

## Meeting: Pilot project on “Facilitation of ship to shore reporting” – 5<sup>th</sup> meeting

**Place and date:** Video conference, 08 April 2021

**Agenda item:** IRD phase 3 – progress report

**Document number:** 5.4

**Submitted by** EMSA

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|--------------------|--|
| Summary            | The document presents the progress report on the development of IRD phase 3.   |
| Action to be taken | As per paragraph 5.  |
| Related documents  | 3.4 Possibility for ships to report by electronic means - progress report.<br>4.4 IRD phase 3 – discussion on GUI for ship data providers.<br>4.5 Interaction with VDE Capability project – progress report. |

### 1 Background

During the pilot project meetings, Member States identified a use case aiming at reporting of MRS/VTS data by electronic means to coastal stations. EMSA presented the concept of a ship-to-shore MRS/VTS reporting service. In addition to existing communication links (internet through 3G, 4G or satellite communication), the project will test VDE-SAT connection to address cases of ships sailing in high seas.

Testing of the VDE-SAT connection will be executed in close cooperation with the European Space Agency (ESA) and Space Norway (SPN) with whom EMSA reached an agreement to participate in a VDE-SAT Application and Services Platform (VASP)<sup>1</sup> demonstration project, using a Norwegian satellite as a testbed. According to the VASP project plan, all the partners shall be ready for demonstration in the 2<sup>nd</sup> semester of 2021.

### 2 Current status

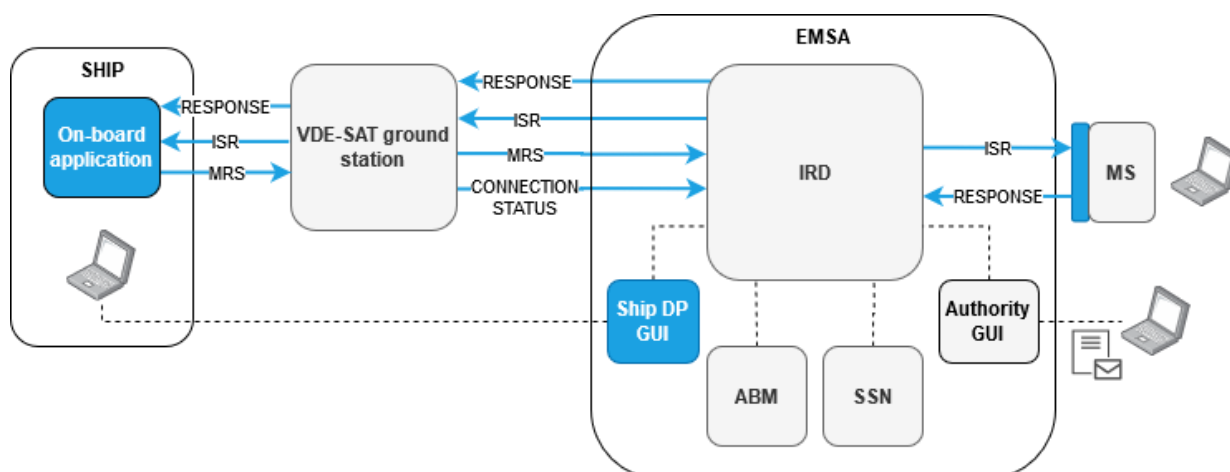
The following features were contracted and are being developed for IRD phase 3:

- development of a specific Graphical User Interface (GUI) for ship data providers to allow them to submit and consult VTS/MRS reports and to consult authorities responses via Internet;
- implementation of a system-to-system interface for exchanging data between the IRD service and the VDE-SAT ground station (operated by Space Norway) to communicate ISRs, VTS/MRS reports and responses from authorities;
- amendments to the existing ISR message with elements from VTS/MRS reports;
- updates to the existing GUI for authorities to show VTS/MRS reports received from ships and to provide responses to these reports.

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<sup>1</sup> More information about VASP project can be found at: <https://business.esa.int/projects/vasp>

A conceptual overview is presented in the diagram below (blue colour indicates changes or new developments):



### 3 Planning for IRD phase 3 and its integration with VDES

# Calendar

The Gantt chart displays the project schedule from October to June. The tasks and their durations are as follows:

- Project Control:** October 8 to June 1
- Design:** October 19 to February 11
- Test Environment:** November 1 to February 11
- IRD Develop.:** December 1 to April 23
- FAT:** April 23 to May 22
- Rollout:** May 22 to June 1

Key milestones and dates are marked:

- OCT 8 :: Kick-off**
- OCT 19 :: Project Start**
- DEC 11 :: Design 1<sup>st</sup> delivery**
- FEB 11 :: Design Final delivery**
- APR 23 :: End Developments**
- MAY 22 :: FAT acceptance**

At the bottom right, there is a note: **XRAY + Tech Documentation update** with a vertical line pointing to the end of the timeline.

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Regarding the development of the ship on-board application for VDE-SAT communication, the tendering procedure is in its final stage. The detailed plan for the development will be presented during the meeting.

## 4 Involvement of ships in tests

The IRD phase 3 aims at reporting of MRS/VTs data to coastal stations by electronic means. There will be 2 possible solutions for the ship to be involved in testing:

### 1) Reporting via ship data provider GUI

To provide an MRS/VTs report using the ship data provider GUI, no installation of specific hardware or software is required on board of the ship. Using the GUI only requires an access to Internet and a web browser. Every ship willing to participate in the test will receive a login and a password to access the GUI. To reduce the usage of Internet, it will be possible to prepare the MRS/VTs reports using spreadsheets (XLSX files) and upload them in the GUI.

There is no limitation in the number of participating ships.

### 2) Reporting using the on-board application connected to VDES equipment

To provide MRS/VTs reports using VDE-SAT communication, specific VDE-SAT equipment needs to be installed on board of the ship. The ship installation consists of a Kongsberg Seatex VDES 300 transceiver connected to a VHF antenna, an active GNSS antenna and a laptop computer. A cellular 4G modem and 4G antenna is also included for remote connectivity. All equipment is connected to a power distribution unit (PDU) with Ethernet connection that can remotely turn off the power. For more details on the installation please refer to the Vessel Installation document prepared by Kongsberg Seatex and available in Annex 1.

All the necessary equipment will be provided by the VASP project and no extra cost is expected for the ships participating in tests.

There will be a limited number of VDE-SAT devices for testing (maximum 5).

## 5 Actions required

Member States are invited to take note of the above information and to provide their feedback.

Member States willing to participate in the testing are invited to express their interest and to identify the ships which could participate in the tests.