INTERNATIONAL MARITIME ORGANIZATION

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REVIEW AND REVISION OF THE IMO COMPENDIUM ON FACILITATION AND ELECTRONIC BUSINESS, INCLUDING ADDITIONAL E-BUSINESS SOLUTIONS

Invitation to industry bodies to develop and maintain technical standards for administrative and operational data

Submitted by ICS, ISO, IAPH, BIMCO, IFSMA, IHMA, IBTA, FONASBA and IPCSA

	SUMMARY
Executive summary:	Digitalization has taken on a new urgency in the light of the COVID-19 pandemic, in particular when it comes to digital data exchange in ports and the facilitation of trade and logistics in general. The co-sponsors and other maritime NGOs are inviting public and private actors to help create global digital standards under the auspices of ISO Technical Committee 8, to facilitate the digital exchange of data.
Strategic direction, if applicable:	5
Output:	Not applicable
Action to be taken:	Paragraph 9
Related documents:	None

Introduction

1   Over the past years, IMO has put significant effort into the development of common and harmonized data definitions and data models to ease the exchange of digital information between ship and shore.

2   Early in 2019, FAL 43 approved a revised and updated Compendium on Facilitation and Electronic Business to support harmonization and standardization of electronic messages, supporting the need to define all elements of the electronic FAL forms across WCO, UN/CEFACT and ISO standard protocols. A central element in the new Compendium is the establishment of the IMO Data Set, that provides the core mechanism for ensuring interoperability between the standards developed by the participating organizations for their individual group of stakeholders.

3   The type and amount of information to be exchanged to get ship clearance before entry to port depend on trade and port business processes, compliancy with IMO regulations, contractual obligations and authorities such as customs, health and immigration authorities. The IMO Data Set makes it possible to ensure that when a ship or its agent sends information to one authority or party, the information can be (re)used by other authorized parties, without having to (re)submit the same information many times.

4   However, not all levels of the digital port clearance process are fully developed and fit-for-purpose. For this reason, the co-sponsors and other maritime NGOs invite public and private actors to help co-create additional global digital standards for the exchange of administrative, operational and nautical data.

5   Shipping is a global industry and therefore these solutions require global digital standard, which has the commitment of both shipping and ports. The collective efforts will improve the general quality and availability of data, which must be robust enough to avoid incompatibility between standards and systems, across countries worldwide, as well as ensure a long-term commitment to the maintenance of such standards.

6   It is essential that any new standard conforms to the IMO Data Set where data elements already exist and contributes to the extension of the IMO Data Set should new data elements be required. This will help reduce the need to resubmit the same information many times.

7   By standardizing data exchange processes to make them compatible and interoperable, ports actors will benefit from granular and real-time information on scheduled port calls from the shipping sector. Ships will be able to communicate more easily using smart solutions, like an Application Programming Interface (API) – a software solution where two computers can "speak" to each other. Ship and port can then exchange amongst others shipping schedules, cargo information, and possible delays or cancellations.

8   In the document's annex is an invitation for key maritime actors in both public and private sectors to co-create a single and neutral supporting technical standard for administrative and operational data under the auspices of ISO Technical Committee 8. The aim is for the ISO Committee to continue the work on the alignment of ISO 28005 on exchange of electronic information between ships and shore, to the IMO Compendium.

Action requested of the Committee

9   The Committee is invited to note the information provided.

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ANNEX

**An invitation to Industry bodies to develop and maintain technical standards
for administrative and operational data**

IMO Resolution MEPC.323(74) called for voluntary cooperation between the port and shipping sectors to contribute to reducing GHG emissions from ships.

This will support the industry's collective efforts to improve the quality and availability of data and develop necessary global digital standards allowing reliable and efficient data exchange between ship and shore.

The IMO GIA Just In Time Arrival Guide explains how data quality and availability is a cost-effective measure to reduce GHG emissions, whilst also addressing important IMO objectives, namely: vessel safety and security.

Nonetheless, to achieve data quality and availability data owners need to share critical data in real time.

Data from other sources may not be updated regularly enough and is often not binding which results in parties including additional margins: buffer or suffer.

To minimize the administrative burden, errors and delays in updates, data owners are looking for global solutions to share data "one-to-any".

With up to 8,000[1] different ports and up to 98,000[2] different ships, and with many more different cargo owners and interested parties, the maritime industry must work together on the way forward to create robust global solutions that incentivize both data owner and user.

These global solutions require standards which have the commitment of both shipping and ports.

They must be robust enough to avoid incompatibility between standards and systems. Ultimately the aim is to avoid investments to implement standards that are neither fit-for-purpose nor sustainable and that are simply not viable for all stakeholders across the supply chain.

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[1]   Lloyds Maritime Atlas.

[2]   UNCTAD report, greater than 100 GT.

In a recent initiative between ITPCO and IMO GIA to support low carbon shipping, Subject Matter Experts from both ports and shipping were asked which data elements have most impact on IMO objectives.

To achieve genuine interoperability between independent IT systems among relevant stakeholders, standards are required for:

- Nautical data: general port data, depths, and identification of terminals, berths and berth positions, according to the IHO standards

- Administrative data: to ensure the IMO GISIS data base is up to date and to allow data transfer, according to the IMO Compendium

- Operational data: arrival and departure times at berth and pilot boarding place, starting and completion times of cargo and ship services, according to the IMO Compendium

When combined, these objectives have the most impact on reducing GHG emissions in the long run by reducing overall vessel turnaround times.

They also impact safe berth-to-berth navigation as well as crew rest hour planning and security.

Harmonized data in these three categories demonstrate due diligence for safe port clauses in charter party contracts as well as verifying that the Port Authority and Hydrographic Office have jointly worked together to discharge their collective SOLAS responsibilities.

Where collaboration between IMO, IHO and the Industry is good for nautical data, similar collaboration in administrative and operational data is lacking.

IMO together with NGOs and IMO Member States have put in a significant effort to develop data definitions and data models in the IMO Compendium which is the first and most important step: to have a common language.

However, the second and third steps, namely developing technical standards and software platforms, still remain to be addressed.

This letter is about the second step.

Supporting technical standards to ensure Application Programme Interfaces (APIs) are compatible with one another are not within the competency of IMO.

This requires industry collaboration to develop and maintain such supporting technical standards.

Today, many isolated industry developments exist, from ports, shipping, port community systems, solution providers and research institutes.

Unfortunately, developments to date have only resulted in a proliferation of solutions, no return on investments and not allowing the data owner to share in a "one-to-any" manner.

This proliferation of solutions causes confusion in port and shipping sectors, delaying a pathway for the industry to move forward in a sustainable way.

NGOs and the Industry agree the most robust path forward is to:

ask existing neutral industry bodies to deploy their expertise and ability to listen to their key stakeholders' needs in order to co-create a single supporting technical standard under ISO Technical Committee 8.

This effectively takes commercial and vested interests out of the equation and allows for governance and fair play in the compromises that need to be reached between stakeholders. It will also ensure neutrality of such standards and development alongside existing standards of IMO and ISO.

IMO and the Industry together can then accept and promote these standards for implementation. This also ensures sustainable and future-proof maintenance of the standards as well as other developments needed to foster data sharing in the maritime industry.

In summary, this document is a call to action from NGOs representing both ports and shipping[3] to existing industry and governmental bodies to work together on supporting technical standards for administrative and operational data.

This will allow commercial APIs to be developed on the basis of these technical standards, which are compatible and interoperable.

Such an approach has the potential to break down barriers and will accelerate the development process dramatically by allowing the technical and subject matter experts to work together in Q2 2021.

In parallel this will permit all parties to prepare for the formal ISO procedures and the governance of such industry alliance under NGOs.

The aim is to result in a permanent working group under ISO TC8/SC11 to continue the work on the alignment of ISO 28005 to the IMO Compendium, assuming responsibility for defining the information exchange needs and APIs between ship and shore.

Next step:

Those NGOs and Industry bodies in agreement will propose the way forward to meet Q2 2021.

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[3]   BIMCO, DryBulkTerminals, FONASBA, IAPH, ICS, IFSMA, IHMA, IPCSA and ITPCO.