

# **6<sup>th</sup> IMDatE User Consultation Meeting**

## **Meeting Minutes**

**Held in Lisbon on**

**15 October 2015**

Final version

**Date: 17 November 2015**



## List of Abbreviations

AIS	Automatic Identification System
ABM	Automated Behaviour Monitoring
DG GROW	Directorate-General for Internal Market, Industry, Entrepreneurship and Small and Medium Enterprises
DG MARE	Directorate-General for Maritime Affairs and Fisheries
DG MOVE	Directorate-General for Mobility and Transport
EC	European Community
EFCA	European Fisheries Control Agency
EMODnet	European Marine Observation and Data Network
EMSA	European Maritime Safety Agency
ESA	European Space Agency
EU	European Union
EUNAVFOR	European Union Naval Force ATALANTA
EUROSUR	European Border Surveillance System
FRONTEX	European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union
IMDatE	Integrated Maritime Data Environment
IMS	Integrated Maritime Services
LRIT	Long Range Identification and Tracking (vessel position data based on telecommunication satellites)
IUU	Illegal Unreported and Unregulated Fishing
MAOC-N	Maritime Analysis and Operations Centre – Narcotics
MRS	Mandatory Reporting System
MSS	EMSA's Maritime Support Services
RPAS	Remotely piloted airborne systems (the term is used synonymously with UAS, UAV and drone)
SAT-AIS	Satellite Automatic Identification System (AIS data transmitted by satellite)
UAS	Unmanned airborne system (see RPAS)
UAV	Unmanned aerial vehicle (see RPAS)
VDS	Vessel detection system (vessels identified on satellite images)
VDES	VHF data exchange system
VHF	Very high frequency (radio signals)
VMS	Vessel Monitoring System (tracking of commercial fishing vessels based on communications satellites)
VOI	Vessel of Interest
VTMIS	Vessel Traffic Monitoring and Information System
WUP	Web User Portal, also referred to as web user interface

## Background

The meeting was opened and chaired by Mr Lazaros Aichmalotidis, Head of Unit for Information Services/User Management, **EMSA**. Mr Sandro Nuccio represented the **European Commission** (DG MOVE).

EU member state delegations from **Belgium, Bulgaria, Croatia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Poland, Portugal, Romania, Slovenia, Spain, Sweden, the Netherlands** and the **United Kingdom** attended the meeting. There were also delegations from the following bodies: the European Fisheries Control Agency (EFCA), the European Agency for the Management of Operational Cooperation at the External Borders (Frontex), the Maritime Analysis and Operations Centre - Narcotics (MAOC-N), The European Space Agency (ESA) and its contractor for S-AIS, exactEarth Europe and the European Union Naval Forces (EU NAVFOR) Somalia.

The list of participants is attached in Annex 2, and a list of distributed documents is included at Annex 3. All IMDatE User Consultation Meeting documentation may be obtained at:

<http://emsa.europa.eu/workshops-a-events/188-workshops.html>

## Meeting programme

### 1. Welcome and opening

The chairman welcomed the participants and introduced the objectives of the meeting, which were: to obtain feedback on current use of the system; discuss the future requirements, including technical developments and new functionalities; and outline plans for the system in 2016 (version 1.5 and 1.6 updates). It was noted that with the adoption amendments to Annex III of the Vessel Traffic Monitoring and Information System Directive (Directive 2002/59/EC as amended, commonly referred to as the VTMISS Directive) the integration of data is now part of the SafeSeaNet (SSN) legal background, and that discussion related to this change will be addressed during the agenda item 6.2 on the SSN Interface and Functionalities Control Document (SSN IFCD).

**EMSA** delivered a brief presentation to introduce the current status of the Integrated Maritime Services, including the evolution in the range of services and the continued increase in the number of users which now stands at over 600.

Participants were reminded of the points addressed at the previous UCM meeting (IMDatE UCM #5), and an overview was given on the status of each of the action points agreed therein. The overview had also been circulated to participants in the minutes of the UCM#5 meeting. Some more detailed information was provided on the Central Ship Database, and progress to date. Five member states now have access to the web training environment, and two member states have expressed willingness to connect to the database via a machine to machine (S2S) connection.

Following the update on actions agreed at the previous meeting, the agenda for the UCM #6 was presented and adopted without change.

### 2. Update on the IFCD revision working group meeting (IMDatE presentation no. 6.2)

The **European Commission** representative presented the background of the amendments to Annex III of the VTMISS Directive, commenting that the changes were to reflect the progress which had been occurring in practice, and to promote consistency and best use of resources. The Annex provides a sound legal basis for further integration of data and systems, including new data sources such as satellite AIS, and will ensure coherency with other legal acquis such as Directive 2000/59/EC on port reception facilities for ship-generated waste and cargo residues and Directive 2010/65/EU on reporting formalities for ships arriving in and/or departing from ports of the Member States.

The presentation delivered by **EMSA** expanded on the information given by the Commission. The concurrent expansion of the scope of the Interface Functionalities and Control Document (IFCD) is therefore necessary to provide guidance and scope for the regulation of Integrated Maritime Services (IMS), including rules for integration and distribution of all data types.

The plans for the revision of the IFCD were presented, including the methodology and timeline for the revision, which is expected to be completed and approved at the HLSG 15 in June 2016. A 'chapter by chapter' overview of changes to the IFCD was introduced and details are available in the PowerPoint presentation related to this agenda point (available online at: <http://emsa.europa.eu/workshops-a-events.html>).

#### Discussion

**Sweden** asked whether there were any implications in terms of a System to System (S2S) connection, and expressed an interest in doing so. **EMSA** confirmed that the IFCD will be updated to reflect current practice, and does not imply any changes. The IFCD will describe the S2S interface for IMS services. Sweden is welcome to approach EMSA to set up such a service and EMSA will send them the relevant documentation for the S2S interface (**Action 1**).

**Poland** asked how collaboration between the HLSG and the eMS group would occur for addressing the issues related to the coordination between IMDatE/SSN/National Single Window. **EMSA** responded that the Commission is currently working on a new commission decision to address this topic.

**Germany** mentioned that work being done on the eManifest under the coordination of DG TAXUD, as well as the need for statistical information on cargo should also be taken into account, so that where possible any given set of information is only submitted once. **EMSA** agreed on the importance of these subjects, though noting they are slightly out of scope of the IMS UCM. The meeting participants were informed that DG MOVE and DG TAXUD are already in discussion for developing a pilot project specifically in relation to the eManifest.

### 3. Consultation meeting documents – storage policy (IMDatE Document no. 6.3)

**EMSA** is intending to harmonise the document management for all documents related to IMS, SafeSeaNet and LRIT. For this reason, it is proposed that by default all documents and presentations would be publically available through the EMSA website. Exceptions are foreseen when documents address issues related to security, contain information which is potentially commercially sensitive, or when a member of the group expresses a preference that a specific document not be made public (he/she will have to inform EMSA (meeting chair) or mention it during the IMDatE UCM).

#### Action

The group agreed to this proposal (**Action 2**). The representative from the Netherlands stated that he will confirm later on the possibility to publish his presentation.

### 4. Updated overview of IMDatE services to MS and EU bodies (IMDatE Document no. 6.4)

#### Existing business rules

**EMSA** presented the existing data sets available to users, along with the business rules (including access rights) and presentation and display aspects (refer to Annex 4). It was explained that, based on access rights of the user, the integrated ship position can comprise T-AIS, S-AIS, LRIT, VMS and other position reports. The IMDatE Web User Portal, also referred to as web user interface (WUP) displays the most recent position reports of a vessel regardless of the tracking system.

## Planned business rules

The presentation summarised information related to the additional data sources which are being considered for inclusion in IMDatE (including THETIS public data and met-ocean data addressed above). Member states were also encouraged to provide updated information on their oil pollution response ships and the AIS- shore based stations in order for this information to be provided the IMDatE (refer to Annex 5).

## Pilot services

The participants were informed of recent discussions between **Germany and EMSA** to explore the possibility of two new pilot projects: 1) to display ships exceeding a defined SO<sub>2</sub> (sulphur) emission threshold; and 2) to display ice charts (ice concentration, ice thickness and associated symbols) for German waters (refer to Annex 5). The proposed pilot projects were addressed in greater length during the German presentation.

## Other services

The services, including data types, provided to EUNAVFOR, EFCA, MAOC-N and FRONTEX were described (refer to Annex 6). The vessel detection service (VDS) data provided to Frontex was explained in detail, for the information of participants.

### Discussion

**Sweden** asked about the services provided to SafeMed and Traceca. It was explained that for SafeMed and Traceca, a limited amount of data related to the beneficiary countries, including satellite and terrestrial AIS and earth observation data, is displayed to partners via the IMDatE WUP.

### Action

The group validated the existing data types and business rules for the IMS services and endorsed the planned and pilot, new data types foreseen for the future (**Action 3**).

## 5. Feedback on IMDatE 1.4; plan for IMDatE 1.5 and 1.6 (IMDatE Document no. 6.5)

**EMSA** delivered a presentation to introduce the current status of IMDatE version 1.4 (released in July 2015) and gave an overview of the new functionalities foreseen in the next releases (1.5 and 1.6) for all the services provided via the IMDatE platform.

IMDatE1.4 includes the following features: display of in-situ and forecast met-ocean information; display of additional SafeSeaNet data (voyage and HAZMAT); a new WUP design; services for FRONTEX (access to WUP) and SAFEMED/TRACECA; correction of software defects and general improvements; E-SARSURPIC improvement; and finally, a new database technology (Exadata).

Two new satellite AIS data services will be introduced in release 1.5 (by the end of 2015), in order to validate AIS position reports. One validates the vessel's position against the satellite footprint by verifying the presence of the position of the vessel in the coverage of the satellite at reception time. The other provides the possibility of validating an AIS position report using Doppler shift frequency.

Release 1.6 is planned for the first quarter of 2016. It includes: more advanced search capabilities; improved management of ship details; access control and display of specific SafeSeaNet and THETIS information; monitoring of IMDatE usage to improve understanding of the difference uses of the system; and Vessel Detection System (VDS) processing changes to support FRONTEX services.

## Discussion

**Bulgaria** asked for clarification regarding what was intended by the term ‘operational vessel registry’ in the context of improved management of ship details. It was confirmed that this referred to information on vessels contained within the central ship database, and did not refer to a flag-state registry. It was noted that an effort should be made to use terminology in a clear way in order to avoid confusion.

## 6. Feedback on specific Integrated Maritime Services (IMS) (IMDatE Document no. 6.6)

### Automated behaviour monitoring (ABM) algorithms

Participants were informed that, as agreed at the previous UCM, a request form for using the ABM functionality was sent to IMDatE Points of Contact (PoC) on 29 June 2015 (action 4 of IMDatE 5 UCM minutes).

In the interim, several tests have been performed by **EMSA**. Three ABMs have been identified as operational (*InArea*, *DistanceToShore* and *AtPortAtSea*). The remaining ABMs are still in the testing phase, and need further improvements and testing before they can be considered operational. It was announced that Frontex was performing operational tests on several ABMs.

With regard to the “InArea” ABM, an issue related over alerting (due to lack of ship type information) has been identified. The issue should be resolved by the end of October.

## Actions

- Member States and EU bodies are invited to use the three operational ABMs and provide feedback on possible improvements (**Action 4**)
- EMSA will continue to test the ABMs still under assessment/validation and will request volunteers for further tests (**Action 5**).
- An ABM improvements release plan will be prepared and communicated to the IMDatE PoC when the corrections of identified issues will be validated (**Action 6**).

### Testing of mobile applications

**EMSA** gave an overview of the IMS application for mobile phones and tablets, and provided a live demonstration to explain to participants the main features of the app.

There are three main elements to the IMS mobile applications: 1) iOS and Android versions providing a range of information (vessel position and information, CleanSeaNet detections, incident and alert information, possibility of providing feedback on events); 2) web-services needed to interact with existing IMDATE and CleanSeaNet services; 3) a mobile access gateway to interact with EMSA’s single sign on.

There was a restricted test campaign from May to September with users in Malta and MAOC-N, and development of version 1 was concluded in August. The mobile apps will soon be ready to be deployed to the wider IMDatE user community (late 2015/early 2016). The app will be available to download from the relevant app stores (access will be restricted to registered IMDatE users); IMDatE users will need to be configured as app users by EMSA.

A second version of the app will be developed in 2016, with changes and improvements driven by feedback from selected volunteer users.

## Discussion

**Sweden** remarked that the demonstration was impressive, and asked whether one login could be active in parallel sessions, and if the number of users would affect the performance of the app. EMSA replied that it should be possible to keep simultaneous sessions open and that performance should be fine up to a limit of about 200 users.

The following Member States informed during the meeting that they volunteer to tests the version 2: Greece, Italy, Latvia, Luxemburg and Sweden.

### Actions

IMDatE users should:

- Consider using the IMS mobile application version 1, and provide feedback to EMSA (**Action 7**).
- Consider volunteering as test users for version 2 (**Action 8**).

## 7. Operational feedback on the Member State service

### Belgium

**Belgium** explained that the main users continue to be the MRCC in Ostend and MIK in Zeebrugge, who use the IMS as a complement to national systems. Defence, customs authorities and border control authorities are also considering becoming users. The Belgian maritime administration in collaboration with EMSA organised a training on IMDATE for Belgian users and also invited users from the Netherlands.

### Croatia

Although **Croatia** is not currently using IMDatE, the Croatian representative stated that there is potential to use the IMS services, in particular those integrating satellite AIS data and the enhanced SARSURPIC service.

### France

**France** reported that they were satisfied with recent changes in version 1.4, and preferred the new WUP, which is more user-friendly. France has provided some training sessions, and will continue with additional training sessions for other national users.

### Germany

**Germany** focused on two aspects that are under discussion with EMSA for potential pilot projects (see document IMDatE 6.4, pilot services).

Ice charts - DE produces ice charts for Baltic and N Sea. The proposal currently discussed with EMSA is to propose charts related to ice concentration and ice stage of development into a specific layer in IMDatE. These charts are available a harmonised format. (**Proposal DE1**)

Display and alerting on ships exceeding a defined SO<sub>2</sub> (**Proposal DE2**) - Currently Germany uses fixed devices (sniffers) to analyse the air emission during the passage of ships. AIS and meteorological devices are associated to the sniffers. The information on SO<sub>x</sub> emission and especially for those ships exceeding a threshold is made available to the German water Police which then can run appropriate inspections. The idea driving the potential pilot project is that the relevant information on air emission calculation could be sent to IMDatE which then would make it available, especially for those ships above the threshold, to the German users (water police). Other MS were invited to take note of the project and to explore their National developments in order to seek the similarities and consider harmonization of the approach.

### Discussion

**EMSA** clarified that, in term of access rights, Ice charts would be available to all users and air emission calculation just to German users (water police).

**Sweden** mentioned that this project could trigger better awareness in SE. It could enhance the ability to select which ships to observe/follow.



**Greece** stated that IMDatE is particularly useful in the context of accident investigation. The playback feature helps in the identification of polluter in pollution cases too. Greece volunteered to use and provide feedback on the mobile application.

## Ireland

Two recent case studies demonstrating the Irish Coast Guard's use of IMDatE were presented at the meeting. The first case study related to how the MRCC could use IMDatE in a local high traffic area to monitor which vessels were engaged in a search and rescue operation, including vessels using the Irish SafeTrx application. The search lasted 11 days, during which time a number of small ribs were used for local searches, which did not have AIS but which had access to SafeTrx. The second case study highlighted how IMDatE could be used to save time locating and contacting vessels. The case related to a (false) distress alarm received via GMDSS MF but the position of the ship could not be confirmed. The details of the situation were quickly confirmed through IMDatE using the information from S-AIS.

The Irish Coast Guards also informed on the use of the Barometer reading information available via IMDatE Met-ocean data to anticipate the potential T AIS propagation (high pressure is linked to higher propagation).

**Ireland** also gave feedback on their impressions of the new version of IMDatE: some headings are now harder to see; the layout of the home screen is very clear; the 60 second warning regarding state of idleness was useful and isn't used in this version; the CleanSeaNet alert works better; the export of timestamps is very useful, particularly in pollution cases. In terms of new functionalities, Ireland would find it useful to have the SafeTrx vessel track position reports as an option to select independently (**Proposal IE1**), and would like to be able to select certain vessels to assign a particular colour to on a temporary basis (e.g. all vessels engaged in a SAR operation could be allocated a particular colour for the period of the search, up to about two weeks) (**Proposal IE2**).

**EMSA** expressed thanks and appreciation for the detailed feedback, which provides a sound basis for implementing improvements to the service.

## Italy

**Italy** stated that IMDatE continues to be actively used on a regular basis, primarily for SAR rescue events. Italy would be interested in using and testing both the ABM functionalities and the mobile applications. Italy is interested in the system2system services offered by IMDatE as well in receiving the technical documentation of the CSD (**Action 9**).

## Latvia

**Latvia** is a new user of IMDatE. The Latvian representative stated that they were pleased to be IMDatE users, but do not yet have concrete feedback to give at the moment.

They are interested by system2system connection and a specific dialogue has been initiated with EMSA on this.

## Finland

**Finland** stated that IMDatE provides a good back-up to national systems, which in Finland are quite extensive. The Finnish representative expressed appreciation for the interesting presentation delivered by Germany, and information on the potential pilot projects. Finland also takes ice areas into account in vessel monitoring, but obtains information from the Finnish meteorological service.

## Luxembourg

**Luxembourg** became a user of IMDatE recently, and their 24/7 service will use IMDatE primarily to cross-check vessel position reports. They will report back at the next meeting on experiences using the service. Luxembourg would also like to volunteer to test the mobile application.

## Portugal

**Portugal** confirmed that users from most Portuguese services use IMDatE as a back-up or secondary tool, with the exception of the MRCC who use it as a primary tool.

## Slovenia

**Slovenia** is not an IMDatE user yet, but may consider becoming a user in 2016. They are busy at the moment with the integration of the national single window.

## Spain

SASEMAR, the Maritime Administration, and the Spanish Navy all use IMDatE. The **Spanish** representative informed the meeting of an incident in which IMDatE was used successfully. A sailing vessel in distress with one solitary crew member needed assistance. IMDatE was very useful to MRCC Madrid for identifying other sailing vessels in area; the importance of SAR SURPIC functionality using satellite AIS data was particularly emphasized.

## Sweden

There are currently approximately 60 users of the system in **Sweden**. These are predominantly occasional users from the navy and coastguard centres, who consider IMDatE to be complementary to national systems and as a valuable back-up. Some individuals use it on a more regular basis. Sweden expressed willingness to hold a training session/information meeting to update users on new functions. Sweden is also interested in testing the mobile applications and ABMs especially for monitoring their ships outside Swedish waters (e.g. for activities including missions in the Mediterranean). It was stated that IMDatE is valuable for general situational awareness.

## UK

The **UK** representative gave a complete presentation on IMDatE use and expectations within the UK. He informed the meeting that the number of users is growing, and will probably increase further. It is actively used by a number of departments in the Maritime and Coastguard Agency, as well as other government bodies. Attention was drawn to the benefits of satellite AIS, including in the following circumstances: during SAR incidents to get the latest position report of the casualty; for incidents at sea more generally, to identify vessels in the area to offer assistance; and to complete the picture during vessel track queries. UK coast guard authorities are also still monitoring vessels coming from Ebola affected areas, and will continue to do so until instructed otherwise.

A number of requests from UK users were presented: the logout button should not be obscured; the results box, when conducting a query, is large and the text size could be reduced; when entering a query, the time range should highlight the current date; a place search would be useful (**Proposal UK1**). The UK also asked how far back data was available for each of the position sources. There was a request that if a search for a vessel on a specific date did not find data ("No track found"), then IMDatE return the first date for which the vessel can be found after the date queried (**Proposal UK2**). Users would also like the ability to export individual .csv files for multiple vessels on individual sheets (**Proposal UK3**). Pending issues include the display of shore-based stations and aid to navigation (AtoNs), and the exchange of data between of IMDatE and EMCIP (identified as actions 5, 6 and 8 of the 5<sup>th</sup> IMDatE user group consultation meeting ).

## The Netherlands

**The Netherlands** informed meeting participants of a recent customs case related to the import of duty-free goods in which IMDatE was used to track a vessel in real-time. The operations team was able to take infra-red photos, and the incident is currently in court. Through using different data sources, it is useful that authorities can track vessels even if the vessel switches off one source – for example, a fishing vessel may switch off AIS, but still transmits VMS.

The Netherlands is interested in using IMDatE to monitor all activities going on around wrecks (**Proposal NL1**). Authorities are also still investigating how to implement coastal radar (**Proposal NL2**).

In practical terms, the Netherlands would like to access all EMSA accounts from one portal by harmonising log-ins. With regard to the ABM functionalities, the vessel security system (VSS) operators would like to create own areas of responsibility, rather than sending in forms to EMSA to set up the ABM service each time. The Netherlands is also hoping to create shared area with Belgium and UK, and to maintain a common ‘vessels of interest’ list.

The Netherlands added one more suggestion at the end of the meeting, that it would be useful to have a chat box in IMDatE so that up to six member states can chat together from a distance while looking at the same screen. This would be particularly useful while conducting joint operations. (**Proposal NL3**).

**EMSA** confirmed that the ABMs can only be set up by EMSA. The reason is that this tool is still under pilot phase and the potential impact on the system needs to be closely monitored before giving to the PoC the possibility to create them.

## Other comments

**Denmark** states that they do not currently use the IMDatE system, but may in future be interested in using it as a back-up, and/or investigate whether there is the possibility to exchange any information via an S2S link. Denmark has a sniffer Sulphur project for air emissions ongoing, but it is in the area of responsibility of another department, and it was not possible to get more details at short notice. It may be interesting to exchange ideas with the pilot project which Germany proposed.

Remark: all the proposed improvements or suggestion for new functionalities are recorded using the following convention: Proposal+ the bigram of the country+ the number (Proposal XX1). These proposals are gathered in Annex 8 and will be assessed by EMSA which will provide feedback at IMDatE 6 (**Action 10**).

## 8. Operational feedback on the services for EU bodies

### European Fisheries Control Agency (EFCA)

**EFCA** gave a summary of how they used IMDatE in the past few years, and the increasing scope (both geographical and in terms of activities) and number of users over this period. There are now over 200 users in Fisheries Monitoring Centres (FMC) and in EFCA; IMDatE is being used in all EFCA Joint Deployment Plans (JDPs) and the Agency is currently considering whether it can be used worldwide for an Illegal Unreported and Unregulated (IUU) service from 2016 onwards. It is anticipated that the mobile application will be useful for fisheries patrol vessels and for inspectors in port.

EFCA’s main challenge at the moment is the development of an automatically updated fishing vessel registry, which is being done through a change in the EFCA enterprise architecture. The registry file at the moment which is exchanged and sent o EMSA currently has very limited information; for example, it does not include MMSI numbers for all the FF/VV. An up to date and complete register is essential for a number of reasons, including for example to be able to check which fishing vessels have AIS.

EFCA uses IMDatE for real-time monitoring and post-event analysis. The additional AIS and S-AIS data is invaluable. Inspectors can then compare information from the fishing trip analysis with log book entries and catch reports.

Met-ocean data available through IMDatE can also be used to identify anomalies.

In terms of the new version of IMDatE, EFCA noted a number of positive features. For EFCA the usefulness of IMDatE would be halved if the system did not contain satellite AIS data. They stressed the importance of this data source indicating it was crucial for their work.

Then EFCA gave suggestions for possible improvements (available in EFCA presentation published in EMSA website).

## FRONTEx

Frontex played a new corporate video, which introduces EUROSUR and highlights the role of data integration and cooperation with EMSA for Frontex activities at sea.

Frontex then provided an overview of the recent increases in the volume of people crossing borders by various routes.

Frontex uses S2S services from EMSA, which are used within the Frontex fusion services. About 60% of the data in the maritime situational picture is provided by EMSA. The Frontex representative presented the different services available: vessel monitoring and tracking, tracking of vessels of interest, vessel detection, meteo data, visual data discovery, the maritime simulation model, satellite imagery, anomaly detection, and supporting information.

The vessel detection service was noted as being especially important, as satellite images are able to identify vessels which do not transmit position information. The rapidity between the image ordering and its reception (around 30 min) is highly appreciated by Frontex.

Frontex is in the process of setting up anomaly service (using Automated Behaviour Monitoring tools) with EMSA. It was tested in Baltic on 14 October 2016. The algorithms tested for which positive results were provided are: In area, sudden change of speed, sudden change of heading. For at sea encounter (rendez-vous at sea), further feedback are expected.

Cooperation with other Agencies and EU bodies was highlighted as being of particular importance to Frontex. The Frontex representative thanked colleagues at EMSA for their support, and added that Frontex looks forward to receiving data from EFCA.

Frontex also informed the meeting participants that they had identified 350 requirements of IMDatE, which they are working on bilaterally with EMSA. These are very specific to the Frontex service, and therefore not listed in detail in this meeting.

## Maritime analysis and operations centre - narcotics (MAOC-N)

The **MAOC-N** representative provided a brief background of the organisation, and then discussed some use cases of how they used IMDatE.

MAOC-N gave some examples of the functionalities of IMDatE which are used in their activities. Creating surveillance areas, being able to add filters (e.g. vessel types, under/over-reporting) and receive alerts are important capabilities. The area centric and track queries are also used considerably, and satellite AIS data add valuable information. An example was given of a vessel track query in the Caribbean; due to satellite AIS data, the vessel could be tracked across the Atlantic and into the Mediterranean, where a partner country was able to seize the vessel. Satellite surveillance can also be valuable when combined with intelligence information

MAOC-N has been involved with testing the mobile applications. This is especially useful to operators when out of the office. The streamlined interface is appreciated. MAOC-N recommended that speed and heading be added to the information available via the mobile app.

With regard to the IMDatE system and interface, MAOC-N suggested that the following features would be interesting: user-uploaded vessel of interest lists; filters to display only specific vessels (e.g. vessels from the user updated vessel list); user controlled colour-coding of vessels (same as proposal IE 2); multiple level filters based on user defined criteria, e.g. all vessels arriving in a certain area with a specified flag, vessel type etc.; highlighting of vessels which have previously activated an alert; and the option to send selected vessel information via email.

For IMS services accessible via the application, MAOC-N would appreciate: a link between the IMDatE web interface and IMS app e.g. display saved searches across both platforms; user-uploaded vessel of interest lists; user controlled colour coding of vessels; filters to only display specific vessels e.g. user updated vessel list; and the option to send selected vessel information via email.

In addition to these initial suggestions (which were outlined in the presentation), MAOC-N added: visible names of class B vessels (not MMSI number, but name, which operators are immediately familiar with); a 'vessels in view'

functionality which provides a side list of the name of vessels on the display; a smaller vessel track box, which is 'draggable'; and finally an alert when any of a list of MMSI numbers not currently available in the system become active.

Remark: as for the other agencies, the requests for improvements for MAOC-N are addressed via specific dialogue EMSA-MAOC-N.

## EUNAVFOR (MSCHOA)

The **EUNAVFOR** representative reminded participants of the goals and history of the EUNAVFOR Atalanta mission and the use of EMSA services in support of the mission since 2010. The maritime situational awareness provided by IMDatE now includes ship identification, risk assessment details, ship protection measures (SPM), and contact details of the vessels.

The addition of satellite AIS data for the Indian Ocean has real benefits: EUNAVFOR can receive data on the ships from flag states that have not opted in on EUNAVFOR's information distribution facility; there is a faster position update rate and improved monitoring of merchant vessels, enabling a quicker response from EUNAVFOR in unusual situations. An example of this was the use of IMDatE to contact a tanker travelling between Fujairah and Mogadishu, which changed course and turned towards the Somali coast unexpectedly.

EUNAVFOR monitors fishing activities, in order to identify vessels fishing in the EEZ of Somalia, some of which are engaged in IUU. The mission also has a project on dhows, to increase knowledge of the dhow community and their movements. For both these activities, EUNAVFOR has been using behaviour monitoring algorithms.

There are some improvements that could be made to the EUNAVFOR service, especially in the identification of vessels. Currently, satellite AIS data only gives the MMSI number, not the IMO number, and therefore does not correlate to the vessels registered with EUNAVFOR, with the consequence that the risk assessment colour code does not appear on IMDatE, and with the loss of some data and contact details.

### Discussion

There was a short clarification of the respective roles and missions of EUNAVFOR Atalanta and EUNAVFOR MED.

## 9. Provision of satellite AIS data in IMDatE

### European Space Agency

**ESA** provided a short introduction to the work of the Agency, and the context in which collaboration with EMSA takes place, through the telecommunications area of activity, and in particular the ARTES (Advanced Research in Telecommunications Systems) Application Programme. EMSA and ESA have been developing a Satellite AIS programme together since 2012. The PLatform for Advanced SAT-AIS Maritime Application (PLASMA) covers the specification, design, implementation and pre-operational demonstration of enhanced SAT-AIS services, and was initiated in 2013. The provision of a global feed of SAT-AIS data through PLASMA will come to an end in August 2016.

### exactEarth

**exactEarth** provided more detailed information on the structure of the ARTES 21 PLASMA project, through which ESA and exactEarth provided a global SAT-AIS data feed to EMSA and EMSA users since March of 2014. Within this framework, an Advanced Ship Tracking and Reporting (A-STAR) initiative was set up as an extension of the original PLASMA project. A-STAR began in November 2014, and in addition to the provision of global satellite AIS data, includes Doppler data to assist with services related to the validation of AIS messages.

The exactEarth representative went on to talk about the future of satellite AIS, including exactEarth's second generation satellite AIS constellation. It was stated that feedback on the usefulness and contribution of satellite AIS and the PLASMA project to national or EU maritime operations would be highly appreciated.

## 10. Integrated maritime service: general discussion on next steps

**EMSA** gave participants an overview of the intended developments to IMDatE in the coming period.

One of the most important changes will be the move to a new single graphical user interface or GUI (also known as the SafeSeaNet GUI, or SEG). Whereas in the past the interfaces were quite different, and served different user communities, now that services and user communities are becoming more integrated, a common interface is more optimal. It is intended that the SEG will: take the best of each existing interface; introduce some innovations and solutions; have a new approach to certain data sets; be customizable for specific users/ operations. The SEG will be tested in spring 2016, and has a go-live date of November 2016. The SEG will be available in html on desktop, laptop and tablet, while the IMS app is available in iOS and android on tablet and smart phone.

Participants were informed of the dates of relevant upcoming meetings: 1) ESA-EMSA Workshop "Remotely Piloted Aircraft Systems for maritime surveillance" on 28-29 October 2015; 2) the SafeSeaNet High Level Steering Group meeting, which will include a discussion on the revision of the IFCD, December 2015; 3) IMDatE/IMS User Consultation Meeting 7, tentative date 12 May 2016.

## 11. Summary, conclusions and follow-up actions

EMSA briefly summarised the main points addressed during the meeting. There were no further remarks, and the meeting was closed.

The follow-up actions arising from the UCM#6 meeting and pending from UCM#5 are indicated in Annex 6.

The annex 7 gathers the proposal for improvements expressed by the Member States. Those from agencies are treated via specific dialogue/meetings.

## Annexes

Annex 1 – Meeting Agenda

Annex 2 – Attendance List

Annex 3 – List of IMDatE UCM 6 documents

Annex 4 – Existing data types and associated access rights

Annex 5 - Future new data types and associated access rights

Annex 6 – Data types and access rights for other services

Annex 7 – List of action items from the 6<sup>th</sup> IMDatE user consultation meeting

Annex 8 – List of IMS proposals from Member States.



## Annex 1: Meeting Agenda - 6<sup>th</sup> IMDatE User Consultation meeting (for Member States and EU Bodies)

Lisbon, 15 October 2015

Thursday, 15 October 2015

Time	Agenda Item	Speakers
08:45 – 09:15	<b>Registration and coffee</b>	
09:15 – 09:30	1. Chairman welcome and opening	EMSA
09:30 – 10:00	2. Update on the IFCD Revision WG meeting Background of the revision Proposed modifications of the SSN IFCD document for the Integrated Maritime Services (IMS)	EMSA
10:00 – 10:15	3. Consultation meeting documents – storage policy	EMSA
10:15 – 10:45	4. Update overview on IMDatE services to MS and EU bodies Mapping of the new business rules and user requirements	EMSA
10:45 – 11:00	<b>Coffee break</b>	
11:00 – 11:20	5. Feedback on IMDatE 1.4 and plan for 1.5 and 1.6	EMSA
11:20 – 11:40	6. Feedback on specific IMS services Automated Behaviour Algorithms (ABMs) Testing of mobile applications	EMSA / IMS users
11:40 – 13:00	7. MS Operational Feedback on IMS Use cases Feedback on latest version Data needs Requirements for new functionalities	MS
13:00 – 14:00	<b>Lunch break</b>	
14:00 – 15:20	8. EU Bodies Operational Feedback on IMS EFCA FRONTEX MAOC-N	EU Bodies

Time	Agenda Item	Speakers
	EU-NAVFOR	
<b>15:20 – 15:40</b>	9. Provision of S-AIS in IMDatE	ESA / Exact Earth
<b>15:40 – 16:00</b>	10. Integrated Maritime Services general discussion on Next steps	EMSA / MS / EU Bodies
<b>16:00 – 16:30</b>	Summary and conclusions – End of IMDatE meeting	EMSA



## Annex 2: Participant List



## 6th IMDatE Meeting, 15th October 2015

Country	Name	First Name	Organisation	E-mail	Attendance on 15.10.2015
Belgium	Baudemeprez	Bart	EUNAVFOR	cj3ncags2@mschoa.org	
Bulgaria	Ivanov	Petar	Executive Agency Maritime Administration	peter_iv@marad.bg	
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France	Maire	Nicolas	Department of Maritime Affairs	maire.nicolas@developpement-durable.gouv.fr	
Germany	Baum	Patrick	Federal Ministry of Transport and digital Infrastructure	patrick.baum@wiv.bund.de	
Germany	Preuss	Ralf-Dieter	BSH	Ralf-Dieter.Preuss@bsh.de	
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Hungary	Jeney	Zsigmond Péter	National Transport Authority	jeney.zsigmond@nkh.gov.hu	
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Ireland	Osborne	Alan	Irish Coast Guard	jamesalanosborne@gmail.com	
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Italy	Tassara	Andrea	Italian Coast Guard	andrea.tassara@mit.gov.it	
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Latvia	Bickovs	Deniss	Latvian Coast Guard Service	deniss.bickovs@mrcc.lv	



## 6th IMDatE Meeting, 15th October 2015

Country	Name	First Name	Organisation	E-mail	Attendance on 15.10.2015
Latvia	Buners	Ričards	Latvian Coast Guard Service	ricbuners@gmail.com	
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Luxembourg	Arend	Patrick	Commissariat aux affaires maritimes	patrick.arend@cam.etat.lu	
Poland	Rojek	Bogdan	Maritime Office Gdynia	dim@umgd.gov.pl	
Portugal	Silva	Paulo	MAOC (N)	paulo.silva@maoc.eu	
Portugal	Ferreira	José	MAOC (N)	jose.ferreira@maoc.eu	
Portugal	Risley	Michael	MAOC (N)	michael.risley@maoc.eu	
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The Netherlands	Kleinen	Tom	NLCG	tom.kleinen@kustwacht.nl	
The Netherlands	van Oss	Lisette	NLCG	lisette.van.oss@kustwacht.nl	



## 6th IMDatE Meeting, 15th October 2015

Country	Name	First Name	Organisation	E-mail	Attendance on 15.10.2015
United Kingdom	Wake	Joanne	MCA	Joanne.Wake@mca.gov.uk	<i>Joanne</i>
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United Kingdom	Chesworth	Simon	ExactEarth Europe	simon.chesworth@exactearth.com	<i>Simon</i>
United Kingdom	Dettmann	Jan	ESA	jan.dettmann@esa.int	<i>Jan</i>
United Kingdom	Proud	Richard	ExactEarth Europe	richard.proud@exactearth.com	<i>Richard</i>
	Malinowski	Piotr	FRONTEX	Piotr.Malinowski@frontex.europa.eu	<i>Piotr</i>
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BELGIUM	Huibbertse	Jack	" " " " " "	Jack.Huibbertse@scheldevaerwet.be	<i>Jack</i>
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Portugal	Tenente	Rui	DGRM		<i>Rui</i>
FINLAND	Antti	Antti	FTA		<i>Antti</i>



EMSA staff			
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## **Annex 3: List of IMDatE UCM 6 documents**

IMDatE UCM Agenda

IMDatE 6.3: Consultation meeting documents: storage and access policy

IMDatE 6.4: Update Overview of IMDatE MS service

IMDatE 6.5: Feedback on release 1.4 and plan for release 1.5 and 1.6 of the IMDatE platform

IMDatE 6.6: Feedback on Specific IMS services

## Annex 4 – Existing data types and associated access rights for the Member States services

No	Data type or specific function	Business rule	Presentation / display aspects
1	<b>LRIT</b>	<p>LRIT Flag Fleet position report data is made available to MS users from EU LRIT CDC as decided by each MS.</p> <p>The basic rule is that only the data belonging to a MS fleet is provided to the users of that MS, however a number of MS have agreed to share their flag fleet data with other MS.</p>	<p>The regular (6 hours) LRIT position data is a part of the integrated ship position comprising (based on the access rights) of T-AIS, S-AIS, LRIT, VMS and other position reports.</p> <p>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</p> <p>The reporting as requested via the EU LRIT CDC user web interface is not displayed. The reporting requested via the DDP or XML interfaces to the EU LRIT CDC is displayed.</p>
2	<b>Satellite-AIS</b>	A global feed of SAT-AIS is made available to all users without any restriction, as agreed with the data providers (Norway and ESA/ExactEarth).	<p>The SAT-AIS position report data is a part of the integrated ship position.</p> <p>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</p>
3	<b>SSN T-AIS</b>	SSN T-AIS data is streamed from the SSN system. Currently all administrations have confirmed access to SSN T-AIS data in line with the access rights as laid down in the IFCD.	<p>The T-AIS position data is a part of the integrated ship position.</p> <p>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</p>
4	<b>VMS</b>	VMS Flag data is streamed from MS or alternatively from EFCA to IMDatE. Access is governed by MS, and can be filtered at MS, organisation and user level. Basic rule is that only the data belonging to a MS fleet is provided to MS users, however a number of MS have agreed to share their VMS data with other participating MS.	<p>The VMS position data is a part of the integrated ship position.</p> <p>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</p>
5	<b>Patrol Assets</b>	Patrol asset data is provided from MS to IMDatE. This data stream is filtered and made available only to MS providing the data. Access is governed by MS, and can be filtered at MS, organisation and user level.	<p>The patrol data asset is linked to the data provided by the MS and is independent of the display of the integrated ship position.</p> <p>Patrol assets are displayed with specific colour icons.</p>
6	<b>Pleasure/Leisure crafts</b>	SafeTrx data for Irish pleasure/leisure crafts has been integrated as of July 2014, and is made available to Irish users.	<p>The SafeTrx data asset is linked to the data provided by the MS and is independent of the display of the integrated ship position.</p> <p>SafeTrx are displayed with specific colour icons.</p>



No	Data type or specific function	Business rule	Presentation / display aspects
7	<b>EMSA and MS Oil Spill Recovery Vessels</b>	Available to all MS users	Specific symbols based on the ship (MS or EMSA) data and additional information provided: type, av. speed, breadth, crane y/n, Draft, GT, Length, Area of operation, OS response equipment, Tank capacity, Equipment depot
8	<b>CleanSeaNet</b>	CSN oil spill detections and SAR satellite imagery (as well as their footprints) is made available from the EO DC. VDS (Vessel Detection Service) data is also presented.  As all administrations have confirmed access to CSN data, there is currently no restriction to this data set and therefore all data is made available to all users.	The SAR satellite images as well as the potential spills detections are displayed for the last 24 hours.
9	<b>Met-Ocean Information</b>	In-situ data from “Puertos del Estado” (Spain) was expanded via the access to the EMODNet.	Different parameters are available to all users depending on the data available in the EMODNet, for example: Sea current speed and direction, Sea water temperature, Sea water salinity, Significant wave height, Mean wave period, Sea level etc. Clicking on the particular sensor allows getting the information on the available measurements as well as the authority providing the data.
10	<b>Enhanced SAR SURPIC<sup>1</sup></b>	The Enhanced SARSURPIC tool provides information based on the existing LRIT SAR SURPIC function with addition of all available position reports /data types (currently except VMS). In order to access the Enhanced SARSURPIC function the IMDatE user has to be registered in the EU LRIT Data Centre and has to be granted the SAR Role.	Ship positions obtained in the Enhanced SARSURPIC use all the integrated position reports that the user is entitled to see, within last 24 hours from the time of request. The function remains active for 30 minutes.
11	<b>Automated Behaviour Monitoring</b>	See details of the ABM surveillances in the UCM IMDatE paper 6.6	-
12	<b>SSN Port+ via the Integrated Ship Profile</b>	SSN Enrichment data is presented in the Integrated Ship Profile based on the data provided by MS to the SSN European Index Server (EIS)	Last Port, ETD from Last Port, Port of Call, ATA and ATD at Port of Call (when provided), ETA to port of Call, Next Port, Hazmat Y/N, POB, HAZMAT Classification (when available), voyage information

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<sup>1</sup> function



Access Rights per participating Member State (5<sup>th</sup> IMDatE)

MS	Organisation	Which LRIT Flag Fleets they can see	VMS	SAT-AIS	T-AIS	CSN	Miscellaneous
ES	All	ES, FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	
FR	All	FR, FI, GR, IT, LV, LT, RO, UK	IT	x	x	x	
GR	All	GR, FI, FR, IT, LV, LT, RO, UK	IT	x	x	x	
IE	All	IE, FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	IE-SafeTrx
IT	All	IT, FI, FR, GR, LV, LT, RO, UK	IT	x	x	x	LRIT COASTAL IT
MT	Transport Malta	MT, FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	
	Fisheries Dept.	FI, FR, GR, IT, LV, LT, RO, UK	MT, IT	x	x	x	
	Armed Forces	MT, FI, FR, GR, IT, LV, LT, RO, UK	MT, IT	x	x	x	
NL	All	NL, FI, FR, GR, IT, LV, LT, RO, UK	NL, IT	x	x	x	NL CG
PT	All	PT, FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	
UK	All	UK, FI, FR, GR, IT, LV, LT, RO	UK, IT	x	x	x	LRIT COASTAL UK
BE	All	BE, FI, FR, GR, IT, LV, LT, RO, UK	IT, BE	x	x	x	
DE	All	DE, FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	
SE	All	SE, FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	
HR	All	HR, FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	
FI	All	FI, FR, GR, IT, LV, LT, RO, UK	IT	x	x	x	
LU	All	LU		x	x		
LV	All	LV, FI, FR, GR, IT, LT, RO, UK	IT	x	x	x	

## Annex 5 - Future new data types and associated access rights and planned pilot services

No	Data type or specific function	Business rule	Presentation / display aspects
13	<b>SSN Port+</b>	Following SSN version 3 developments additional SSN Enrichment data could be presented	Security information (current security level), Waste delivered (Delivery status N), Incident Y/N
14	<b>SSN MRS Data</b>	Following the agreed guidelines at SSN HLSG 10 for exchanging MRS notifications through SSN.	MRS position will be displayed on the map with a specific icon and additionally the MRS 'enrichment' ( or voyage) information will include:  Ship Position, ReportingDateAndTime – timestamp (if not available the SentAt value will be used), Voyage Information, NextPortOfCall, ETA, Total Persons On Board, Any DG – yes/ no, MRS identification, CST identification
15	<b>THETIS public data</b>	Public Port State Control (PSC) could be presented to the users	Ship Risk Profile in the Integrated Ship Profile (ISP)  The data may be presented per ship in the vessel information tab. It may contain: date of the last PSC inspection with a link to the inspection details and list of all inspections , Information if the ship's flag is classified as White, Grey or Black according to the Paris MoU flag performance, the latest available information , Current detentions Y/N , Refusal of access information Y/N , Prevention of operation Y/N
16	<b>Met-ocean</b>	Earth Observation and model/forecast met-ocean data.	Specific layers will be gradually integrated into the service. The following parameters will be made available: Sea current speed and direction, Sea water temperature, Sea water salinity, Significant wave height, Mean wave period, Sea level, Chlorophyll-a concentration, Wind speed and direction, Air temperature, Air pressure
17	<b>S-AIS</b>	Validity/Invalidity Check of an AIS message	This service validates the vessel's position against the satellite footprint by means of verifying the presence of the current position of the vessel in the coverage of the satellite at reception time,
18	<b>S-AIS</b>	Doppler validation	This service provides the possibility of validating an AIS position report using Doppler shift frequency. IMDatE will be able to compute an independent position from the GNSS positions sent within the AIS message, thus validating or invaliding an AIS position report.

No	Data type or specific function	Business rule	Presentation / display aspects
19	<b>AIS shore-based stations</b>	Availability depending on the decision of the MS: either to MS own users or to all users	<p>The data set covers: Name (location name), Lat, Long, MMSI, Height of the antenna above ground level</p> <p>Display: magenta coloured squares as the AIS Base Station symbols</p>

### Pilot services

No	Data type or specific function	Business rule	Presentation / display aspects
20	<b>Sulphur emissions information</b>	Specific display of ships exceeding a defined SO <sub>2</sub> (sulphur) emission threshold	<p>Available to German users only. The potential data set covering:</p> <p><b>Monitoring station:</b> Station ID, Name of measuring station, Location of station (lat/lon), Measuring method, Contact person</p> <p><b>Measurement:</b> Unique ID, Date and time UTC, IMO or MMSI number of the ship, Position of the measured target (lat/lon), Measured Sulphur in %, Measurement uncertainty</p>
21	<b>Ice charts</b>	Display of the ice concentration, ice thickness and associated symbols for the German waters (West Baltic and North Sea), represented through a World Meteorological Organization (WMO) & International Hydrographic organization (IHO) standard specification S411.	Available to all users, covering initially the North Sea and Western Baltic, with future possibility of expanding to ice chart maps produced by Canada, US, Russia and other EU/EFTA states.

## Annex 6 - Data types and access rights for other services

### EU NAVFOR

No	Data type or specific function	Business rule	Presentation / display aspects
22	LRIT	<p>LRIT EU Flag Fleet position report data is made available to EU NAVFOR users from EU LRIT CDC as decided by each MS</p> <p>LRIT from third countries is provided based on the flag states' decisions via DDP</p> <p>Available to EU NAVFOR users only</p>	<p>The regular (6 hours) LRIT position data</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p> <p><u>The reporting as requested via the EU LRIT CDC user web interface is not displayed. The reporting requested via the DDP or XML interfaces to the EU LRIT CDC is displayed.</u></p>
23	Satellite-AIS	SAT-AIS is made available to EUNAVFOR users for their Area of Interest without any restriction (all ships)	<p>The SAT-AIS position report data is a part of the integrated ship position.</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p>
24	Risk Assessment Data	Specific data set provided by EUNAVFOR, integrated and made available to EUNAVFOR users only	Colour coding and symbols as defined by EUNAVFOR users

### EFCA

No	Data type or specific function	Business rule	Presentation / display aspects
25	LRIT	<p>LRIT EU Flag Fleet position report data is made available to EFCA users from EU LRIT CDC as decided by each MS.</p> <p>Available to EU EFCA users only</p>	<p>The regular (6 hours) LRIT position data</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p> <p><u>The reporting as requested via the EU LRIT CDC user web interface is not displayed. The reporting requested via the DDP or XML interfaces to the EU LRIT CDC is displayed.</u></p>

No	Data type or specific function	Business rule	Presentation / display aspects
26	<b>Satellite-AIS</b>	A feed of SAT-AIS is made available to EFCA users without any restriction (all ships), in an “AD-HOC” polygon (Area of Interest) as agreed with the data providers (Norway and ESA/ExactEarth).	The SAT-AIS position report data is a part of the integrated ship position. <u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u>
27	<b>EFCA REGISTRY FILE AND EFCA INCIDENTS</b>	Specific data set provided by EFCA integrated and made available to EFCA users only	Colour coding and symbols as defined by EFCA users and additionally MS specific data in the information panel
28	<b>VMS</b>	VMS EU Flag Fleet and NON EU position report data is made available to EFCA users from EFCA data centre in the framework of Joint Deployment Plans (JDP) decided by each MS and Contracting Parties (CP) in the Framework of the International Regional Fisheries Management Organizations (RFMO's)  Available to EFCA users only	The regular (1 or two hours) VMS position data  IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.
29	<b>T-AIS</b>	T-AIS data is provided from the SSN system to the EFCA users	The T-AIS position data is a part of the integrated ship position.  IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.
30	<b>Met-ocean</b>	In-situ data from “Puertos del Estado” (Spain) was expanded via the access to the EMODNet.	Different parameters are available to all users depending on the data available in the EMODNet, for example: Sea current speed and direction, Sea water temperature, Sea water salinity, Significant wave height, Mean wave period, Sea level etc. Clicking on the particular sensor allows getting the information on the available measurements as well as the authority providing the data.

## MAOC- N

No	Data type or specific function	Business rule	Presentation / display aspects
31	LRIT	<p>LRIT EU Flag Fleet position report data is made available to MAOC- N users from EU LRIT CDC as decided by each MS.</p> <p>Available to MAOC-N users only</p>	<p>The regular (6 hours) LRIT position data</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p> <p><u>The reporting as requested via the EU LRIT CDC user web interface is not displayed. The reporting requested via the DDP or XML interfaces to the EU LRIT CDC is displayed.</u></p>
32	Satellite-AIS	A feed of SAT-AIS is made available to MAOC –N users in “AD-HOC” polygon (Area of Interest) without any restriction (all ships), as agreed with the data providers (Norway and ESA/ExactEarth).	<p>The SAT-AIS position report data is a part of the integrated ship position.</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p>
33	T-AIS	T-AIS data is provided from the SSN system to the MAOC -N users	<p>The T-AIS position data is a part of the integrated ship position.</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p>
34	Met-ocean	In-situ data from “Puertos del Estado” (Spain) was expanded via the access to the EMODNet.	<p>Different parameters are available to all users depending on the data available in the EMODNet, for example: Sea current speed and direction, Sea water temperature, Sea water salinity, Significant wave height, Mean wave period, Sea level etc. Clicking on the particular sensor allows getting the information on the available measurements as well as the authority providing the data.</p>

### FRONTEX

No	Data type or specific function	Business rule	Presentation / display aspects
35	LRIT	<p>LRIT EU Flag Fleet position report data is made available for a specific Area of Interest</p> <p>LRIT Coastal State request from Italy for a defined Area of Interest</p>	<p>The regular (6 hours) LRIT position data</p> <p><u>Delivery to Frontex through Web services.</u> Colour coding and symbols as defined by Frontex</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p>
36	Satellite-AIS	SAT-AIS is made available to Frontex users without any restriction (all ships) for their Area of Interest.	<p>The SAT-AIS position report data is a part of the integrated ship position.</p> <p><u>Delivery to Frontex through Web services.</u> Colour coding and symbols as defined by Frontex</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p>
37	Terrestrial-AIS	T-AIS data is provided from the SSN system	<p>The T-AIS position data is a part of the integrated ship position.</p> <p><u>Delivery to Frontex through Web services.</u> Colour coding and symbols as defined by Frontex</p> <p><u>IMDatE WUP displays the most recent position reports of a vessel regardless of the tracking system.</u></p>
38	Vessel Detection Service	<p>SAR satellite acquisitions are planned based on Frontex coverage requirements (area of interest, satellite mode)</p> <p>VDS targets and SAR satellite planned/acquired frames are made available.</p> <p>VDS targets are categorised: identified ; non-identified.</p>	<p>VDS positions are displayed for the last 24 hours. Acquired SAR satellite acquisitions frames are available for the last 24 hours. All planned acquisitions are available for 1 month.</p> <p>Delivery to Frontex through Web services. Colour coding and symbols as defined by Frontex</p> <p>The SAR satellite images, oil spills and VDS targets are displayed for the last 24 hours- after that period of time only based on area centric query.</p>
39	Optical images+Activity Detection	Very High Resolution Optical satellite acquisitions are planned based on Frontex coverage requirements (area of interest, satellite mode).	<p>To be delivered To Frontex by Web services. Currently being delivered by FTP.</p>

## Annex 7 – List of action items from the 6th IMDatE user consultation meeting

Action Point from IMDatE 6	Topic and Action	Resp.
1	EMSA will send to Sweden the relevant documentation for the S2S interface.	EMSA
2	The group agreed to the storage and access policy of IMS user group meeting.	EMSA/MSs/EU Bodies
3	The group validated the existing data types and business rules for the IMS services and endorsed the planned and pilot, new data types foreseen for the future.	EMSA/MSs
4	Member States and EU bodies are invited to use the three operational ABMs and provide feedback on possible improvements.	MSs/EU Bodies
5	EMSA will continue to test the ABMs under assessment/validation and will request volunteers for further tests.	EMSA
6	An ABM improvements release plan will be prepared and communicated to the IMDatE PoC when the corrections of identified issues will be validated.	EMSA
7	Consider using the IMS mobile app version 1, and provide feedback to.	MSs/EU Bodies
8	Consider volunteering as test users for IMS mobile app version 2.	MSs/EU Bodies
9	Provide Italy with documentation about system2system services offered by IMDatE as well as CSD technical documentation.	EMSA
10	Proposals from Member States are reflected in annex 8 and will be assessed by EMSA which will provide feedback at IMDatE7	EMSA
Action Point from IMDatE 5	Topic and Action	Resp.
5	Interested Member States should cooperate with EMSA to validate/Update their AIS shore-based station list and oil pollution response registries in order include an AIS shore based station layer in IMDatE and to display up-to-date information regarding their oil pollution response ships	EMSA and MS



## Annex 8 – List of proposals from Member States from the 6<sup>th</sup> IMDatE user consultation meeting

Proposals	Topic and Action	Resp.
DE 1	<b>Ice charts</b> - DE produces ice charts for Baltic and N Sea. The aim is to propose charts related to ice concentration and ice stage of development into a specific layer in IMDatE. These charts are available a harmonised format.	DE/EMSA
DE 2	<b>Display and alerting on ships exceeding a defined SO<sub>2</sub></b> - The idea driving the potential pilot project is that the relevant information on air emission calculation could be sent to IMDatE which then would make it available, especially for those ships above the threshold, to the German users (water police)	DE/MESA
IE 1	SafeTrx vessel track position reports as an option to select independently	IE/EMSA
IE 2	To be able to select certain vessels to assign a particular colour to on a temporary basis (e.g. all vessels engaged in a SAR operation could be allocated a particular colour for the period of the search, up to about two weeks).	IE/EMSA
UK 1	Information displaying 1.1 The logout button should not be obscured; 1.2 The results box, when conducting a query, is large and the text size could be reduced; 1.3 When entering a query, the time range should highlight the current date; 1.4 A place search would be useful.	UK/EMSA
UK 2	If a search for a vessel on a specific date did not find data ("No track found"), then IMDatE return the first date for which the vessel can be found after the date queried	UK/EMSA
UK 3	Users should have the ability to export individual .csv files for multiple vessels on individual sheets.	UK/EMSA
UK 4 (ex action 6 of IMDatE 5)	Investigate the possibility of displaying of the AIS-based aids to Navigation in IMDatE/ single user interface	UK/EMSA
UK 5 (ex action 8 of IMDatE 5)	Investigate the possibility of integrating some EMCIP data / information in IMDatE	UK/EMSA
UK 6 (ex action 12 IMDatE 5)	Investigate possible improvements such as: on-board AIS switch-off, Alert for AIS discrepancies, no time logout	UK/EMSA
NL 1	Investigating how using IMDatE to monitor all activities going on around wrecks	NL/EMSA

Proposals	Topic and Action	Resp.
NL 2	Investigating how to implement coastal radar	NL/EMSA
NL 3	To implement a chat box in IMDatE so that up to six member states can chat together from a distance while looking at the same screen.	NL/EMSA



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