

### HOW TO USE EMSA'S SEARCH AND RESCUE TOOLBOX ?

Within Vessel Traffic Monitoring and Information System (VTMIS), EMSA has been collaborating with Member States to establish Integrated Maritime Services (IMS).

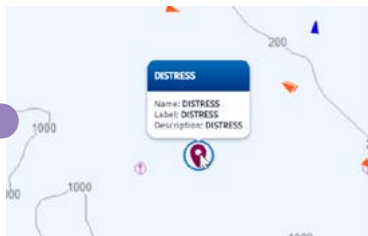
The IMS supports various activities of national authorities via the existing toolbox of functionalities. One of them is Search and Rescue (SAR).

The comprehensive maritime traffic picture provided by the IMS allows for efficient monitoring of the SAR activities, marking distress situations and search and rescue assets.



#### OPERATIONAL AWARENESS

For an overview of SAR response activities, the IMS graphical interface does the following:



**Marks the location** of the accident/emergency (placemark).



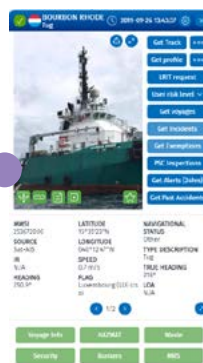
**Tracks your response** vessels and SAR assets in SEG (vessels of interest).



**Displays the** search **patterns** and historical tracks.

#### SAR EXERCISES

What can you do when collaborating with other MRCCs or SAR authorities during exercises?



**Use IMS** to visualise all ships in the vicinity of the incident including the “enrichment”. (e.g. number of persons on board, presence of Hazmat, previous incidents).



**Share the same** maritime situation **picture**.



**Mark the location** of the incidents or your assets at sea.

# HOW DO EMSA'S INTEGRATED MARITIME SERVICES SUPPORT MEMBER STATE AUTHORITIES IN THEIR SAR ACTIVITIES?

What is the content of the 'SAR Toolbox'?

## DESIGN SEARCH PATTERNS

Are you supervising SAR operations? If so, you can use the **integrated vessel track functionalities** to monitor SAR patterns and mobilized assets. You may also:



Manually **insert the vessels' positions** or use measuring tools.



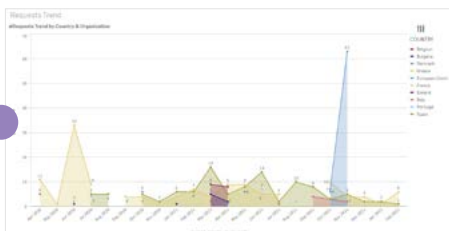
**Download historical tracks** for further evaluation or integration in external tool.

## SAR PREPAREDNESS

What else can IMS provide?

- **Access** to EU maritime authority contacts, locations and supporting collaboration.
- **Early warnings** on developing dangerous situations at sea through algorithms provided by the Automated Behaviour Monitoring (ABM) and the IMS interfaces, linking to the Earth Observation (EO) imageries, products and services.

**In the future**, IMS will expand the SAR Toolbox in line with user requirements by allowing drift model visualisation, chat box and other features.



## E-SARSURPIC

Are you responsible for deep sea SAR?

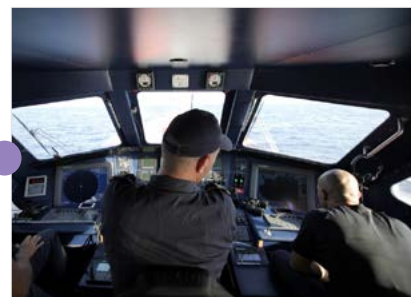
- **USE** the Enhanced SARSURPIC functionality
- **REQUEST** LRIT data
- **USE** Sat-AIS for deep-sea coverage and VMS to locate fishing boats



E-SARSURPIC (Enhanced Search and Rescue Surface Picture) combines various data sources – T-AIS, LRIT, Sat-AIS, VMS and provides a unique view of the vessels in the vicinity that may respond to a distress situation.

## TESTIMONIALS

**Iceland (Coast Guard):** "The IMS services integrate key data sets, such as ship positions worldwide, voyage information, and possible oil spills."



**Spain (SASEMAR):** "SEG/IMS functionalities give us a quick and complete image of the maritime area where an emergency or an incident occurs."

**Germany (MSZ):** "The SEG system is used here... to coordinate the approach of rescue vessels into the area of distress."

