**Ship Reporting Task Group**

**Summary of Discussions during ARM9**

**Participants**

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**Resolution FAL.12(40)**

***C. Systems for the electronic exchange of information***

*FAL 40 adopted new mandatory requirements on Electronic Data Interchange in resolution FAL.12(40), amendments to the annex to the Convention on Facilitation of International Maritime Traffic, 1965 (FAL Convention). According to the new* ***standard 1.3bis, Public Authorities have to establish systems for the electronic exchange of information by 8 April 2019***.

It is the TG’s understanding that the resolution calls for public authorities to implement electronic exchange of information about the arrival, stay and departure of the ship, persons and cargo to facilitate clearance processes by the above-mentioned date.

1.3ter **Standard.** Public authorities, when introducing systems for the electronic exchange of information to assist clearance processes, shall provide shipowners and other parties concerned with the necessary information about the systems requirements and give an adequate period of transition before the use of the systems are made mandatory. A period of no less than 12 months for transition to the mandatory use of the systems shall be provided from the date of the introduction of such systems.

The TG acknowledged that while Resolution FAL.12(40) directs public authorities to implement electronic exchange of information about the arrival, stay and departure of the ship, persons and cargo to facilitate clearance processes by April 8th, 2019, FAL has limited means to enforce public authorities to implement such systems on this schedule. Implementation of this directive is therefore foreseen to be, at least initially, limited to public authorities that are technologically sophisticated thus leaving many paper-based ship reporting schemes in effect for the foreseeable future.

**Guideline Objective**

The IALA Guideline on ship reporting from the shore‐side perspective should support FAL with implementation of the resolution by giving public authorities guidance on providing shipowners and other parties concerned with the necessary information about the information exchange systems requirements.

IALA ARM Committee’s Ship Reporting Task directly addresses this objective:

Develop Guideline on ship reporting from the shore‐side perspective.

Expected outputs:

* 1. Ship Report Template Registry specifications and governance;
  2. Guideline on ship reporting tools;
  3. Minimum cyber security requirements for sharing ship report information;
  4. Guidance on migration from current ship reporting system to a harmonised and secure electronic system;

**Guideline Target Audiences**

The target audiences of the guideline are:

1. Shore based authorities that are legally responsible for the operation and development of systems for the electronic exchange of information, ref FAL 12(40), such as the Maritime Single Window
2. The developers of onboard and shore-based reporting systems that will receive and submit information from and to shore-based authorities and other stakeholders
3. The users of information exchange systems.

**Guideline Scope**

The reporting schemes, requirements and systems around the world are vary widely. Some countries and ports have limited reporting requirements. They typically only require standard IMO and IMO FAL reports, whilst other countries and ports require submittal of significant additional domestic information. The TG decided it would be beyond the scope of this guideline to address every level of reporting. As a start, the guideline therefore will focus on the internationally agreed obligatory reporting schemes for international ship traffic. However, the guideline should be constructed in a way that does not rule out the reporting beyond internationally agreed obligatory reporting schemes.

It will be important to distinguish in the guideline what the ship is legally obligated to report and the port/voyage services that often are considered a reporting requirement (i.e. Information associated with requesting a Local Port Service, Tug Service, Pilot Service, etc.).

The level of technological sophistication of competent authorities varies widely. Consequently, ship reporting systems range from partly automated reporting systems to paper-based systems that require several copies of reports to be submitted to a number of local authorities. The IALA service Guideline on Vessel Shore Reporting (MS8) implies that the focus will be on guidance on digital and electronic services, whilst keeping in mind that there is a need to take into account paper-based ship reporting systems.

**System Architecture**

The main conceptual discussions were about a centralized versus a distributed model as a basis for the publication of reporting requirements. Whilst there are valid arguments for a centralized repository model, a distributed model has merit in an electronic e-navigation future. The TG decided that the distributed model should be adopted mostly because it will minimize the associated administrative burden and cost.

**Ship Reporting (Maritime) Services**

The TG proposed that the ship reporting system shall comprise of at least two distinct services:

1. Ship Reporting Requirements Service provided by shore-based authorities and other stakeholders.
2. Ship Reporting Service provided by ships to shore-based authorities and other stakeholders to fulfill their reporting requirements.

**Ship Reporting Requirements Service**

The Ship Reporting Requirements Service, will typically be a webservice that exposes an (XML-based) interface that identifies the obligatory reporting requirements for a particular voyage or port call, taking into account parameters such as; departure port, ship and voyage particulars, cargo, flag, etc.

The Reporting Requirements Service should:

1. have a machine-to-machine (M2M) interface as well as an optional web interface for non M2M actors
2. mirror the business logic of the underlying systems for the electronic exchange of information (ref FAL 12(40)), such as the Single Window and associated legal reporting requirements for that particular country or port(s).
3. provide information on the report deadlines (relative to time of arrival or other circumstances)
4. provide information on planned changes in reporting requirements and their effective dates.
5. be based upon existing/emerging standards

A simple *Reporting Requirements Service mockup* has been developed by the Sesame II Solution project to provide a visual demonstration of such as a concept (both GUI and Webservice). This mockup can be found on the link: <http://test.shiprep.no/SSNApisGUI>

**Ship Reporting Service**

The Ship Reporting Service could be a webservice that handles the actual ship reporting (and their updates) that fulfills the requirements identified by the "Reporting Requirements Service"

The Ship Reporting Service should:

1. have an M2M interface, as well as an optional web interface for non M2M actors
2. provide acknowledgement of receipt
3. provide authentication mechanisms and enable encryption of certain sensitive reporting information
4. allow ship owners to control access to certain sensitive reporting information (crew and pax information, trade secrets contained in cargo manifests)
5. be based upon existing/emerging standards

The two services outlined above needs to be carefully described/specified so that the Vessel Shore Reporting Service/systems (VSRS) can be developed. A process diagram should support the guideline

Norway has made a generic open source version of a Maritime Single Window Ship Reporting Service publicly available on Github (see <https://github.com/Fundator/IMO-Maritime-Single-Window>).