

## **ANNEX A: Singapore-Rotterdam e-BL Collaboration**



- Singapore and the Netherlands have collaborated since late-2019 to explore electronic bills of lading (eBL) on one of the world's most important maritime trade lanes – the Europe-Far East trade lane where Singapore and Rotterdam are two major transshipment ports
- In January this year, the two major transshipment ports completed a shipment using an eBL to shadow a live shipment. This shipment was carried out by Ocean Network Express (ONE), a Singapore-headquartered container carrier in collaboration with Olam, a leading food and agri-business supplier for a live shipment of processed cashew from Qui Nhon, Vietnam to Rotterdam, the Netherlands via transshipment at Singapore. It was facilitated by MPA, the Infocomm Media Development Authority (IMDA), with technology platforms provided by #dltledgers from Singapore and NaviPorta from BlockLab, a subsidiary of the Port of Rotterdam Authority.
- A cross platform interoperability test conducted demonstrated that an eBL issued by one platform could be verified and processed by another digital trade platform. In this trial, the shipper and the consignee use two different platforms, i.e. the Singapore-based #dltledgers' blockchain platform and the Netherlands-based NaviPorta platform to perform the title transfer transaction and thereafter the surrender of the eBL issued by ONE. The title transfer and surrender capability on both platforms were enabled by the TradeTrust digital utility, which is based on open standards and is developed to be compliant to the UNCITRAL Model Law on Electronic Transferable Records (MLETR). Singapore has recently amended its Electronic Transactions Act (ETA) which adopts MLETR that enables the creation and use of eBLs that are the legal equivalents to paper-based BLs.

## **ANNEX B: digitalOCEANS™ initiative**

The lack of standards and interoperability across different systems used by ports, ships, shipping companies and traders are key impediments to frictionless trade and operations efficiency due to siloed information flow and higher cost of adoption.

At the global level, the International Maritime Organization (IMO)'s Convention on Facilitation of International Maritime Traffic (FAL) has made electronic exchange of information for clearance processes in Contracting Parties' ports mandatory.

To implement these data standards as Application Programming Interfaces (API) specifications, MPA introduced the digitalOCEANS™ initiative in 2020 to develop and promote open and common data standards for the maritime supply chain. This was implemented via a MoU that was signed by several ports and trade platform providers, including MPA, PSA

International, Port of Rotterdam Authority, GTD Solutions (representing TradeLens), Global e-Trade Services (representing CALISTA) and CargoSmart (solution provider for GSBN).

DCSA is the latest entity to join this partnership, complementing the respective networks where DCSA represents a coalition of ocean carriers which collectively account for about 70% of global container trade. DCSA's active leadership in developing container cargo and vessel operational data standards is a valuable contribution to the existing efforts of the partners.

### **ANNEX C: QUOTES BY PARTNERS**

#### *Call-for-Proposal for eBL Solutions & digitalOCEANS™ initiative*

Thomas Bagge, CEO of Digital Container Shipping Association:

“We are thrilled to provide open-source standards that enable interoperability for this momentous collaboration. This is precisely the kind of innovation our standards are designed to facilitate. MPA has brought together numerous digital platforms to prove that eBL is not only within reach, but provides significant cost savings and ensures interoperability via DCSA's open-source standards. Widespread adoption of electronic documentation will also help reduce the CO2 footprint of container transportation, an important step towards sustainability goals. MPA's dedication to promoting collaboration and furthering digital transformation of the industry are solidifying its position as the world's leading port in terms of efficiency, cost effectiveness and innovation.”

#### *MPA-PSA 4th Memorandum of Understanding on the Port Technology R&D programme*

Mr Ong Kim Pong, Regional CEO SEA, PSA International:

“PSA is delighted to continue this long-running collaboration with MPA. Beginning in 2011, the PTRDP has augmented our capabilities to develop and enhance port technologies, such as the Automated Guided Vehicles which will play a key role in Tuas Port where the first berths will be operational by the end of this year. Leveraging new technologies has been vital in ensuring that we enhance port productivity in tandem with our continued pursuit of sustainability.”

#### *MPA- Research Council of Norway (RCN) 8th Memorandum of Understanding*

Ms Mari Sundli Tveit, Chief Executive of the Research Council of Norway

“In an environment challenged by disruptions, it is important for maritime stakeholders to collaborate to develop and testbed technologies to enable companies to be more resilient in weathering shocks. The renewal of the MOU between RCN and MPA reaffirms the commitment by both parties to pursue and testbed maritime R&D.”