Maritime Single Window Symposium
A window of opportunities

Rhona Macdonald
IMO/INTERPORTPOLICE Symposium
Thursday 16 March 2023
Overview

1. IAPH and BIMCO
2. What is an MSW?
3. A window of opportunity
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5. The Symposium
6. Challenges and success factors
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8. Interoperability of standards
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Founded in 1955, IAPH is the global port alliance, representing today around 170 port regular members and 135 associate members linked to ports in 87 countries. Together, IAPH port members handle more than one third of global maritime traffic and more than 60% of container traffic.

IAPH has a consultative status and represents the interests of world ports at IMO and additional UN agencies such as such as the ILO, UNCITRAL, UNCTAD (UN Conference on Trade and Development), UNEP (UN Environment Program) and the UN Global Compact.

IAPH works closely with the World Bank, and World Customs Organization, the Global Maritime Forum, and World Economic Forum.

Three strategic focus areas: Risk and Resilience, Data Collaboration, Climate and Energy
**Themes**

**Climate & Energy**
IAPH occupies an influential seat at the table of the International Maritime Organization, with both shipping and ports now beginning to open meaningful dialogues together on climate action, digitalization, trade facilitation and environmental performance.

**Data Collaboration**
IAPH has taken a front-running role in a joint industry call to accelerate digitalization. This policy document was issued in June 2020, co-signed by leading maritime industry associations and endorsed by the IMO Secretary General.

**Risk & Resilience**
Following the outbreak of the COVID-19 pandemic, IAPH set up a COVID-19 Taskforce composed of some of the world’s leading port experts in operations and crisis management, combined with specialists called upon to make contributions.
Our partner

Founded in 1905, BIMCO provides the practical voice for shipping. By helping to build a resilient industry in a sustainable future, they support its members in keeping world trade moving.

They provide practical solutions to manage risk, create and deliver maritime contracts, influence global regulation, and provide practical business services and expert knowledge.

BIMCO members cover over 60% of the global fleet with around 2,000 members in more than 130 countries, representing a significant portion of the global shipping community.
2. What is a Maritime Single Window (MSW) ?

MSW is a public-private data collaboration platform… enabling the orchestration and optimization of business processes… between organizations involved in… the arrival, stay and departure of ships in ports… through a single “one truth” submission… of standardized and harmonized data
3. Which parties are involved in an MSW?
4. Which windows of opportunity exist for all parties?

✓ Reduce vessel time at anchor and at berth, minimising emissions

✓ Reduce the vessel clearance process, speeding up departure

✓ Improve safety of a call thanks to data certainty and availability

✓ Reduce human ship-to-shore interaction - better health and safety

✓ Greater efficiency by allowing authorities and companies serving the vessel to synchronize their activities in tandem with vessel arrival and departure time

✓ Increase supply chain predictability thanks to advance vessel and cargo information, optimising processes and risk management
The mandatory requirements are defined in the International Maritime Organization’s Facilitation (FAL) Convention (IMO 1965).

The FAL Convention aims to support transmission, receipt, and response of all necessary information in connection with the arrival, stay, and departure of ships, persons, and cargo, to be conveyed by EDI, as a first stage.

This has been a mandatory requirement for all ports since April 2019, though implementation remains limited as the IAPH survey illustrated.

The FAL convention also encourages the use of a MSW, to enable all information required submitted via a single portal without duplication.
5. Which FAL ship-shore data needs to be actually exchanged?

1) General Declaration
2) Cargo Declaration or Manifest
3) Ship's Stores Declaration
4) Crew's Effects Declaration
5) Crew List
6) Passenger List
7) Dangerous Goods Manifest
8) Special declaration for postal items
9) Maritime Declaration of Health
10) Ship Sanitation Control Certificate
11) Security-related information
12) Advance electronic cargo information
13) Advanced Notification Form for Waste Delivery
1. FAL 46 MSW To Become Mandatory

As of January 1\textsuperscript{st} 2024, the mandatory requirement for public authorities to establish, maintain and use a maritime single window system will create genuine opportunities for the electronic exchange of information on the arrival, stay and departure of ships in ports.
6. Why is this deadline such a window of opportunities?

« WE HAVE A WINDOW OF OPPORTUNITY TO EVENTUALLY DIGITALIZE THE FULL PORT CALL PROCESS »

IMO FAL DATA REQUIREMENTS ➔ VESSEL CLEARANCE PROCESS ➔ PORT CALL PROCESS
Symposium

Maritime Single Window 2024
Challenges and success factors

• The main barrier often cited by ports is the legal framework in their home countries.

• As the Maritime Single Window is a public-private collaboration related to the port call, implementing the five principles of data collaboration is required to build trust among the stakeholders, as follows: (i) stakeholder engagement; (ii) data governance; (iii) data orchestration; (iv) change management; and (v) long term financial sustainability.

• The need for technical assistance and project financing to support countries in their MSW projects.
What challenges are you facing / have faced in getting electronic data exchange up and running? Please rank these from 1 (very low challenge) to 5 (very high challenge)

<table>
<thead>
<tr>
<th></th>
<th>1 (VERY LOW CHALLENGE)</th>
<th>2 (LOW CHALLENGE)</th>
<th>3 (REASONABLE CHALLENGE)</th>
<th>4 (HIGH CHALLENGE)</th>
<th>5 (EXTERMELY HIGH CHALLENGE)</th>
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</tr>
</thead>
<tbody>
<tr>
<td>Technology / IT</td>
<td>10.31%</td>
<td>21.65%</td>
<td>34.02%</td>
<td>20.62%</td>
<td>13.40%</td>
<td>97</td>
</tr>
<tr>
<td>Human resources</td>
<td>10.31%</td>
<td>22.68%</td>
<td>35.05%</td>
<td>22.68%</td>
<td>9.28%</td>
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<tr>
<td>Legal framework</td>
<td>3.09%</td>
<td>14.43%</td>
<td>30.93%</td>
<td>38.14%</td>
<td>13.40%</td>
<td>97</td>
</tr>
<tr>
<td>Multi-stakeholder</td>
<td>7.22%</td>
<td>8.25%</td>
<td>20.62%</td>
<td>40.21%</td>
<td>23.71%</td>
<td>97</td>
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<tr>
<td>collaboration</td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Budget</td>
<td>8.25%</td>
<td>20.62%</td>
<td>36.08%</td>
<td>26.80%</td>
<td>8.25%</td>
<td>97</td>
</tr>
</tbody>
</table>

Multi-stakeholder collaboration: 3.64
Legal framework: 3.44
Budget: 3.06
Technology / IT: 3.05
Human resources: 2.97
Possible MSW structures

• As a standalone system, as a module of a national single window, or as part of a port community system.

• A decision on the appropriate structure is dependent on port and country-specific circumstances.

• As early as possible, stakeholders must consider the functionalities and technology of existing digital systems to avoid duplication and to reuse data where possible to reduce costs and increase efficiency.
Interoperability

• International standards play a crucial role in facilitating frictionless trade by creating common communications and understanding between trading partners, enabling compatibility and interoperability of different systems and platforms.

• Harmonization, interoperability and communication are vital. For maritime digitalization and data exchange to work effectively, all stakeholders (actors) must get involved and interact, at both the national, regional and the international level. But also, in the public-private partnership.

• Change management and enhanced trust when sharing data are two key elements to successful implementation.
Port call data requirements

Key considerations and data requirements for commencing an MSW project:

- Ensure an MSW project contains a review of what data the authorities need, where to obtain it from the data owner and who should share that information once only for reuse.

- Start on a small scale focusing on pre-notification and pre-clearance processes.

- Establish a governance structure to safeguard the system and adhere to robust standards allowing for integration into an efficient global port data exchange environment.
<table>
<thead>
<tr>
<th>Process</th>
<th>Description</th>
<th>Timeframe</th>
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<tbody>
<tr>
<td>Sale of Goods contract (bulk)</td>
<td>-3 months to -3 weeks</td>
<td></td>
</tr>
<tr>
<td>Contract for hiring ships</td>
<td></td>
<td>-3 months to -3 weeks</td>
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<tr>
<td>Sale of Goods contract (container)</td>
<td></td>
<td>-3 months to -3 weeks</td>
</tr>
<tr>
<td>Terminal contract</td>
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<td>-3 months to -3 weeks</td>
</tr>
<tr>
<td>Departure Passage planning to port A</td>
<td>-3 hours</td>
<td></td>
</tr>
<tr>
<td>Berth planning arrival</td>
<td></td>
<td>-48 hours</td>
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<tr>
<td>Port planning</td>
<td></td>
<td>-3 hours</td>
</tr>
<tr>
<td>Berth / Port arrival</td>
<td></td>
<td>0 hours</td>
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<tr>
<td>Vessel / Cargo service planning</td>
<td></td>
<td>+24 hours - +72 hours</td>
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<tr>
<td>Port planning departure</td>
<td></td>
<td>+24 hours - +72 hours</td>
</tr>
<tr>
<td>Berth / Port departure</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Roles and Responsibilities**

- **Ship operator**
  - Sale of Goods contract (bulk)
  - Contract for hiring ships
  - Sale of Goods contract (container)
  - Terminal contract
  - Departure Passage planning to port A
  - Berth planning
  - Port planning
  - Berth / Port arrival

- **Ship charterer**
  - Contract for hiring ships

- **Berth planner**
  - Berth info.
  - Port dues and lease contract
  - Port info.
  - Port planning
  - ISPS

- **Port planner**
  - Port info.
  - Port planning
  - ISPS

- **Hydrographic service provider**
  - Nautical charts & publications

- **Ship manager**
  - Arriving ship
  - Port passage plan
  - ETA berthing
  - PTA berthing
  - PTA pilot boarding place
  - ETA pilot boarding place
  - Vessel & cargo service planning
  - Vessel & cargo service planning
  - ETD berthing
  - ETD berthing

- **Ship manager**
  - Departing ship
  - PTD berthing
  - PTD berthing

- **Vessel or Cargo service providers**
  - ETS Service
  - PTS Service
  - ATC Service
  - ETC Service
  - PTC Service

- **Authorities**
  - Notifications & declarations
  - Notifications & declarations
  - Notifications & declarations
What are the IAPH Cybersecurity guidelines?

This 84 page document is the culmination of four months of intense work between 22 experts from IAPH member ports from around the world as well as Associate Member cybersecurity specialists and contributors from the World Bank. It will serve as a crucial, neutral document for senior executive decision makers at ports who are responsible for safeguarding against cybersecurity risks as well as ensuring the continued business resilience of their organization.
What is the aim of the document?

• The document aims to assist ports and port facilities to establish the true financial, commercial & operational impact of a cyber-attack.

• It also is intended to help ports and port facilities make an objective assessment on their readiness to prevent, stop and recover from a cyber-attack.

• The Guidelines also address the very difficult question of what port organizations need in terms of resources to effectively manage cybersecurity risks.

• For your copy of the guidelines:

Thank you for your attention!

For your copy of the IMO Guidelines for setting up a maritime single window:

For more information, contact:
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