform with the corresponding activity timestamps.



### Itinerary Planning for Port Stay

The ETB information will be sent to all stakeholders attending to the vessel through the JIT platform.

Government authorities and marine service providers can use the ETB to **plan and deploy resources** accordingly.



### Examples of Interfacing Systems

- digitalPORT@SG™ (Single Window Port Clearance)
- digitalBunker@SG
- LT Connect
- Portnet
- JP-Online
- as well as any digital-ready platform of marine service providers through APIs!

# JIT Value Proposition – Significant CO2 emission reduction

Uniform

Transparent

Faster and safer

More predictable

More sustainable

	JIT PBP-PBP	JIT 24	JIT 12
Total CO <sub>2</sub> saving <sup>2</sup> (MT)	19.39 million	8.08 million	5.80 million
Total fuel consumption saving (MT)	6.23 million	2.59 million	1.86 million
Mean fuel consumption saving, on per voyage basis compared to baseline	14.16%	5.90%	4.23%

\* IMO GIA Study published June 1st 2022

# Digital Port Clearance

Digital Port Clearance enables **ship-port data exchange interoperability** along the maritime transport chain and facilitates efficient processing of port reporting requirements and formalities

**Data standards** and interfaces for port clearance have been developed based on **IMO FAL forms**

## Forms for Port Authorities



Form 1  
General Declaration



Form 4  
Crew's Effects Declaration



Form 5  
Crew List



Form 6  
Passenger List

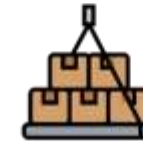


Form 7  
Dangerous Goods Manifest



Form 8  
Security-related Information

## Other Forms



Form 2  
Cargo Declaration



Form 3  
Ship Stores Declaration



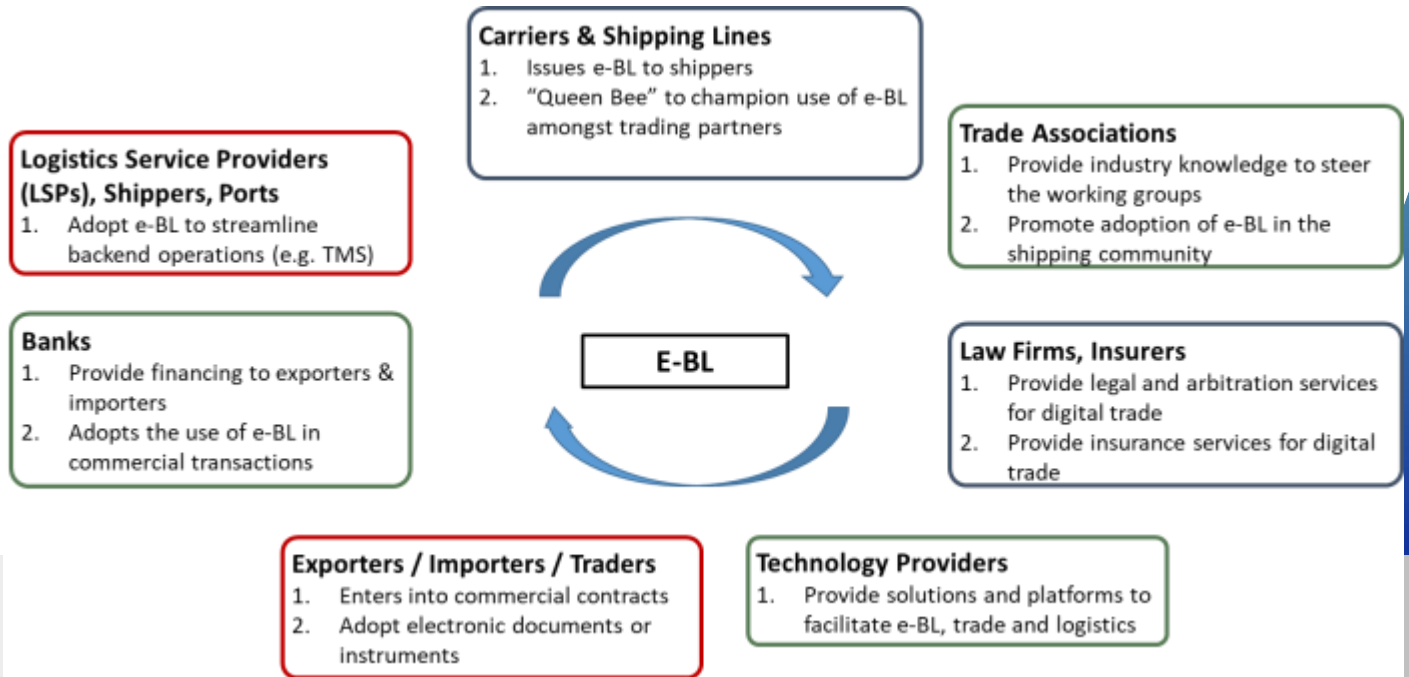
Form 9  
Advance Notification for Waste  
Delivery to Port Reception  
Facilities



# Electronic Bill of Lading

*“Switching away from the transfer of physical paper bills of lading could **save \$6.5 billion in direct costs** for stakeholders, **enable \$30-40 billion in annual global trade growth**, transform the customer experience and improve sustainability.” DCSA*

Singapore is among the first nations to implement the **UNCITRAL Model Law on Electronic Transferrable Records (MLETR)**. This enables the legal use of transferable instruments such as e-BL.





M P A  
S I N G A P O R E



**MARITIME**  
S I N G A P O R E

**Thank You**