

European Maritime Safety Agency

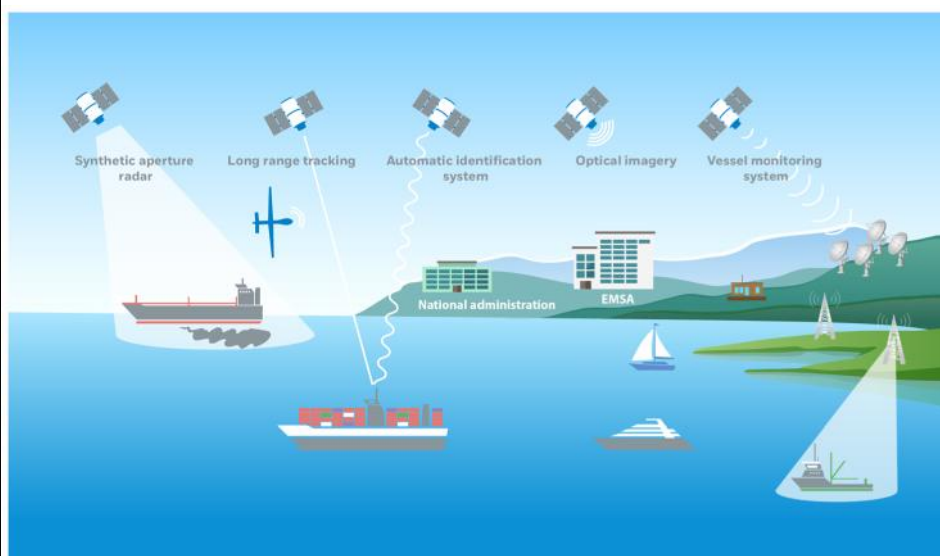
EMSA's Integrated Maritime Services

Improving Operational Maritime Awareness by Integration and Sharing

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Interspill 2018 / 14 March 2018

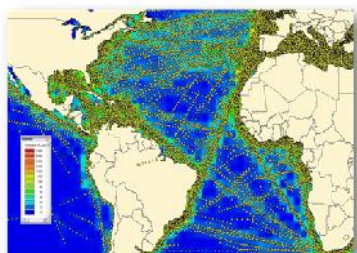


Sources for the “maritime picture”

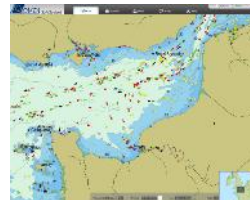


Initial Maritime Picture: 3 sources

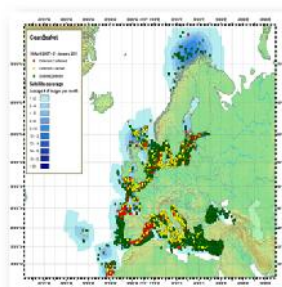
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➤ SafeSeaNet (SSN)



➤ Long Range Identification and Tracking (LRIT)



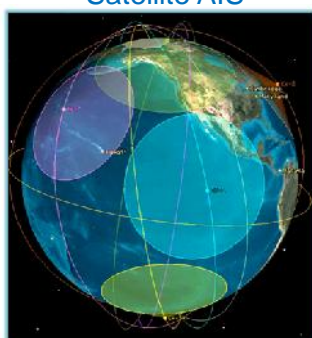
➤ CleanSeaNet (CSN)

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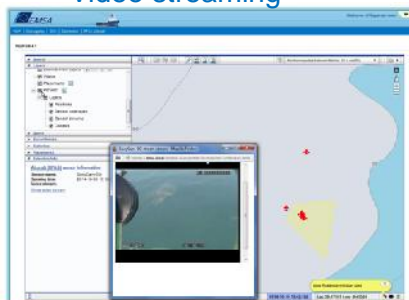
Not limited to traditional data sources

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Satellite AIS

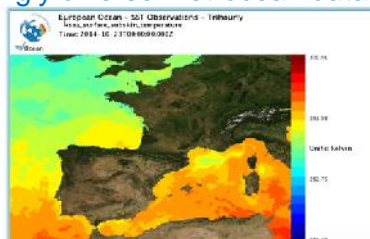


Video streaming



Increasingly diverse met-ocean datasets

RPAS developing fast



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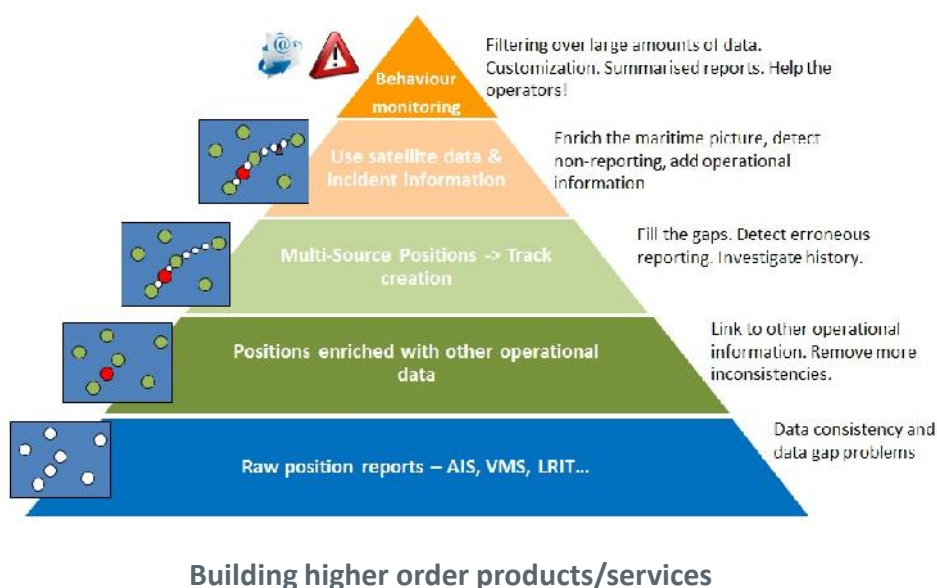
Integrated Maritime Services (IMS)



- Configurable, voluntary, functionalities, ***promoting regional, national and local cooperation, providing an enhanced maritime picture***, using the integration capability, following the agreed access rights and responding to the users specific needs.
- These functionalities foster the ***sharing and exchange of data*** between different users and applications and provide ***additional, complementary and supportive tools***. They do not replace any existing systems and mandatory system functionalities.
- IMS are offered to EU Member States and EU Bodies, following a ***functional approach***, i.e. IMS are offered to ***all authorities/organisations executing functions in the maritime domain***.

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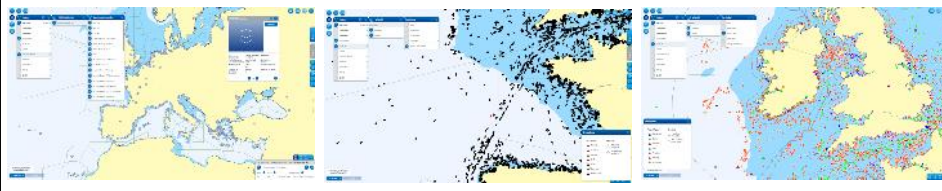
Integration of Maritime Data



Main functionalities



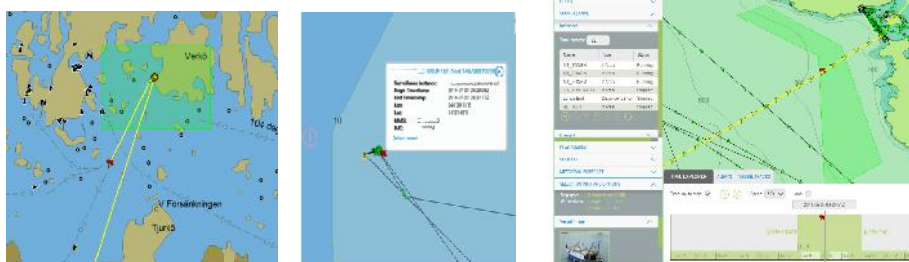
- A **single screen** combining all data, tailored to the users needs;
- **Integrated ship tracking**, including the correlation among different data sources (T-AIS, SAT-AIS, LRIT, VMS, etc.);
- Availability of a **global Satellite-AIS data** stream;
- Availability of **EO images and derived products** (oil spills);
- Availability of **met-ocean data** (in-situ, remote sensing and forecast);
- Display of the **ice concentration, ice thickness** maps;
- Integration of **specific MS sources** of information (areas of interest, organisations, authorities & responsibilities);
- **Sharing** of relevant data;
- Provision of **Automated Behaviour Monitoring** alerts;
- Availability of **System-to-System interfaces**.

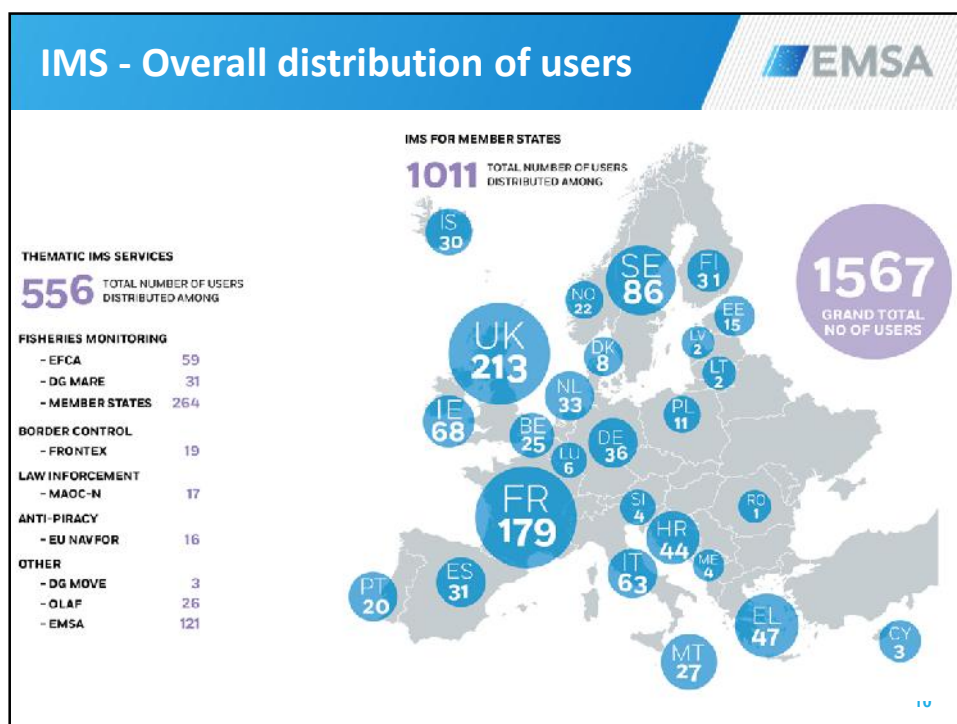
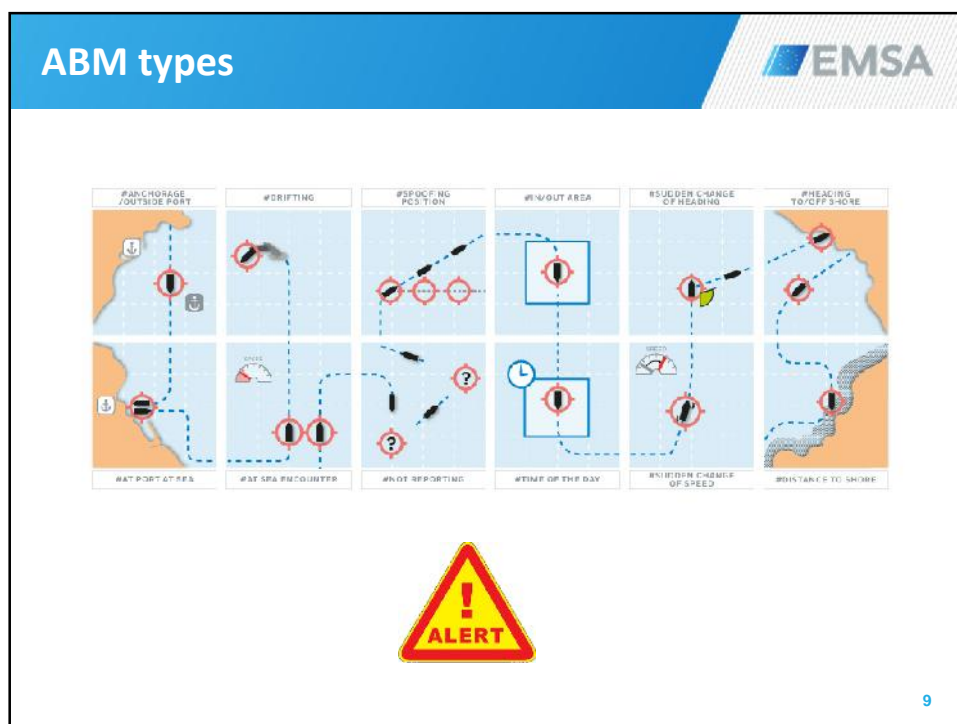


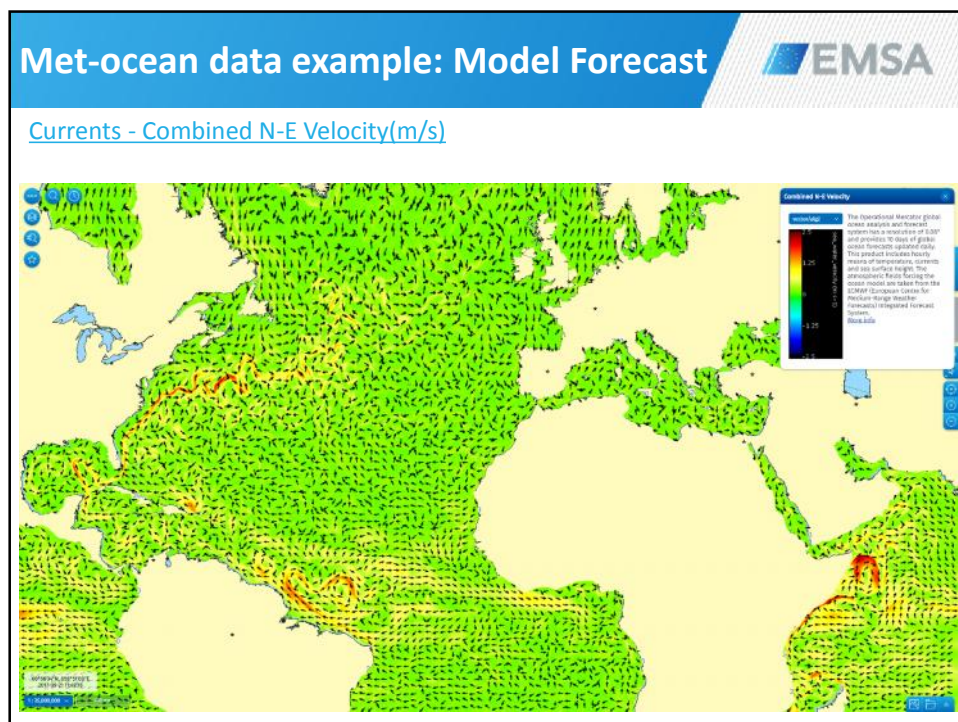
Automated Behaviour Monitoring

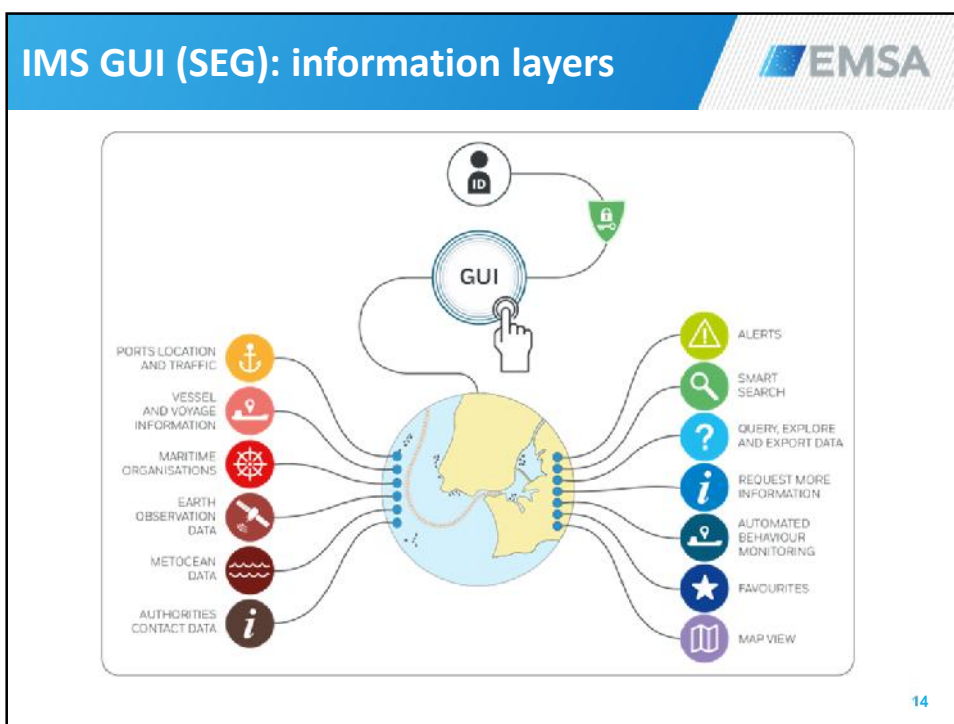
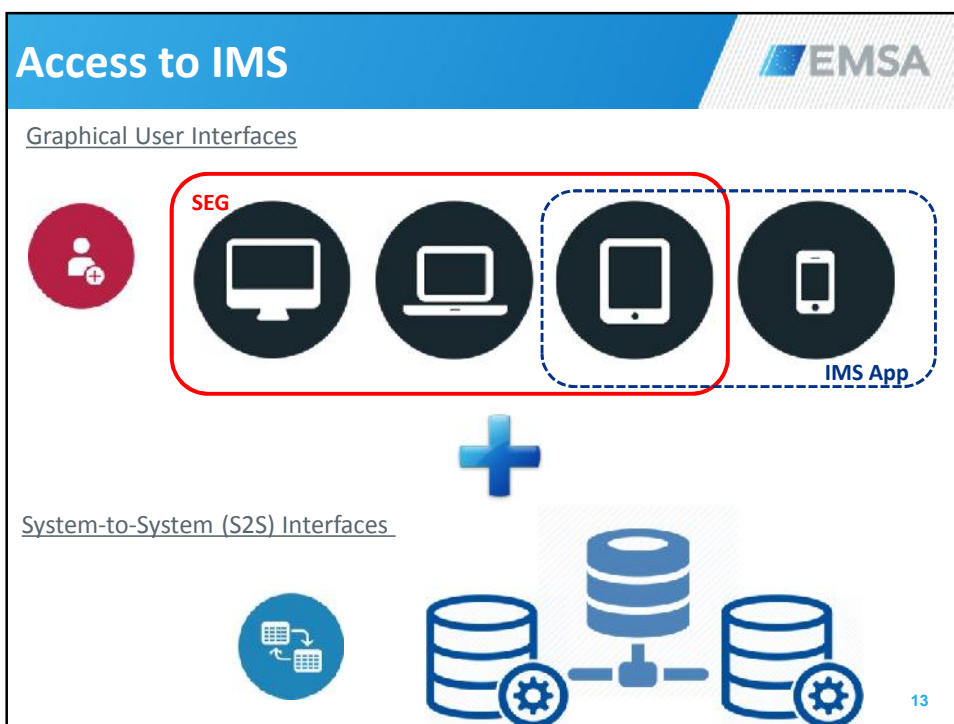


- Automated Behaviour Monitoring (ABM) tool is a computer, rule-based system analysing vessel positions for the detection and alerting of abnormal and/or user specific vessel behaviours.
- To support Integrated Maritime Service users in their maritime surveillance functions.
- When specific, user-defined criteria are met, operators are alerted: in the graphical interface (and IMS Mobile App) and by means of e-mail notifications.









Access to IMS (2/2)

SEG – SafeSeaNet Ecosystem GUI





IMS Mobile App



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Conclusions

How can **IMS** Services support **Risk Assessment & Response Planning**:

- Promote and increase regional, national and local  **cooperation**;
- Provide additional, complementary and supportive  **data, information and tools** for enhancing maritime domain picture, including:
 - Comprehensive overview of situation at sea (integrated vessels info: accidents, incidents, HAZMAT, Waste, type & EO images and derived products, such as oil spills VDS, etc.)
 - Profiling of high/medium/low risk vessels according to users preferences
 - Automated Behaviour Monitoring alerts
 - Meteorological and ocean information
 - Nautical charts with seabed & coastal characteristics
 - Information on Areas of Interest, shore authorities and responsibilities (including contact details)
 - Link to external databases & registries (e.g. EQUASIS, THETIS)

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