

# 5. EMSA Advanced Analytics Tool (EMAT) prototype

## ABM and Advanced Analytics WS7

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- **Background**
- **Objective, Scope**
- **Business Scenarios**
- **MS – EU Bodies, power users -feedback**
- **Next steps**

- IMS User Consultation and ABM Workshop meetings' reports.
- Single Programming Document (SPD)

[...] '...Advance the collaboration with the IMS Member State and EU bodies within the context of the “Automated Behavior Monitoring and Advanced Analytics” Working Group, to further develop the portfolio of ABM services and **define the requirements for Data Analytics tools and products...**'; with a planned 2020 output: **'...further look into data analytics exploitation tools..' [...].**

- Provide analysis that, combining different data sets
- May support the 'Risk Assessment' activities of the Member States (MS) and EU Bodies
- Combining and aggregating data that is traditionally presented separately e.g. position data, ABM data, PSC public data
- Not expected to be used in (near) real time/operationally, but rather more strategically
- The dashboards are aggregated daily for the previous 24 hours
- 7 days, and 30 days analysis are also available in the 'time selection'

- **‘Black Flag’ ships operating around the EU**

‘Black Flag’ per Paris MoU

- **‘Black Flag’ ships not reporting regularly**

8 hours gap between positions in the consolidated vessel track

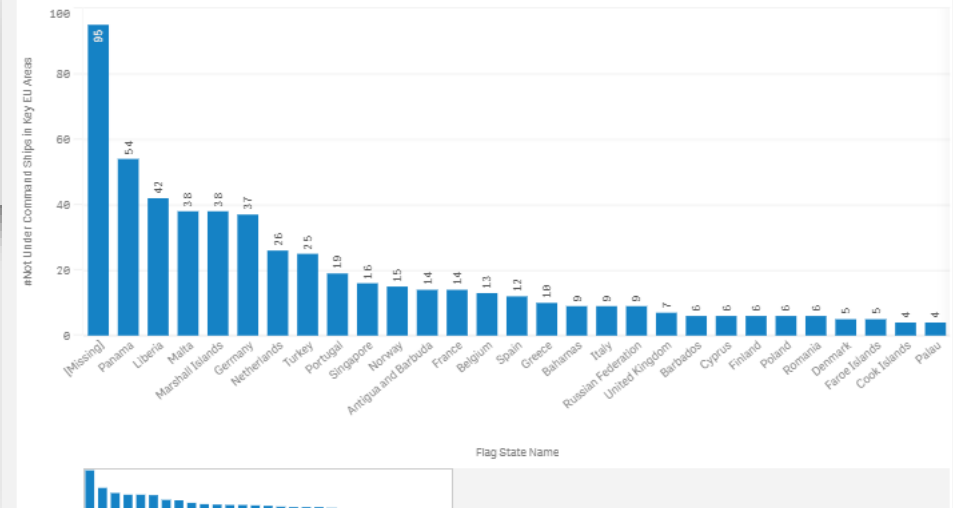
- **Ships drifting in key EU areas**

Based on ABMs configured for that purpose

- **Ships Not Under Command in key EU areas**


Based on the analysis of the ‘navigational status’ transmitted by vessels and their positions

- Dashboards
- Aggregated data
- Simple data 'drilling' options



# Usage scenario – VTMISS incident reporting verification

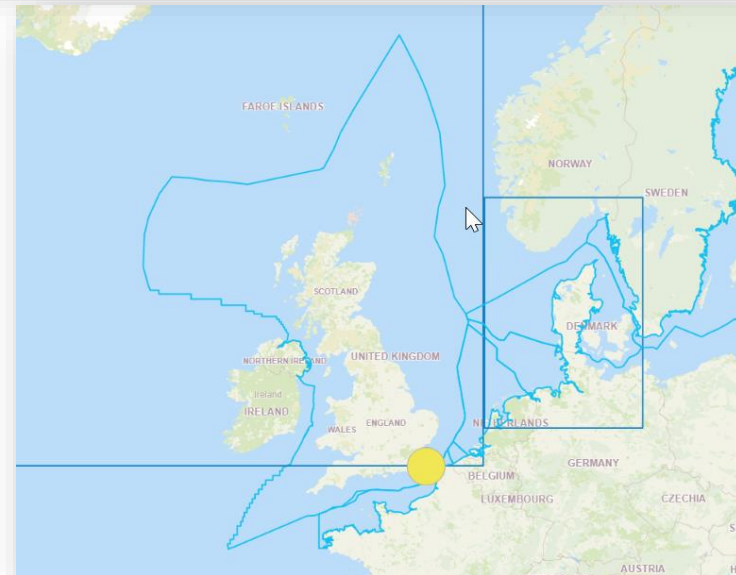
**HELENA SCHIEPERS** (Portugal) Oct 14 -- Fully cellular containership *Helena Schiepers* (IMO No: 9584007, Class: Bureau Veritas, 10318 gt, built 2012), enroute from Rotterdam to Lisbon, Portugal, **not under command** with 12 people on board, needs to replace the engine fuel injector near Falmouth, United Kingdom, in position lat 51 31 00.0N, long 001 54 23.0E, at 1625 UTC, Oct 14. The vessel is proceeding to the northeast of the Falmouth to drift and carry out the engine fuel injector change. The repair is expected to be completed in one hour. The vessel has 227.5 Metric Tons of VLSFO, 427.9 Metric Tons of LSMGO, and 13770 Litres of LO.



Not Under Command Ships Details						
IMO	Q	Ship Name	Q	Ship Type	Q	Flag State
9584		HELENA S		Container		Portugal

?

*Incident report as per  
VTMISS obligations*



# New Dashboards 2021

Time Analysis			
#Black Flag Ships in Key EU Areas 1,354 <small>According to the PIC Ports MSCI Classification</small>	Country with Most Black Flag Ships Ukraine <small>According to the PIC Ports MSCI Classification</small>	Area Name with Most Black Flag Ships West Black Sea <small>According to the PIC Ports MSCI Classification</small>	<a href="#">See More Details</a>
#Black Flag Ships Not Reporting Regularly in E... 620 <small>According to the PIC Ports MSCI Classification</small>	Country with Most Black Flag Ships Not Repor... Ukraine <small>According to the PIC Ports MSCI Classification</small>	Area Name with Most Black Flag Ships Not Re... East Med <small>According to the PIC Ports MSCI Classification</small>	<a href="#">See More Details</a>
#Drifting Ships in Key EU Areas 553	Country with Most Drifting Ships Liberia	Area Name with Most Drifting Ships East Med	<a href="#">See More Details</a>
#Not Under Command Ships in Key EU Ar... 1,896	Country with Most ships Not Under Com... [Missing]	Area Name with Most Not Under Comma... East Med	<a href="#">See More Details</a>
# Sudden Change of Heading Ships in Key... 2,276	Country with Most Sudden Change of He... Panama	Area Name with Most Sudden Change of ... East Med	<a href="#">See More Details</a>
#At Sea Encounter Ships in Key EU Areas 4	Country with Most At Sea Encounter Ships Italy	Area Name with Most At Sea Encounter S... East Med	<a href="#">See More Details</a>



New scenarios to verify VTMIS reporting obligations

- AIS compliance scenarios (invalid MMSI, invalid position reports)
- Lack of SSN Port+ vs. entry to a MS EEZ
- Lack of SSN Port+++ (*comparison ETA reported vs. Port ATA*) vs. Destination ETA reported for EU port in AIS destination

**EMSA encourages MS to further elaborate potential new use cases based on the combination of the position data as well as the enrichment information from various sources.**

<https://app.sli.do/event/hTCtmFAX5G8a8fSPueqQHs/live/questions>

- **Continue validation of the prototype**
- **Work on future, new dashboards**
- **Define KPIs for the future operational tool(s) (i.e. what should be % of availability? )**



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