



EFCA
European Fisheries Control Agency

Integrating ABM's in the fisheries control operational framework

7th Automated Behaviour Monitoring
and Advanced Analytics (ABM)
Workshop

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European Fisheries Control Agency

ABM's for fisheries MCS



- The use of ABM's is imbedded in EFCA's operational framework
 - Joint Deployment Plans (JDP)
 - MS national and joint operations
 - EFCA specific operations
 - Support to third countries (capacity building) operations
- ABM selection and activation in view of potential added value and output requirements for operations

State of play

- ABM’s centrally managed by EFCA through ABM Admin account
- 282 ABM’s defined

116 running (109 in MED & 7 in ATL)

- SpeedAnomalyOverPeriod
- Heading Offshore
- In Area
- Out Area

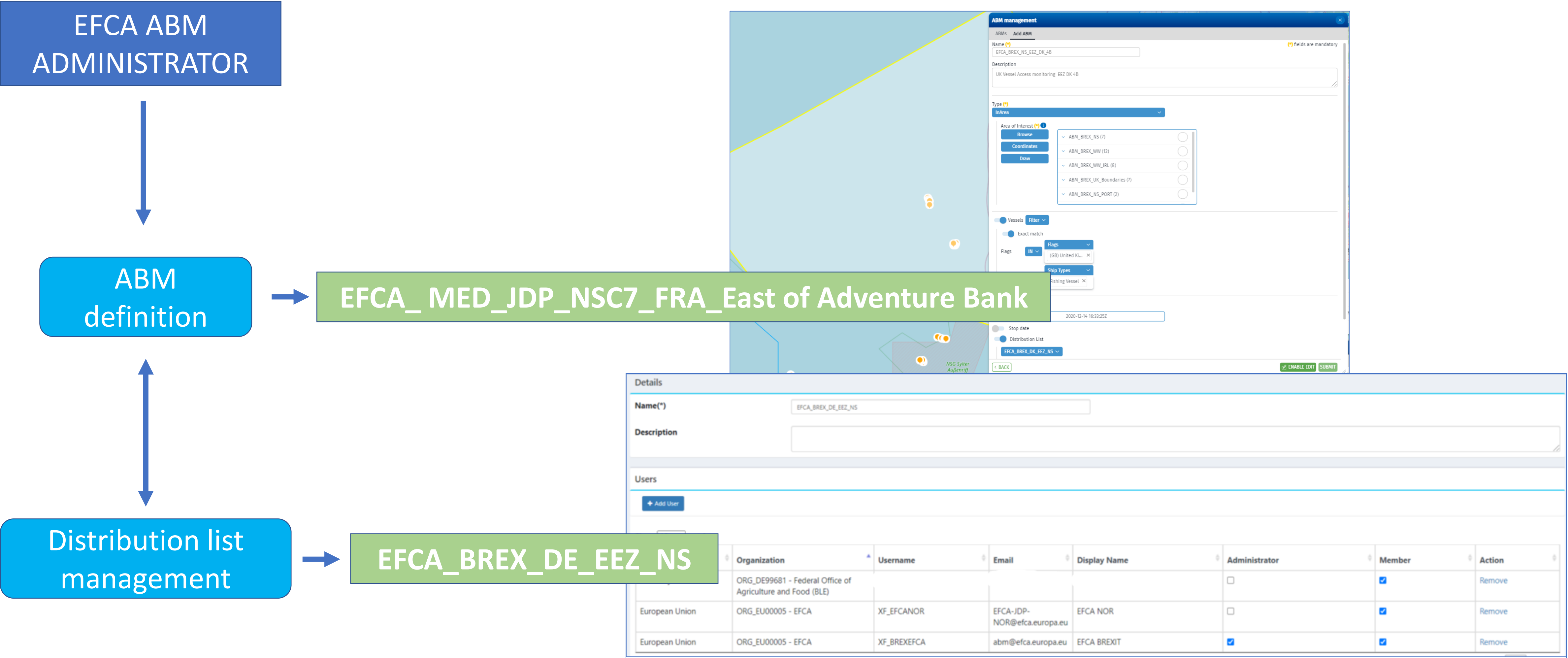
- In support of:

Operational coordination

Detection of potential non-compliance (PNC)

EFCA_BE_MON_PORT	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_IN_FR_12_NM_UK_DE_DK	SpeedAnomalyOverPeriod	running	XF_BREXEFC
EFCA_IN_FR_12_NM_UK_DE_DK_MAIL	SpeedAnomalyOverPeriod	running	XF_BREXEFC
EFCA_IN_FR_12NM_BE_NL	SpeedAnomalyOverPeriod	running	XF_BREXEFC
EFCA_IN_FR_12NM_BE_NL_MAIL	SpeedAnomalyOverPeriod	running	XF_BREXEFC
EFCA_IN_FR_12NM_ES	SpeedAnomalyOverPeriod	running	XF_BREXEFC
EFCA_IN_FR_12NM_ES_MAIL	SpeedAnomalyOverPeriod	running	XF_BREXEFC
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_Croatia	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_Cyprus	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_France	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_Greece	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_Italy_1	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_Italy_2	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_Portugal	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit A_Spain	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_Croatia	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_Cyprus	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_France	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_Greece	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_Italy_1.1	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_Italy_2.1	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_Portugal	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit B_Spain	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Croatia_list_without_auth_OTB	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Croatia_LLS_week08	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Cyprus	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Greece	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Italy_1	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Italy_2	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Portugal	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA Jabuka / Pomo Pit C_Spain	SpeedAnomalyOverPeriod	running	XF_ABMEFCA
EFCA_MEDJDP_MSC7_FRA1_East of Adventure Bank	SpeedAnomalyOverPeriod	running	XF_ABMEFCA

ABM Alert organisation



Fisheries Restricted Areas (FRA)

Eastern Gulf
of Lion

Jabuka / Pomo
Pit A, B and C

Santa Maria di
Leuca

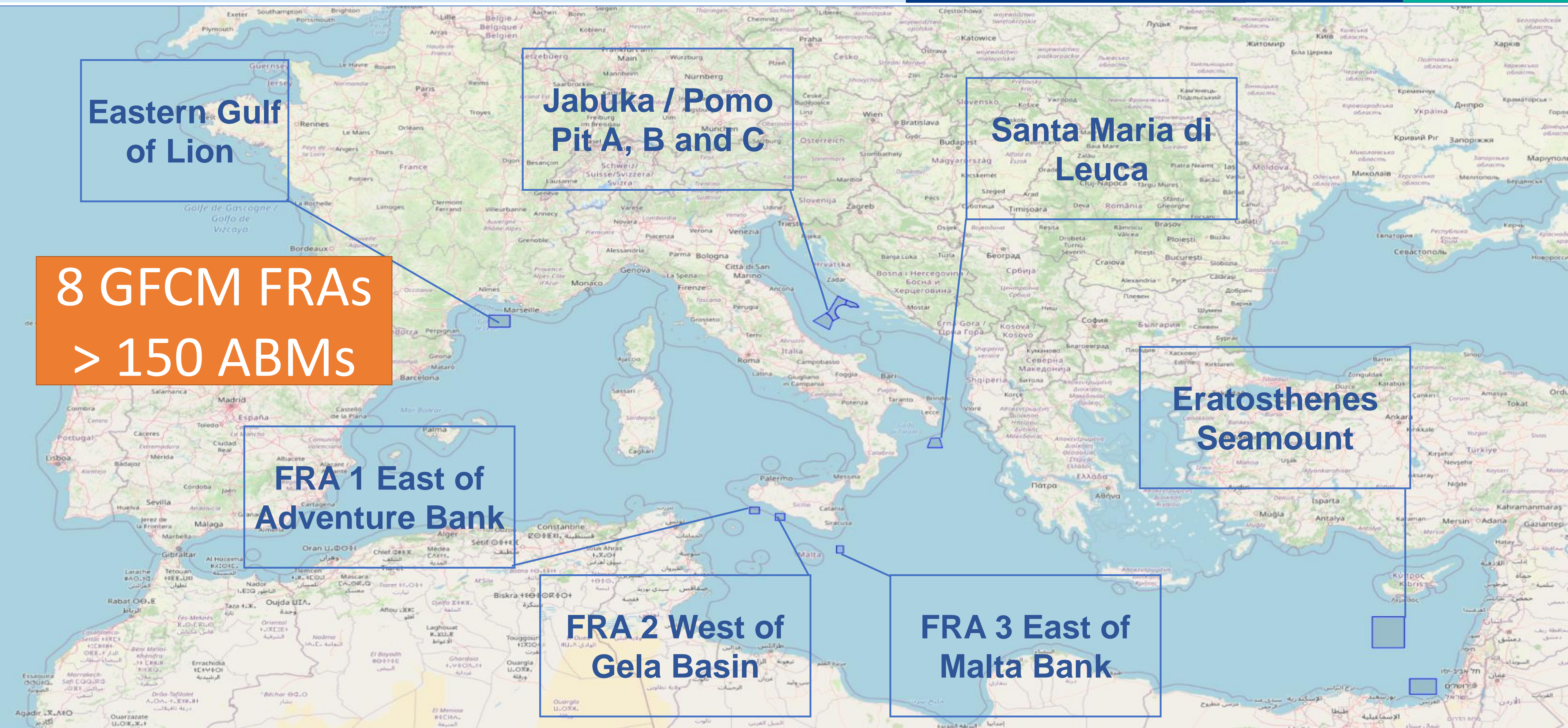
8 GFCM FRAs
> 150 ABMs

FRA 1 East of
Adventure Bank

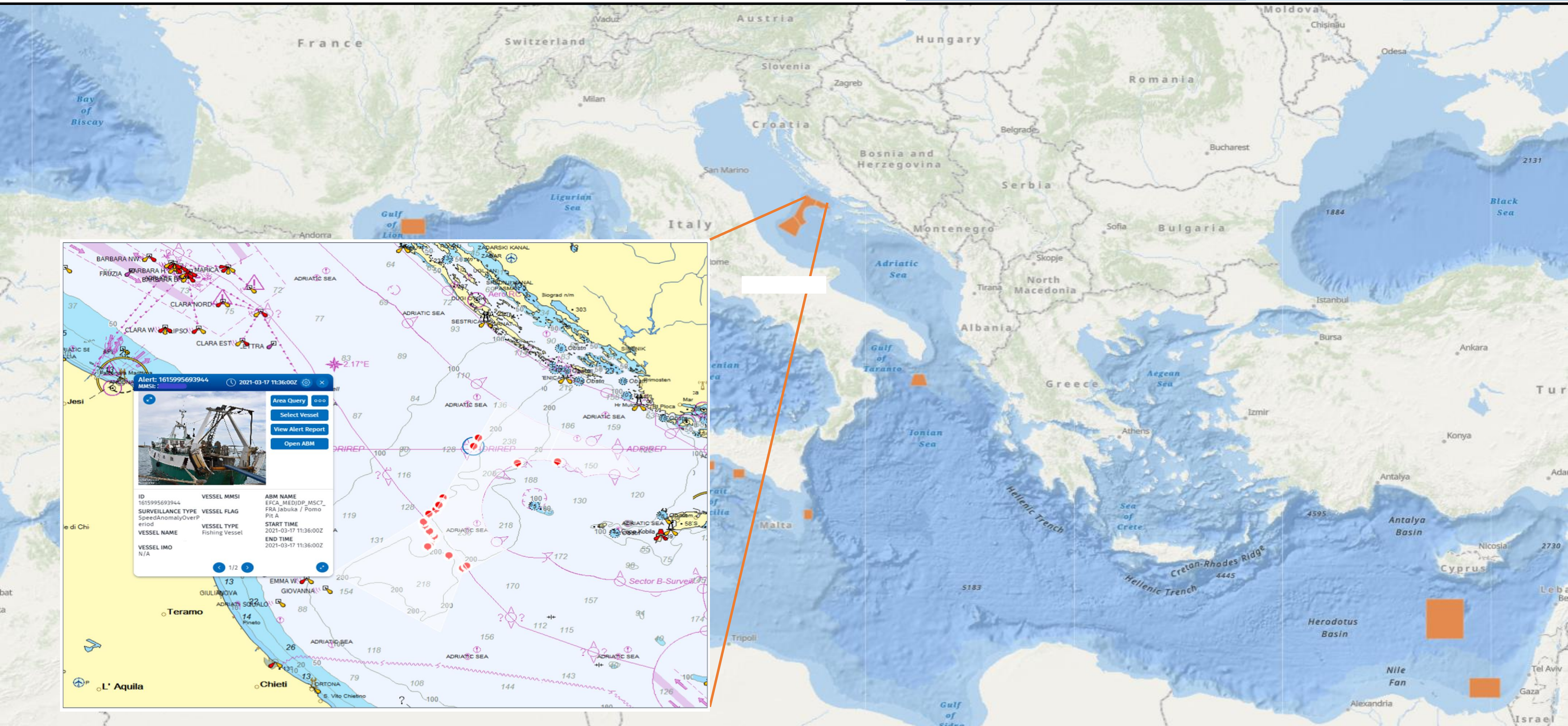
FRA 2 West of
Gela Basin

FRA 3 East of
Malta Bank

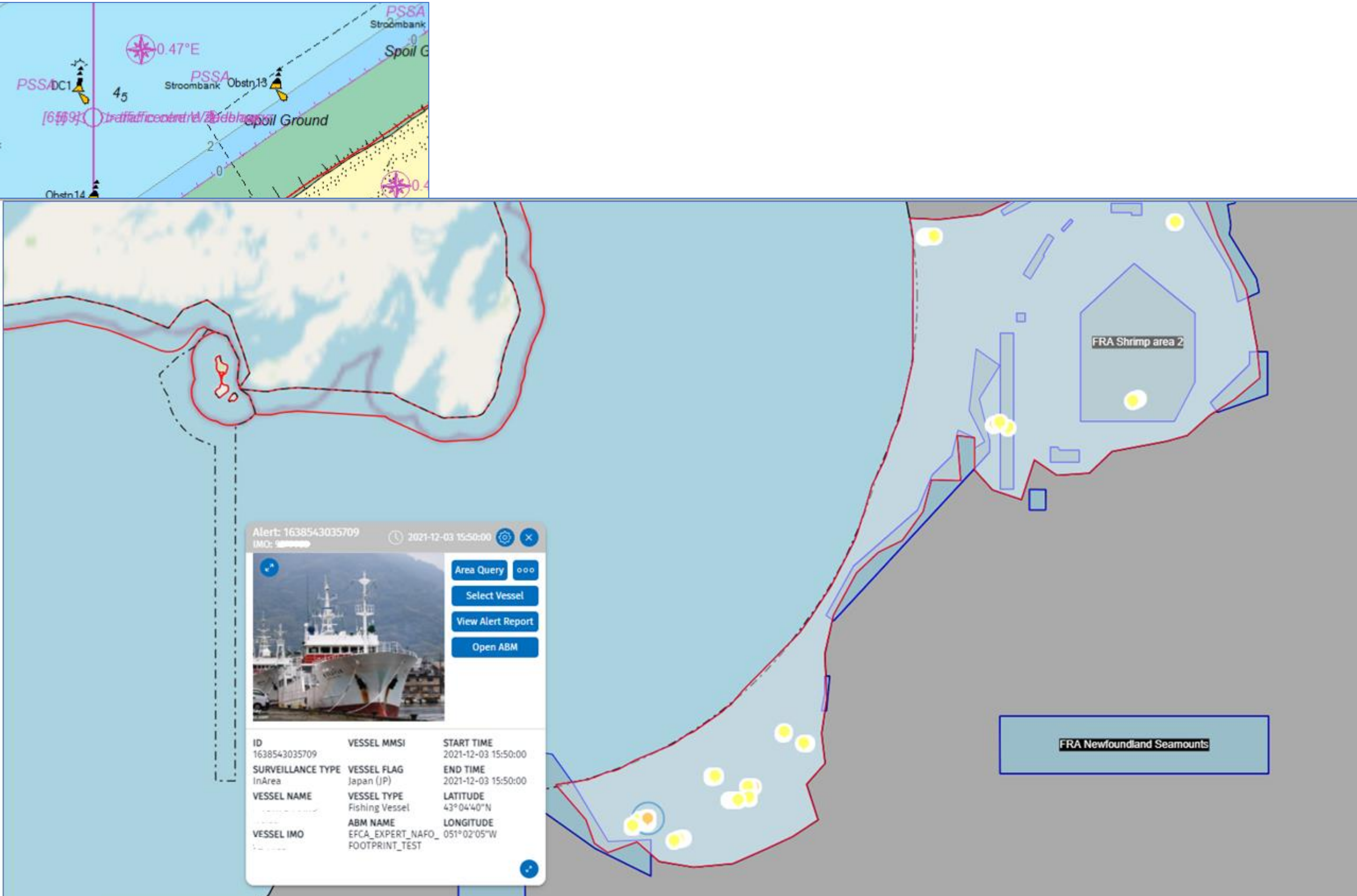
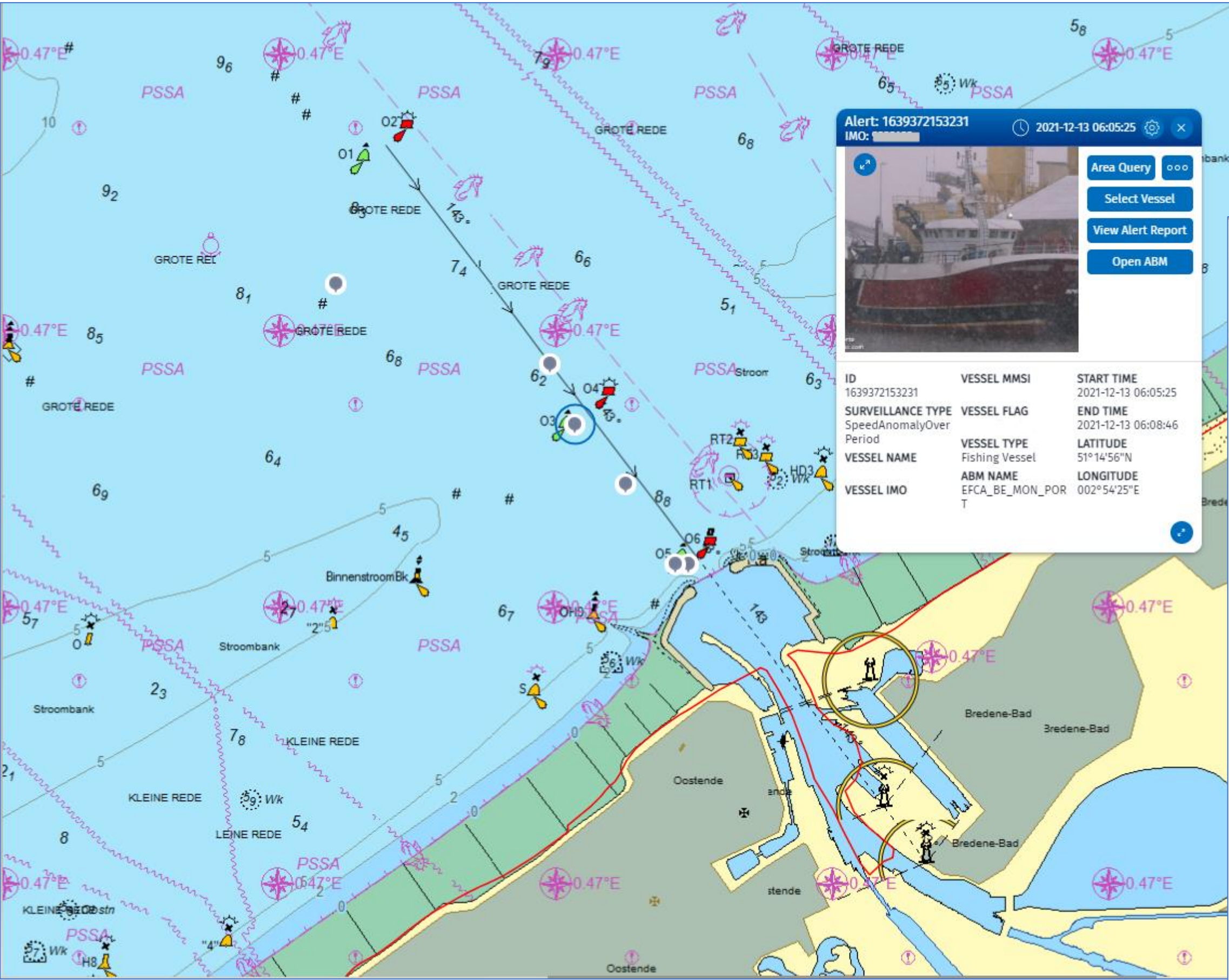
Eratosthenes
Seamount



Jabuka / Pomo Pit A, B and C



Support to coordination



CHOKYU MARU NO.35 alerts (last 24hrs)

Filter applied in all columns

ID	START TIME	END TIME	ABM NAME	SURVEILLANCE TYPE	VESEL IMO	VESEL NAME	VESEL MMSI	VESEL FLAG	VESEL TYPE
1638542244631	2021-12-03 15:36:29	2021-12-03 15:36:29	EFCA_EXPERT_NAFO_FOOTPRINT_TEST	InArea				Japan (JP)	Fishing Vessel
1638542903680	2021-12-03 15:47:10	2021-12-03 15:47:10	EFCA_EXPERT_NAFO_FOOTPRINT_TEST	InArea				Japan (JP)	Fishing Vessel

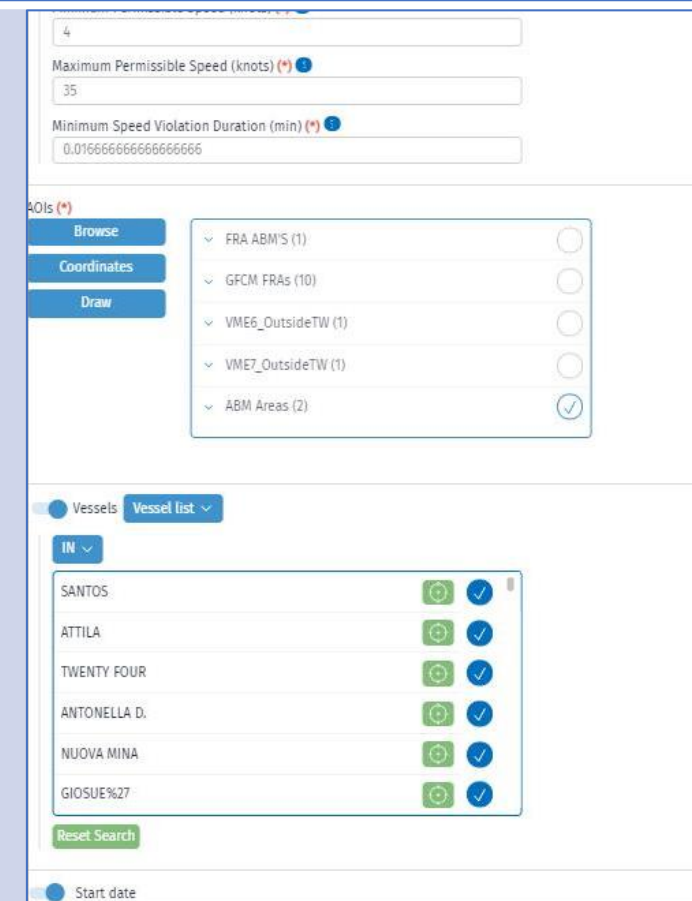
Feedback from the work floor

- ABM's are a real asset for fisheries control
- Ongoing legal proceedings in MS for PNC detected through ABM's
- ABM's are centrally managed by EFCA in order to;
 - provide a service to MS
 - allow for cross MS alert distribution
 - ensure a harmonised application of ABM parameters & AOI's
 - allow for a timely intervention/finetuning of the ABM's
 - manage and update distribution lists
 - channel specific user feedback to EMSA

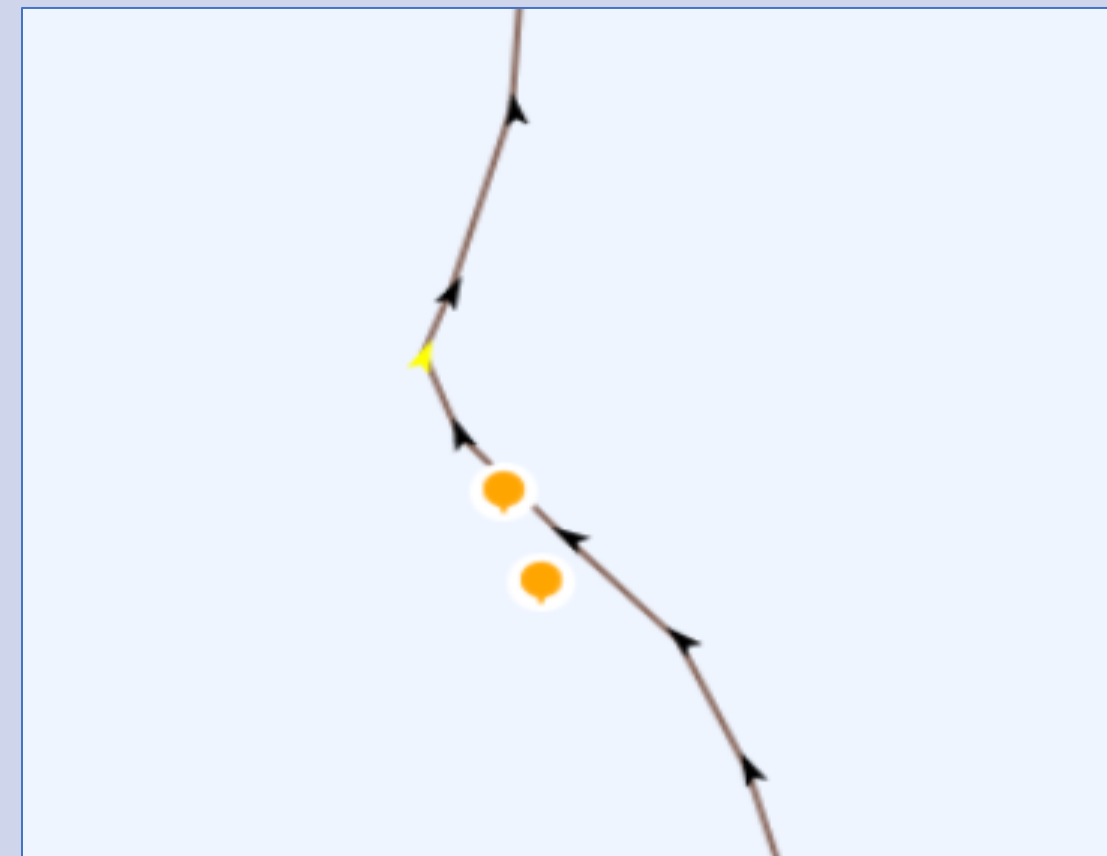
Looking at the future

Main challenges

- Vessel list updating in existing ABM's
- ABM alert visualisation & frequency in SEG



The screenshot shows a web-based interface for managing a vessel list. At the top, there are input fields for 'Maximum Permissible Speed (knots)' (set to 35) and 'Minimum Speed Violation Duration (min)' (set to 0.015666666666666666). Below these are buttons for 'Browse', 'Coordinates', and 'Draw'. A section titled 'SOIs (*)' contains a list of areas with checkboxes: 'FRA ABM's (1)', 'GFCM FRAs (10)', 'VME6_OutsideTW (1)', 'VME7_OutsideTW (1)', and 'ABM Areas (2)'. The 'ABM Areas (2)' checkbox is checked. Below this is a 'Vessels' section with a 'Vessel list' dropdown and a table of vessels. The table has columns for vessel names and status icons. The vessels listed are SANTOS, ATTILA, TWENTY FOUR, ANTONELLA D., NUOVA MINA, and GIOSUE'27. Each vessel has a green icon with a checkmark. A 'Reset Search' button is at the bottom left of the table. A 'Start date' label is at the bottom left of the interface.



• ...

Additional user requirements

- ABM with a speed anomaly parameter 'from' – 'to'
- Allow to create ABM's with repetitive timeslots or multiple start/end dates or including/excluding certain days/months
- Increased flexibility in distribution list alert outputs
- Possibility to set the frequency of alerts
-



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