

Minutes of the meeting

5th meeting of the Pilot Project for the Facilitation of Ship to Shore Reporting

Held via Video conference

08 April 2021

Date: 26 April 2021

1. Background

The meeting was opened and chaired by Mr Lazaros Aichmalotidis, Head of Unit for Simplification, and was held via Video Conference (VC) due to the public health situation. Mr. Jacob Terling and Mr. Alexander Hoffmann from Unit D2 “Maritime Safety” represented the European Commission (DG MOVE).

25 participants from **Belgium, Croatia, Denmark, Estonia, Finland, Germany, France, the Netherlands, Norway, Poland** and **Sweden** attended the meeting.

All meeting documentation and presentations are available at: <http://www.emsa.europa.eu/ssn-main/documents/workshop-presentations-a-reports/item/4355-5th-meeting-of-the-pilot-project-for-the-facilitation-of-ship-to-shore-reporting.html>

The meeting agenda is attached in Annex 1.

2. Objective of the meeting

The objective of the meeting was to:

- Get Member States feedback on the functional tests of the phase 2 of the Integrated Report Distribution (IRD) system;
- Present and discuss the EMSA guidance document for the operational test of IRD phase 2;
- Present the progress report on the electronic exchange of data between ship and shore including interaction with the VDE Capability project;
- Present the outcome of the Port Call Detection pilot project;
- Discuss the future developments of IRD; and
- Present the updated project’s roadmap.

3. Meeting outcome

3.1 Introduction

The chairman welcomed the participants and provided a brief summary of the work completed. He informed the participants that the project gained a lot of visibility and went beyond the initial expectations. For the first time an on-board application for Ship-to-Shore Authorities communication will be developed offering to the ship the possibility to re-use available relevant data and to receive feedback from authorities.

The chairman highlighted the links of this project with e-navigation and the hope that it may turn into an operational system in the future.

3.2 Approval of the agenda and follow-up actions from previous meeting

The group agreed with the agenda indicated in Annex 1.

EMSA summarised the follow-up actions from the previous meeting and informed the participants about the on-going actions related to the testing of IRD. **EMSA** informed that following an invitation from the IALA Secretariat, EMSA presented the pilot project at IALA VTS 50 Committee on 18 March. The presentation is available at: <https://www.youtube.com/watch?v=UJKc7IKI5gq>

EMSA informed the participants about the meetings with Norway to identify synergies between the SESAME II/Balt Safe and the IRD projects. The following possible synergies have been identified:

- Norway developed a flexible reporting mechanism whereby the reporting party (e.g. the ship master reporting to an MRS or VTS) will report the data set required by the specific MRS/VTS instead of the maximum data set. EMSA commented that this functionality could also be used for SSN and the EMSW and offered to work with Norway to jointly investigate the issue. EMSA and Norway agreed to test the “Request and Respond Service” for getting reporting obligations and inform the participants about the outcome (**Action Point 1**).
- The contents of the MRS report in the two projects were aligned to the ISO28005-2 standard;

- The Ship Data Provider GUI being developed by EMSA (in the IRD system) could be used by the ships for reporting MRS reports to Norway. For that purpose, a connection would need to be setup between the IRD and the MRS Reporting instance of SESAME II and BALSAFE project.

The participants **noted** the information presented.

Germany advised that the outcome of the IRD project could be also of interest for the IALA ARM Committee considering that this Committee currently works on the guidelines for ship reporting from the shore perspective. **EMSA** agreed to provide the relevant information/material to the IALA ARM Committee for consideration (**Action Point 2**).

3.3 Member State feedback on functional testing of IRD phase 2

The IRD phase 2 was deployed in Production on 09 December 2020. This phase was presented during the last meeting and **EMSA** had invited MSs to perform functional tests and provide feedback and possible ideas for improvements. **Belgium, France, Norway** and **Poland** responded positively and agreed to share their feedback on the IRD prototype.

Norway informed that only elementary tests had been performed so far without involving VTS authorities. The objective of these tests was to assess how the information coming from the IRD could enhance the data set already available in VTS. The information received from the IRD was compared with the Norwegian SSN using dedicated script.

Belgium informed that the IRD system was tested by the MRCC, the maritime security authorities (Defence, Customs, Shipping police) and by the authorities dealing with the Marine Environment. The ISR reports were either created following detection of specific ship's entry into an area or using manual requests.

France made a presentation showing how the IRD had been tested by the MRCC Jobourg and the MRCC Corsen. For both centres the ISR reports were created following detection of specific ship's entry into an area or using manual requests.

Poland informed that the IRD was tested in the TSS Slupska Bank where there is no ship reporting system in place. The information coming from the IRD was used to provide better awareness about the situation in the TSS and to complement information already available in the national system.

All Member States having tested the IRD phase 2 confirmed that the system is intuitive and easy to use. It was also highlighted that the presentation of ISR had improved significantly in comparison with the prototype version (e.g. no abbreviations, no coded data, etc.). Some of the authorities said that they would like to see this service as fully operational in the future. Issues with data quality were reported on e.g. ship information and voyage data.

A number of issues and ideas for future improvements were provided during the meeting. The comments provided could be grouped in the following categories: improvements to the GUI; new features; and data quality and data reliability.

The comprehensive list is available in Annex 2. **EMSA** will investigate the technical feasibility for implementing these changes and will inform the group on the progress at the next meeting (**Action Point 3**).

3.3 IRD phase 2 – Planning and preparation of operational tests

EMSA presented the document explaining that its objective is to provide guidance to MS authorities willing to participate in the operational tests. The draft Guidance document for the operational tests of the IRD service was distributed to the participants on 19 March 2021. The operational tests will be used to verify the quality, availability and reliability of the IRD service developed under the project and to improve or adjust the solution.

The guidance provides the detailed information to the authorities on the available services and data sets. It also provides the possible use cases as well as procedures for participating. The tests will run between April and June 2021.

Member States agreed to provide feedback to the document by 16 April 2021 (**Action Point 4**). Lack of feedback will be considered as tacit agreement.

Member States authorities willing to participate in the operational tests shall follow the procedure described in chapter 6 of the guidance document (**Action Point 5**). Webinar training sessions will be organised for the authorities involved in the tests.

3.4 IRD phase 3 – progress report and discussion on how to involve ships in operational tests

EMSA presented the concept of a ship-to-shore MRS/VTS reporting service as agreed by the group. In addition to existing communication links (internet through 3G, 4G or satellite communication), the project will test VDE-SAT connection. 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 (VASP¹) demonstration project, using a Norwegian satellite as a testbed.

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

- a. Development of a specific Graphical User Interface (GUI) for ship data providers to allow them to submit and consult VTS/MRS reports and to receive authorities' responses via Internet;
- b. 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;
- c. Amendments to the existing ISR message with elements from VTS/MRS reports;
- d. Updates to the existing GUI for authorities to show VTS/MRS reports received from ships and to provide responses to these reports.

In addition, a specific "on-board application" will be installed on-board test ships and a link with VDE-SAT equipment will be developed.

The IRD phase 3 is under development and is expected to have the upgraded IRD service available for Member States' operational tests in June 2021.

The chairman summarised that the ship data providers GUI is a forward-looking development with high expectations. Apart from the technical development there is another important aspect which is the involvement of ships in testing the solution.

There will be 2 possible solutions for the ship to be involved in testing:

- a. 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. 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.
- b. Reporting using the on-board application connected to VDES equipment: To provide MRS/VTS reports using VDE-SAT communication, a 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 the equipment is connected to a power distribution unit (PDU) with Ethernet connection that can remotely turn off the power.

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

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 (**Action Point 6**).

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

Estonia informed that one Estonian ice breaker may be potentially used to test the VDES solution and requested EMSA to inform what is the deadline for confirming. **EMSA** will check the detailed scheduled with the VASP project partners and will inform Member States accordingly (**Action Point 7**).

Sweden shared their experience in the involvement of ships from the STM project. It was said that it is a very challenging task to convince the ships and their crew to use something that does not yet have a legal obligation.

The suggestion made by Sweden was to:

- Liaise with the shipping companies and not with single ships;
- Use the resources for which there are already arrangements in place (e.g. EMSA pollution response fleet);
- Use the ships belonging to Member State authorities (SAR ships, tugs, dredgers, etc.).

Norway fully agreed with comments from Sweden and added that ship simulators could also be used for testing. **Germany** said that in case of a need they can facilitate access to their simulators for running the tests.

EMSA thanked the participants and highlighted that the goal is to perform the test in as much as possible operational situations. The tests should involve ships but also the authorities receiving the information in order to receive feedback from both sides. **EMSA** will investigate if the EMSA pollution response ships could be involved in tests (**Action Point 8**).

3.5 Port Call Detection service using Cloud-based infrastructure – outcome of pilot project and possible use in IRD

At the 2nd meeting of the project the group agreed that EMSA would investigate the possibility of detecting global port calls automatically. Considering that there were also similar requests from the SSN and IMS working groups, EMSA launched in July 2020 a project to develop a Port Call Detection service. The development of the Port Call Detection service took place between September 2020 and February 2021.

EMSA presented the Port Call Detection service that automatically detects port calls worldwide by using ship position data available in EMSA's HP-IMS LTS system. The detection of port calls heavily depends on the definition of port calls areas. The port areas provided by Member States for EU ports under the STMID² project were used. For ports without port area defined, the contractor created areas as 5 km (configurable parameter) circle around the coordinates of the ports. The service is a near real time service and is also able to detect port calls retroactively in the period covered by vessel positions stored in the LTS (i.e. data since July 2017 is available).

EMSA informed the Member States that the business validation tests proved that the service was delivering the expected results. However, it was noted that the quality of the information depended on the port areas definition and that they would need to be improved.

EMSA highlighted that a new block of data with the Detected Port Calls could be added to the ISR and made available to the Member States authorities via the IRD in the future. This block of data could for instance present a list of the last 10 port calls detected for the ship. **The group** agreed to include the Port Call Detection service as a new source of information to the IRD.

Member States willing to participate in the testing of the Port Call Detection service and helping in the validation of the areas of their ports were invited to express their interest (**Action Point 9**).

Belgium and **the Netherlands** informed EMSA that they would be interested in testing this service.

3.6 IRD phase 4 and Project roadmap

EMSA informed the participants that the project would be extended until the end of year. EMSA will try to contract within the project one more development phase (IRD phase 4). The objective of the IRD phase 4 would be to address as much issues and ideas from the list presented in the Annex 2 as possible.

EMSA presented the updated schedule of the pilot project:

² The Shore-based Traffic Monitoring Infrastructure Database (STMID) has been established to simplify and facilitate sharing of information regarding the competent authorities, port authorities and coastal stations which have been designated by Member States in accordance with Article 22 of Directive 2002/59/EC.

Expected schedule	Tasks
November 2020 – May 2021	Development of IRD phase 3 (ship data provider GUI and link with VDES)
April – June 2021	Operational tests of IRD phase 2
June 2021	6 th meeting to be organised to review the results of the operational tests of phase 2, present IRD phase 3 and agree on the procedure for the operational tests of phase 3
June – September 2021	Operational tests of IRD phase 3
June – October 2021	Development of IRD phase 4
November 2021	7 th meeting to be organised to conclude the pilot project and collect feedback for the final report

Table 1: Project Roadmap

The participants **agreed** with the updated project roadmap.

4. Summary of the follow up actions

The chairman thanked all participants for their active participation, noted the interest in the proposed solutions and that the meeting was again very productive and constructive.

The follow up actions are presented in Annex 3.

COM also thanked EMSA and the Member States for the work completed and stated that this work is a very good example of bottom-up approach.

The next meeting is planned for the second half of June 2021 with the objective of reviewing the results of the operational tests of IRD phase 2, present IRD phase 3, agree on the procedure for the operational tests of phase 3 and present a progress report of IRD phase 4 (**Action Point 10**). In the meantime, the group will work by correspondence.

EMSA will draft the minutes of the meeting and will provide the participants with copies of the meeting presentations (**Action Point 11**).

Annex 1 – Meeting Agenda

Time	Agenda Item	Speakers
Part I – morning session		
09:00 – 09:15	Opening / Introduction 5.1 Agenda 5.2 Follow-up actions	EMSA
09:15 – 10:15	Member State feedback on functional testing of the Integrated Report Distribution (IRD) phase 2	Member States
10:15 – 11:45	5.3 IRD phase 2 – Planning and preparation of operational tests	EMSA Member States
Part II – afternoon session		
13:00 – 13:45	5.4 IRD phase 3 – progress report and discussion on how to involve ships in operational tests	EMSA Member States
13:45 – 14:15	5.5 Port Call Detection service using Cloud-based infrastructure – outcome of pilot project and possible use in IRD	EMSA
14:15 – 14:45	IRD phase 4 – ideas for future developments	EMSA Member States
14:45 – 15:00	Discussion and summary of the follow up actions	EMSA

Annex 2 – List of possible improvements and new features for the IRD

No	Display name of the distribution service when inside the service	Improvement
1	Add the indication of the trigger in ISR details (entry, exit, MRS report, etc.). This is applicable for all distribution methods (e-mail, web interface and system2system interface)	Improvement
2	Use different time zones in the web user interface (currently all data is in UTC)	New feature
3	Display SSN details (e.g. Hazmat) in a more user-friendly way than XML	Improvement
4	Add the indication of country in the list of distribution services	Improvement
5	Keep the last filter used when searching instead of automatically coming back to the default one	Improvement
6	Add the possibility to choose data blocks when exporting ISRs	New feature
7	Improve the email content's structure (to be similar to the one presented in the web user interface)	Improvement
8	Allow configuring a timeframe for Incident Reports, voyages and MRS list (possibility to filter out historical data from the ISR)	New feature
9	Filter ships based on ship particulars (e.g. only ships with IMO number)	New feature
10	Consider new ABMs, e.g. line crossing	New feature
11	Offer more options in e-mail subject configuration (e.g. possibility to have Ship Name)	Improvement
12	Add a graphical display of Voyage Plans and ships' positions (through e.g. a link to SEG)	New feature
13	National user should be able to add and remove ships from the list of ships under the distribution service	New feature
14	Remove duplicated ISRs (e.g. only one entry and one exit)	Improvement
15	Add information about units of measurement	Improvement
16	Integration with Port Call Detection service	New feature
17	Integration with the Central Ship Database	New feature
18	Add a link to EQUASIS	New feature
19	Include additional ship information (contact details, information on the construction of the ship – general arrangement plans)	New feature
20	Possibility to configure attributes of interest under the block of data (i.e. a user may specify that only part of the information from the block of data should be included in the ISR)	New feature
21	Automatic detection of inconsistencies in the report (e.g. inconsistent data between MRS and PortPlus)	New feature
22	Make distribution services visible per organisation and not per country	New feature
23	Add a filter to remove ISR containing only Position Reports	New feature

Annex 3 – Follow up actions

Action Point	Topic and Action	Responsible
1	Test the “Request and Respond Service” of SESAME 2/ BALT SAFE for getting reporting obligations and inform the participants about the outcome	EMSA Norway
2	Provide the relevant information/material to the IALA ARM Committee for consideration.	EMSA
3	Investigate the technical feasibility for implementing changes proposed in Annex 2 and inform the group on the progress at the next meeting	EMSA
4	Provide feedback to the guidance document for the operational tests of the IRD by 16 April 2021	Member States
5	Member States authorities willing to participate in the operational tests shall follow the procedure described in chapter 6 of the guidance document	Member States
6	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	Member States
7	Check the detailed schedule with the VASP project partners and inform Member States accordingly.	EMSA
8	Investigate if the EMSA pollution response ships could be involved in operational tests.	EMSA
9	Member States willing to participate in the testing of the Port Call Detection service and helping in the validation of the areas of their ports are invited to express their interest to EMSA.	Member States
10	Plan next meeting in June 2021 with the objective of reviewing the results of the operational tests of IRD phase 2, present IRD phase 3, agree on the procedure for the operational tests of phase 3 and present a progress report of IRD phase 4	EMSA
11	Draft the minutes of the meeting and provide attendees with copies of the meeting presentations.	EMSA

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