



**EMSA**

**FACTS & FIGURES**

**2023**



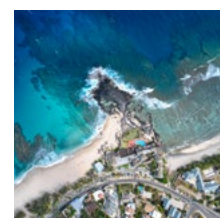
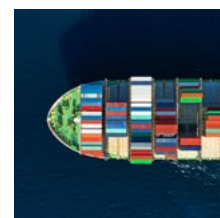
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## TABLE OF CONTENTS

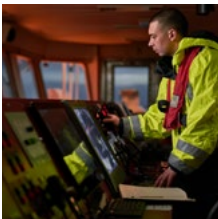
<b>Foreword</b>	<b>6</b>
<b>CHAPTER 1</b>	
<b>SUSTAINABILITY</b>	<b>8</b>
Prevention of pollution by ships	9
Operational pollution response services	10
<b>CHAPTER 2</b>	
<b>SURVEILLANCE</b>	<b>12</b>
Multipurpose maritime surveillance (RPAS)	13
Satellite-based services and surveillance innovation	13
CISE transitional phase	16
<b>CHAPTER 3</b>	
<b>SAFETY AND SECURITY</b>	<b>18</b>
Maritime safety	19
Human element	20
Recognised Organisations	22
Accident investigation	23
Maritime security	25
<b>CHAPTER 4</b>	
<b>SIMPLIFICATION</b>	<b>26</b>
SafeSeaNet	27
European Maritime Single Window	28
Long Range Identification and Tracking (LRIT)	30
e-Certification	30
<b>CHAPTER 5</b>	
<b>DIGITALISATION</b>	<b>32</b>
Maritime digital services	33
THETIS information system	35
Maritime Support Services	37





**CHAPTER 6**

<b>TECHNICAL ASSISTANCE</b>	<b>38</b>
Visits & inspections	39
Capacity building, the EMSA Academy and analytics	41
Pre-Accession and European Neighbourhood Countries	43



**CHAPTER 7**

<b>STRATEGIC SUPPORT</b>	<b>44</b>
European cooperation on coast guard functions	45
Frontex Service Level Agreement	46
EFCA Service Level Agreement	46
Maritime Analysis and Operations Centre	47
Executive and corporate services	47

## FOREWORD

Welcome to the EMSA Facts & Figures publication for 2023. This is for us as an Agency the opportunity to share as widely as possible the activities that have been keeping us busy over the past year. It is where we get the chance to set out the concrete results across each of our strategic areas of action, effectively allowing the facts and figures to speak for themselves. Here let me highlight just a few of those achievements.

Maritime safety and sustainability continued at the centre of our focus throughout the year. With short deadlines, we adapted THETIS MRV to the requirements of the Emissions Trading Scheme legislation so that it could be up and running from the start of 2024. We continued the run of studies on the potential of an increasing number of alternative fuels, adding in 2023 hydrogen and wind-assisted propulsion systems.

We initiated studies on the safety aspects of alternative fuels and power sources, and we published our first safety guidance on Battery Energy Storage Systems on board ships. In addition, we saw the Cargosafe project – aimed at improving the fire safety of containerhips – approved by the dedicated panel of experts at IMO.

In parallel, the Agency's ROV services for underwater surveys became fully operational, supporting accident investigation bodies across the EU. Towards the end of the year, we published a report on the study of competences for the Maritime Autonomous Surface Ship (MASS) operators in remote operation centres.

Our digital services, enabling data from several sources to be fused together to form a real time maritime picture, continued to evolve to the benefit of our stakeholders. Demand for these services was reflected in the growing number of IMS users which rose to more than 7300 individuals and 680 operational bodies in 2023. These capacities were used to facilitate the implementation of sanctions against Russia, to identify ship-to-ship transfers of Russian oil, and to assist in monitoring the grain corridor. Services to EU NAVFOR Atalanta continued in the light of the emerging security threats in the Red Sea and the Gulf of Aden.

Geopolitical instability certainly marked 2023, with the war in Ukraine and the associated sanctions on Russia compounded by the outbreak of a horrific conflict in Gaza and emerging security threats in the Red Sea and Gulf of Aden, all seriously impacting shipping. While we are not able to change the course of what is happening, we were able to assist the Commission and Member States in the response to maritime security threats using our monitoring capacities and advanced digital tools.

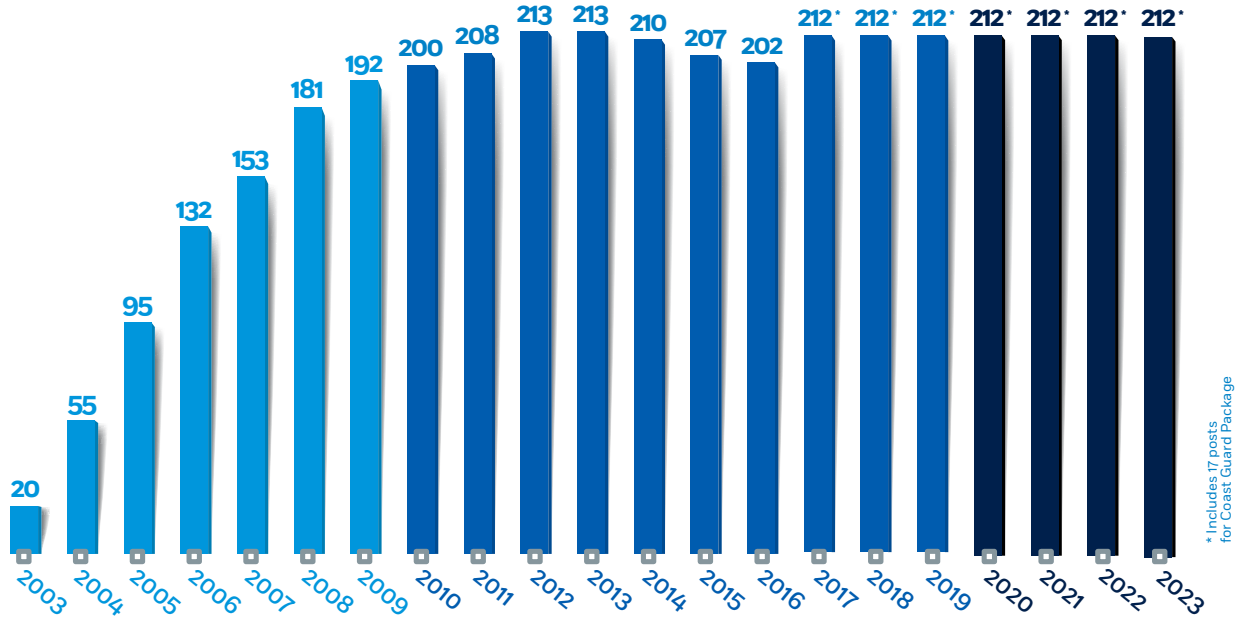
In 2023, I believe therefore that we continued to demonstrate our ability to adapt and respond to new and unforeseen circumstances in the maritime world. For this, I thank each and everyone of our valued staff members, the Commission and Member States, as well as our Administrative Board with a special mention to former Chair, Andreas Nordseth who shall remain greatly appreciated for his longstanding dedicated service.

**Maja Markovčić Kostelac**

Executive Director

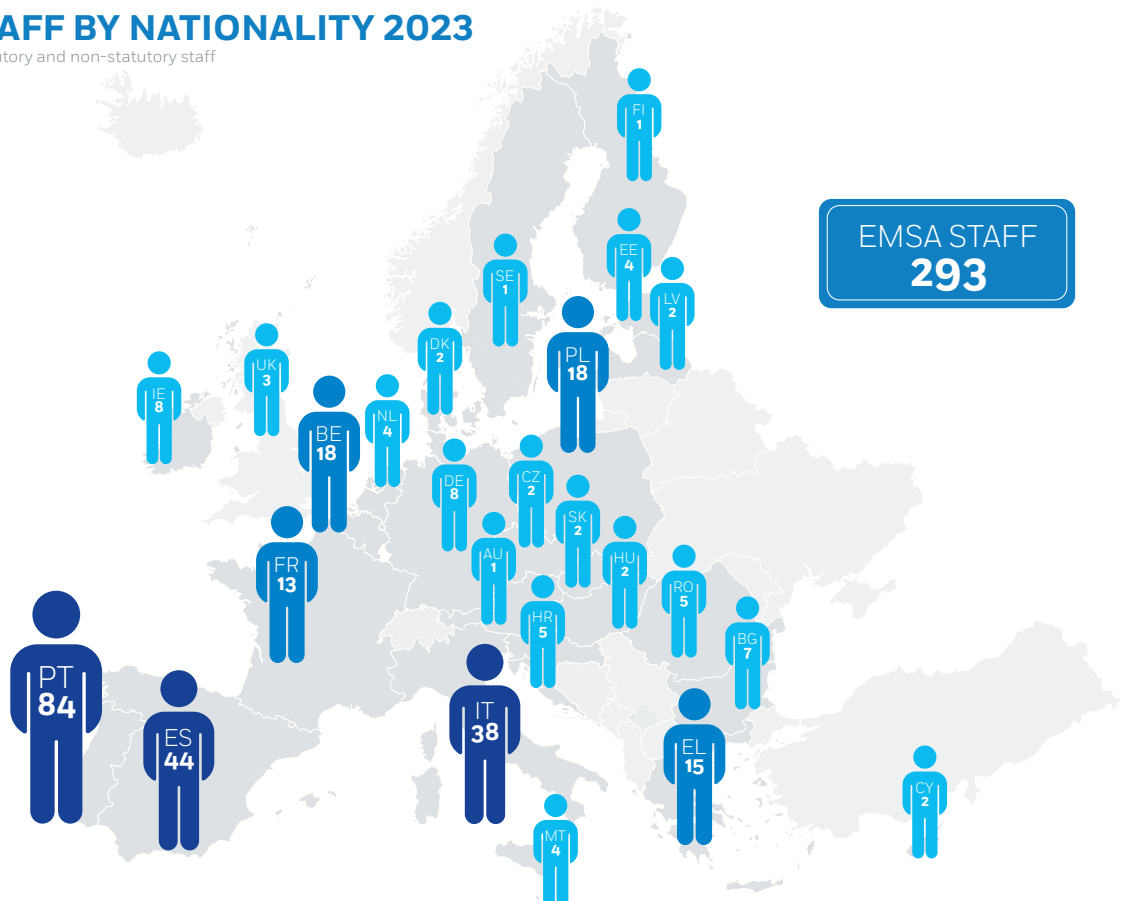
## ESTABLISHMENT PLAN FIGURES

EMSA statutory staff from 2003 to 2023



## EMSA STAFF BY NATIONALITY 2023

Figures include statutory and non-statutory staff



## CHAPTER 1

### SUSTAINABILITY

PANEL  
1

Ocean as a Clean Energy Source and  
a Sustainable Driver for World Trade  
Offshore renewable energy and green shipping



EMSA's Executive Director Maja Markovčić Kostelac joined a panel of international maritime and sustainability experts at the Sustainable Blue Economy Investment Forum held in Estoril on 4 October 2023.

## PREVENTION OF POLLUTION BY SHIPS

EMSA is highly active in helping to reduce the impact of the maritime transport sector on the environment. It is a recognised point of reference for the European Commission and Member States with its technical expertise and tools in support of environmental enforcement efforts. Throughout 2023, EMSA was involved in initiatives related to the European Green Deal providing support and data to the European Commission and Member States. In particular, this support has been crucial in the process towards the final adoption of the proposals made as part of the “Fit for 55 package” such as the extension of the Emission Trading System (ETS) to maritime transport and the FuelEU Maritime Regulation.

Under the dedicated Service Level Agreement with the European Commission on assistance for the extension of the ETS to maritime transport, EMSA delivered the first building blocks of the necessary enhancements to THETIS-MRV. This entails new functionalities which will support the implementation of the legislation. At the same time, online seminars to raise awareness among users and other dissemination measures were ensured in close cooperation with the European Commission.

Support was ensured in the drafting of several implementing and delegated acts both for the extension of the ETS and the FuelEU Maritime Regulation. EMSA also continued to provide assistance for the implementation of Regulation (EU) 2015/757 on the monitoring, reporting and verification of CO<sub>2</sub> emissions, as well as to support the European Commission in the analysis of emissions data from the fourth reporting period. This resulted in the publication of the relevant report in March 2023 to inform the public and allow for an assessment of the CO<sub>2</sub> emissions and the energy efficiency of maritime transport. At international level, EMSA continued to assist the European Commission and the Member States in relation to work on energy efficiency, carbon intensity and fuel lifecycle greenhouse gas (GHG) intensity.

Technical work in support of the European Commission and different stakeholders continued also on alternative fuels and sources of renewable energy, marine litter, underwater noise, the implementation of the revised Port Reception Facilities Directive, the Sulphur Directive and its enforcement, the Zero Pollution initiative, and Greenhouse Gases at international and European level thereby confirming the commitment of the Agency towards sustainability goals and greener shipping.

As part of the series of studies into alternative fuels and power sources in shipping, EMSA published two new reports in 2023 on the potential of hydrogen and wind-assisted propulsion systems, including aspects related to operation, safety and technological standards. These studies are intended to support the European Commission, national administrations and industry and have the objective of informing the uptake of more environmentally sustainable solutions, particularly in the context of the FuelEU Maritime initiative.

EMSA together with the European Environment Agency (EEA) made progress towards the preparation of the second European Maritime Transport Environmental Report (EMTER 2024) which is expected to be published in 2024. This report offers an informed picture of the current situation and trends, with the overall objective of helping to mitigate the environmental risks posed by the shipping sector.



On 8 May 2023, EMSA participated in the joint RAMOGEPOL23 oil spill response exercise, organised by the French Maritime Prefecture of the Mediterranean in Toulon, France.

## OPERATIONAL POLLUTION RESPONSE SERVICES

EMSA maintains a fully equipped, and constantly updated, toolbox of pollution response services. This is at the disposal of coastal Member States of the EU to help them deal quickly, effectively and efficiently with oil pollution incidents from ships and offshore oil and gas installations. In cases of chemical incidents, EMSA's MAR-ICE service provides expertise to Member States during emergencies. Notably, these services are extended to third countries that share a sea basin with the EU.

Located around the EU, these services are designed to top-up and complement existing response resources at national and regional level. When a pollution event occurs, Member States can choose the response resources that best fit their needs from a catalogue of services, including a network of 15 oil spill response vessels (equipped for recovery or dispersion of oil), 13 with light Remotely Piloted Aircraft Systems (RPAS), standalone equipment from one of the five Equipment Assistance Services (EAS) or dispersants from eight stockpiles of 200 tons each. Member States may also ask for satellite-based images from CleanSeaNet.

In addition to maintaining and renewing its existing network of oil recovery vessels, in 2023 the Agency also made available from all five equipment assistance stockpiles near shore pollution response equipment for response in shallow waters, including working boats, and a contract was signed for an intermediate storage vessel to enter into operation in 2024. EMSA also continued improving the operational capacities of its vessels by equipping one additional vessel – Interballast III – with RPAS capacity. Overall, the services provided for the response to pollution caused by ships, as well as the response to marine pollution caused by oil and gas installations, have become more adaptable and flexible to better reflect regional capacity, requirements and risks. In 2023, four vessels and seven EAS arrangements were deployed in five pollution response exercises and four national training sessions were organised in the Member States.

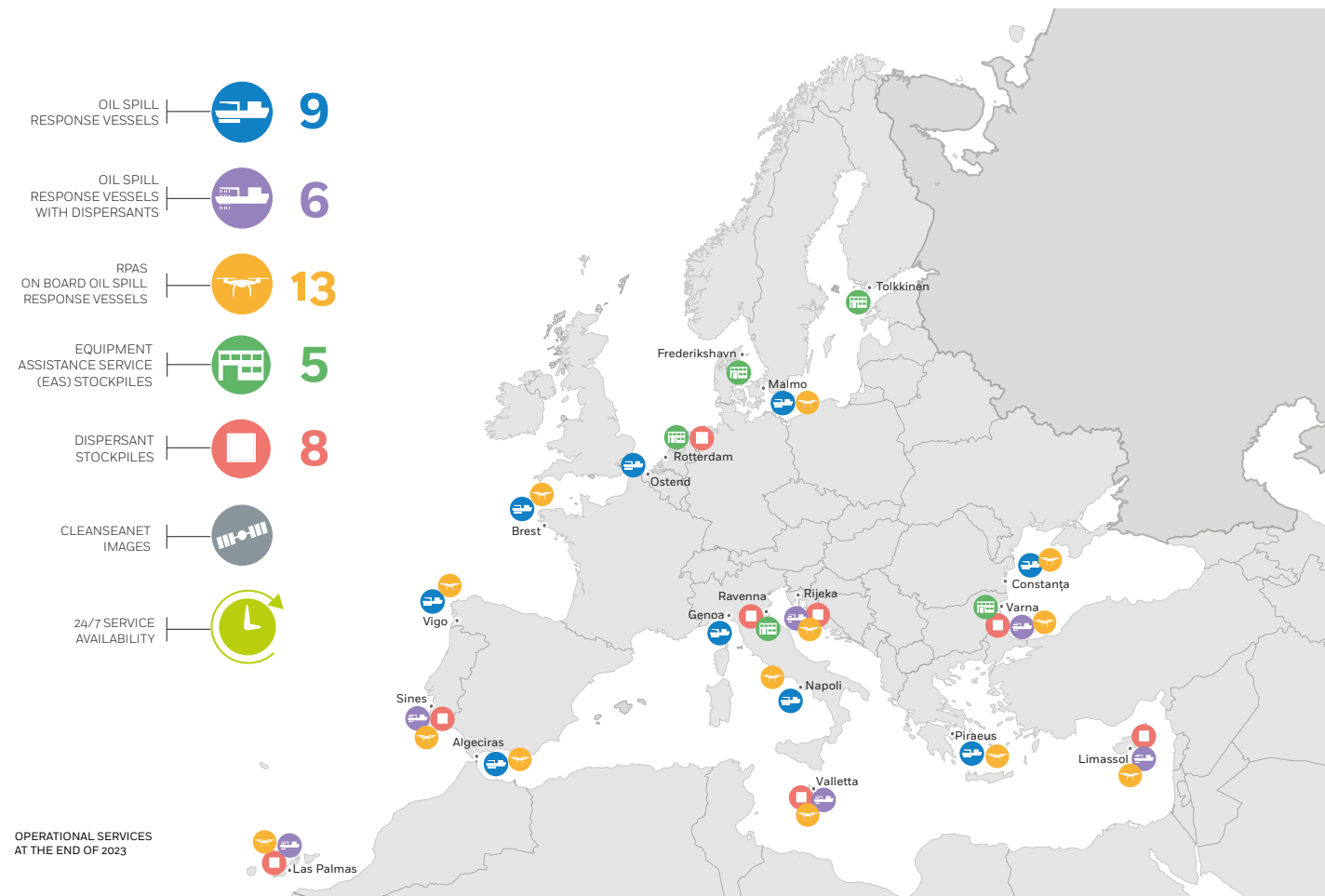
Regarding support to Member States in case of a chemical incident, the MAR-ICE service providing expert information and advice remotely and on-site, was activated by EU Member States' authorities six times in 2023; five times for marine pollution exercises and once for a real incident. The provision of national "MAR-ICE information webinars" continued in 2023 with two sessions, spreading information to response coordinators on how to use the service and what support could be provided. The fifth MAR-ICE

Evaluation meeting among the three MAR-ICE partners, Cefic, Cedre and EMSA was held in 2023, reviewing the service implementation between 2019 and 2023 and addressing feedback received by the service users. The Marine Chemical Information Sheets (MAR-CIS) were also further updated in 2023, and 20 new datasheets were developed, now reaching 257 datasheets in the database.

Preparations to put in place a new capability to assist Member States in the response to chemical incidents got underway in 2023, with the finalisation of a new tender to diversify the equipment in the Agency's stockpiles with HNS equipment. The contract is aimed at supplying portable emergency offloading pumping system for oil and liquid Hazardous Noxious Substances (HNS). Work also kicked off for the development of a new learning service under the EMSA Academy targeting response to HNS pollution, with positive engagement from the experts of the Member States.

EMSA also offered a platform to discuss the potential impact of the ongoing green transition of shipping on future response activities through the Consultative Group on Pollution Preparedness and Response (CTG-PPR) and through the annual meeting of the Secretariats of the different relevant Regional Agreements. In addition, a new correspondence group under the CTG was set up with a focus on data needs and common terminology for risk assessments at national/regional level.

## Network of EMSA's pollution response services available to the coastal Member States up until 31 December 2023



## CHAPTER 2

### SURVEILLANCE



In 2023, EMSA published the CleanSeaNet Catalogue which presents examples of the kind of support provided in response to oil spills following an accident or emergency.

The case shown here involved the collision off Gibraltar Point between the bulk carrier OS 35 and

the LNG tanker ADAM LNG on 29 August 2022.

CleanSeaNet images were provided detecting several possible oil spills. The combination of CSN data, aerial mission observations and the production of regular drift forecasts were defined as crucial to support the incident management.



## MULTIPURPOSE MARITIME SURVEILLANCE (RPAS)

EMSA is a reference at EU and global level for the use of Remotely Piloted Aircraft Systems (RPAS) for maritime surveillance in the civil domain. The Agency makes available a range of RPAS to assist in the maritime surveillance operations undertaken by Member State authorities involved in Coast Guard functions.

In 2023, RPAS services delivered 1 245 operational flight days associated with regional multipurpose deployments, maritime surveillance, emissions monitoring, and support to EU chartered vessels.

The Agency offered nine RPAS operations to Member States and relevant EU Agencies, with eight running in parallel. These included Multipurpose Maritime Surveillance operations with a regional focus in the Mediterranean Sea (Italy), Baltic Sea (Finland, Estonia, and Latvia), North Sea (Denmark) and Atlantic (Spain and Portugal).

Fourteen training sessions on the RPAS Data Centre and RPAS services were delivered to 246 users in Member States' administrations participating in RPAS operations. The RPAS Annual User Group meeting was successfully organised, gathering 38 participants from 19 Member States, EU Agencies, and international organisations.

Additionally, RPAS emission monitoring operations were organised in Germany, France and Lithuania port of Klaipeda (light RPAS).

The existing RPAS portfolio includes five types of RPAS which can address a wide range of user requirements: VTOL medium size aircraft; mid-sized fixed wing aircraft; mid-sized fixed wing aircraft with extended coastal range; and two types of smaller quadcopters for pollution monitoring, multipurpose maritime surveillance, and emissions monitoring.

## SATELLITE-BASED SERVICES AND SURVEILLANCE

### INNOVATION

In 2023, EMSA's Earth Observation services provided over 16 300 images, covering a sea surface area of over 1.5 billion km<sup>2</sup>, to Member State administrations and EU institutions. While getting a comprehensive overview of human activity at sea is a challenging task, satellites are offering a reliable, efficient and cost-effective option for maritime safety, security, and sustainability purposes.

EMSA's Earth Observation services use data from Synthetic Aperture Radar (SAR) and optical satellites, contributing to four main EU surveillance activities:

- **CleanSeaNet** – detecting oil spills and potential polluters
- **Support to maritime emergencies at sea**
- **Copernicus Maritime Surveillance programme** – enhancing awareness of human activity at sea
- **Support to maritime border monitoring** - providing services for Frontex.

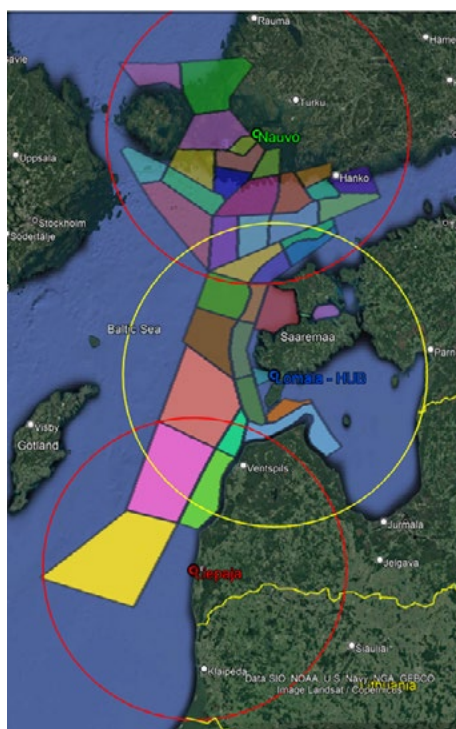
Over the course of the year, CleanSeaNet delivered 7 798 images, and the Copernicus Maritime Surveillance service 6 713 images. Additionally, there were 28 activations of the EMSA contingency plan for emergencies at sea, triggering dedicated Earth Observation services.

A significant investment in EMSA's Earth Observation services contractual frameworks occurred in 2023, with new framework contracts concluded for Synthetic Aperture Radar satellite licenses from Radarsat-2, TerraSAR-X and PAZI. A new contract for oil spill thickness and volume estimation using satellite images from the Sentinel-2 constellation was also awarded.

The Artificial Intelligence (AI) for Earth Observation services project produced its first deliverables, focusing on vessel detection from optical and Synthetic Aperture Radar. Preliminary market consultations were also conducted on AI applied to RPAS-based sensors, satellite-based radio frequency data and services provision for maritime security and surveillance, and oil spill volume estimation based on satellite images.

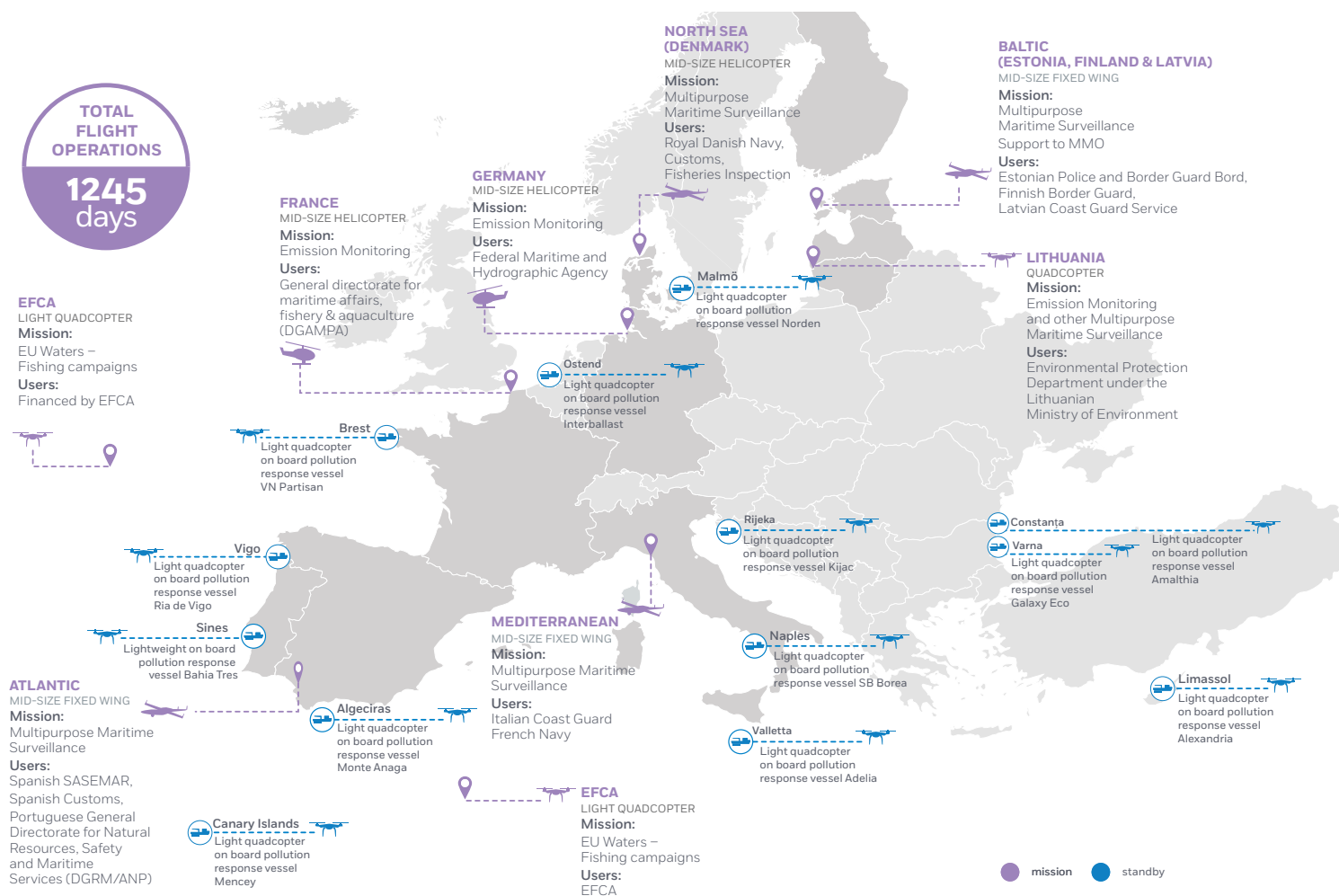
Regarding Satellite-AIS data (SAT-AIS) services, EMSA successfully completed the procurement process for global real-time SAT-AIS data services, concluding framework contracts for low latency SAT-AIS services and for backup/supplementary and high-density SAT-AIS services.

In 2023, EMSA participated in the European Space Agency (ESA) VDE-SAT demonstration project with Norway, exploring the exchange of digital data using the satellite component of the VHF Data Exchange System (VDES). The joint Workshop on VDES, organised by EMSA and ESA, provided insights into the latest VDES developments, showcasing its potential for the next generation of maritime communications. The workshop included presentations on Member States' views on potential VDES use-case scenarios and the industry's readiness to provide VDES services for the maritime domain's benefit.



In 2023 EMSA delivered an RPAS regional service in the Baltic, which operated from mid-April to September in Estonia, Finland, and Latvia. The service was conducted in coordination with multiple authorities from the three countries, and a consolidated framework was established to ensure seamless operations. The remotely piloted aircraft covered a large sea area spanning 500 km from north to south.

## 2023 RPAS OPERATIONS



## RPAS SUPPORT AREAS

## SEARCH &amp; RESCUE

Optical scanner  
EPIRB  
AIS



## EMISSIONS MONITORING

SOx/NOx sniffer  
EO/IR camera  
AIS



## TRAFFIC MONITORING

Radar & optical scanner  
EO/IR camera  
AIS



## MARINE POLLUTION

EO/IR camera  
Radar  
AIS



## FISHERIES CONTROL

Radar & optical scanner  
EO/IR camera  
AIS



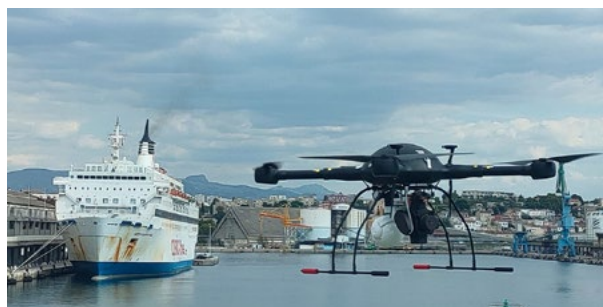
## TRAFFICKING

Radar & optical scanner  
EO/IR camera  
AIS



In Lithuania, the RPAS operation was part of a joint effort to enforce environmental laws and improve environmental protection.

© Nidibou Photography



In France, an EMSA sniffer drone supported French authorities to monitor ship emissions on the Mediterranean Sea coast.

## CISE TRANSITIONAL PHASE

The Common Information Sharing Environment (CISE) is an EU initiative which aims to make European and EU/EEA Member States surveillance systems interoperable and to give all concerned authorities from different sectors access to information they need to conduct missions at sea. The European Commission has put in place a preparatory action for the operational implementation of CISE and has tasked EMSA to set up and coordinate the preparatory actions, known as the transitional phase.

During 2023, EMSA continued to coordinate and chair the CISE Stakeholder Group and the different working groups (Configuration Board, Security, pre-operational), which is made up of 28 stakeholders representing different Member States and EU Agencies and bodies from all the seven maritime sectors (maritime safety and security, marine environment, fisheries control, customs, border control, law enforcement and defence).



On 7-8 March, 62 appointed experts from both EU Member States and European bodies gathered at EMSA premises and online during the 12<sup>th</sup> CISE Stakeholder Group (CSG) meeting.



20 Sept 2023

08:15 - 10:30 (WEST)

# CISE Virtual Open Day

*Learn all about the Common Information Sharing Environment (CISE) for the EU maritime domain during our online workshop!*

In 2023, the CISE node was further upgraded and several new nodes deployed, giving a total of 14 operational nodes with more than 30 authorities connected. Technical support to the members has been consistently provided, and information exchanges based on the Vessel of Interest operational scenario have been tested through trial campaigns. Implementation of the Sea Basin Strategy also started for certain dedicated activities in a range of different locations.

In addition, in 2023 the methodology of the Responsibility-to-Share concept was adopted by the CISE Stakeholders. Throughout the year, numerous workshops, open days and training courses took place, all with the aim of supporting CISE members in their preparations for the operational phase.

## CISE STAKEHOLDER GROUP MEMBERS

- COUNTRIES WITH NOMINATED CSG MEMBERS
- EU INSTITUTIONS, EU SERVICES, AND OTHER INTERNATIONAL ORGANISATIONS
- NODES



## CHAPTER 3

### SAFETY AND SECURITY



## MARITIME SAFETY

Maritime safety represents a cornerstone in the foundation of EMSA's activities, playing a pivotal role in both current initiatives and future work. Throughout 2023, EMSA solidified its position as a key partner to the European Commission and Member States, contributing substantially to safety and standardisation frameworks at both EU and IMO levels. This commitment has extended across traditional ship safety domains, such as fire safety and life-saving appliances, to also incorporate cutting-edge technologies such as alternative energy systems and autonomous systems.

Notably, EMSA has been entrusted by the European Commission with providing technical expertise for the revision of three significant pieces of EU maritime legislation:

- **Accident Investigation Directive:** Addressing changes in the international maritime regulatory environment and technological developments;
- **Port State Control Directive:** aimed at enabling Member States to detect and rectify cases of non-compliance with safety, environmental, and pollution prevention standards;
- **Flag State Requirements Directive:** ensuring EU national Flag States maintain high-quality shipping services, emphasizing information sharing on inspection results and compliance issues.

These efforts involved EMSA's active participation in EU Council meetings, analysing IMO submissions and proposing EU positions.

EMSA's proactive role extended to devising a comprehensive analysis framework, addressing safety and standardisation gaps. This includes drafting best practices and guidance, not only for traditional safety concerns but also for emerging considerations related to electrical systems, batteries, and the carriage of electric vehicles on ships.

In 2023, EMSA continued to undertake studies on alternative fuels. The safety of ammonia as fuel and the safety of biofuels bunkering were explored, producing insightful reports and initiating guidance documents to address the associated risks.

The Agency also released its first safety guidance on Battery Energy Storage Systems (BESS) aboard ships, responding to the increased use of Li-ion batteries.

EMSA intensified its focus on higher-risk vessels, exemplified by the Cargosafe study on cargo fires in container ships. The study's findings were submitted to IMO, as part of efforts to reinforce safety regulations.

Within the Marine Equipment framework, the Agency delivered the annual study to update the technical standards applicable to the manufacturing, testing and certification of marine equipment to be carried onboard EU-flagged ships. In addition, the Agency managed and maintained the Marine Equipment Database of products certified to be carried onboard EU flagged ships and provided the technical secretariat to the MarED group of Notified Bodies. EMSA was also active providing technical and scientific advice for market surveillance issues in relation to Marine Equipment.

On Port State Control (PSC), EMSA prepared relevant documents for and participated in the Paris MoU Port State Control Committee, Technical Group and Management Board



EMSA published guidance to support maritime administrations and industry by promoting a uniform implementation of the essential safety requirements for batteries on board ships.

meetings. Moreover, the Agency prepared the annual fair-share which establishes the PSC inspections commitments of Member States within the Paris MoU. EMSA also acted as coordinator of the IMO Correspondence Group on the global harmonisation of PSC procedures.

Furthermore, EMSA played a key role in the ex-post evaluation of Directive 97/70/EC on fishing vessel safety and contributed to the development of safety guidance documents for domestic passenger ships in support of Flag State implementation. At the request of the European Commission, EMSA started the development of a database for exemptions of passenger ships.

Within the framework of the Search and Rescue Contact Group, the European Commission requested EMSA to develop a study on key safety aspects related to Search and Rescue operations at sea. In 2023, the table of contents was agreed with the relevant stakeholders.

Embracing the green and digital evolution in the shipping industry, EMSA conducted studies on competencies for operators of Maritime Autonomous Surface Ships (MASS) and initiated a procurement process for a study on competencies related to new fuels.

In 2023, the Risk-Based Assessment Tool (RBAT) project delivered a new methodology tailored for maritime autonomous surface ships, contributing significantly to the IMO Correspondence Group on MASS and the development of the first non-mandatory MASS code.

As the host of the Equasis Management Unit, EMSA organised the meetings of the Editorial Board and Supervisory Committee and actively contributed to the Equasis 5-Year Strategy, initiating actions in 2023 to modernise and enhance the Equasis website and statistics presentation. The annual report on the world fleet with statistics from Equasis was also published.

## THE HUMAN ELEMENT

The human element is central to maritime safety and the proper operation of shipping and is a key concern for the Agency. Over the past year, EMSA worked alongside the European Commission and the EU Member States in the initial stages of the comprehensive review of the IMO International Convention on Standards of Training, Certification and Watchkeeping (STCW) for Seafarers. This work is being strengthened with a view to have the amendments adopted by the end of 2027.

The Agency also promoted the implementation of the Maritime Labour Convention (MLC), 2006, by providing training to ensure compliance and enforcement to both EU Member States and non-EU countries. With regard to training related to the implementation of the STCW Convention, the package developed by the Agency includes training on Directive (EU) 2022/993 on the minimum level of training of seafarers; basic and advanced training on the STCW Convention and Code; and a comprehensive online training on the assessment, examination and certification of seafarers.

EMSA completed in 2023 its assistance to the European Commission in the framework of the Enhanced Regional EU-ASEAN Dialogue instrument on the implementation of the

MLC, 2006 Convention in ASEAN Member States. In this way, EMSA was able to increase the knowledge and capacity of ASEAN maritime administrations, improving awareness of seafarers' rights and developing an understanding of the current recruitment and placement system for seafarers.

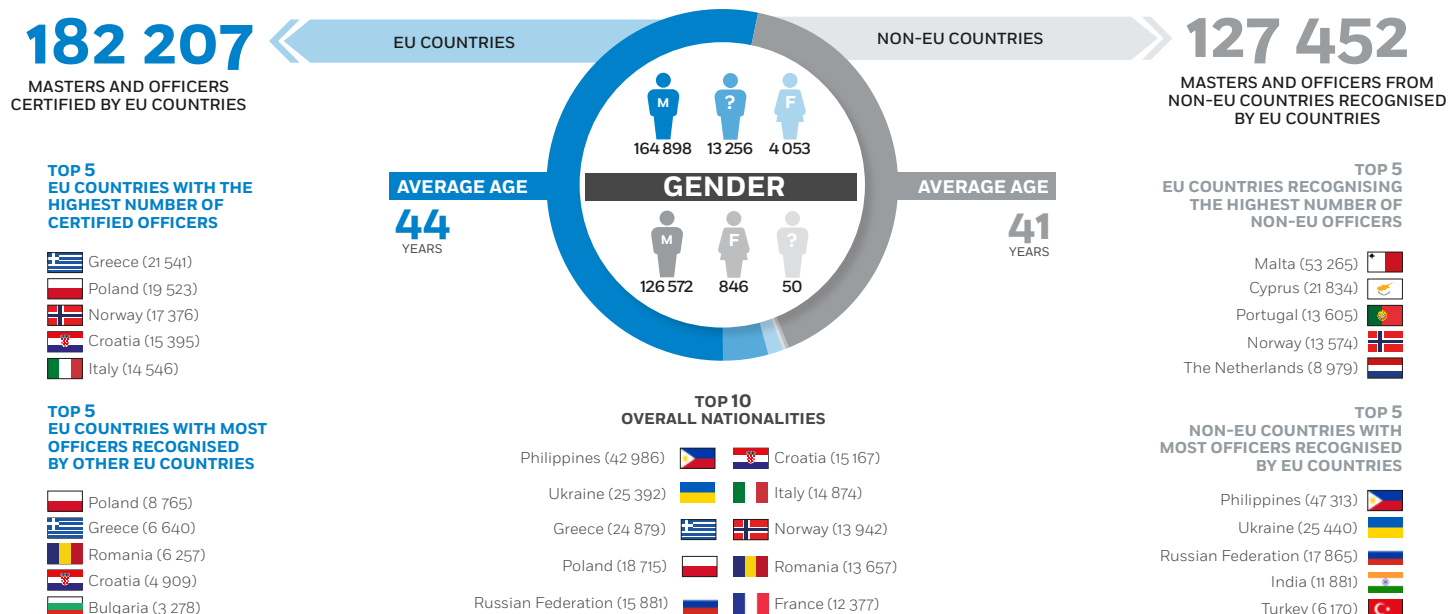
The STCW Information System developed by EMSA was further enhanced with a web-based module. This is designed to provide Member States, stakeholders and other interested parties with a tool where statistics on the number of seafarers holding EU certificates and endorsements can be tailored according to the user's needs. The new module has been available to the public since the middle of 2023.

Meanwhile, EMSA has been working to define the final business and technical specifications in support of the development of the EU Seafarers' Certification Platform. The basis of this work was the final report that was produced by the Correspondence Group composed of representatives from EU Member States and EMSA which defined the high level business and technical specifications. In the coming years the development and implementation of the platform will proceed.

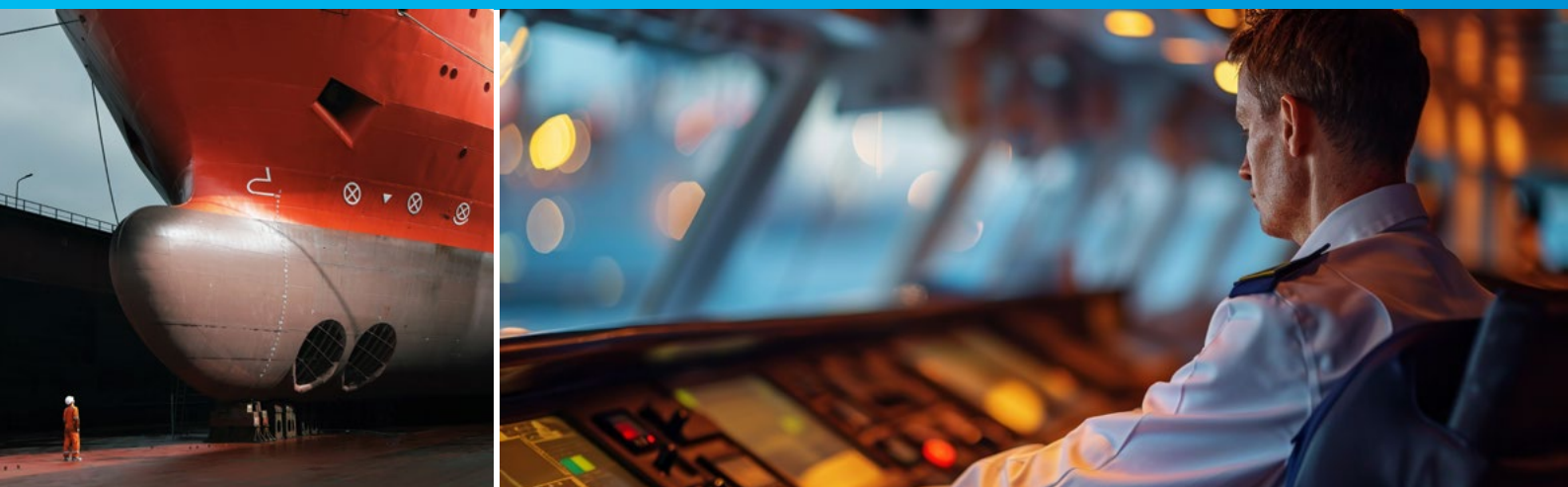
Finally, a study in support of the identification of competences for Maritime Autonomous Surface Ship (MASS) operators in Remote Control Centres was completed and its report made available to the public.

## SEAFARER STATISTICS IN THE EU

A SNAPSHOT OF THE NUMBER OF SEAFARERS HOLDING CERTIFICATES OF COMPETENCY & ENDORSEMENTS ATTESTING RECOGNITION BY EU COUNTRIES VALID IN 2021, AS REPORTED IN EMSA'S STCW INFORMATION SYSTEM



Source: EMSA



## RECOGNISED ORGANISATIONS

Recognised Organisations refer to classification societies which have been recognised by the European Commission to carry out statutory survey and certification work on ships on behalf of EU Member States. EMSA carries out a number of inspections to verify the performance of these recognised organisations, a process which includes visits to head offices and selected regional, field and site offices, as well as visits to ships.

Remote inspections and audits – i.e. without the surveyor or auditor physically present on board the ship – by classification societies became accepted during the COVID-19 pandemic. However, no provisions or common procedures were in place for their execution. This gap has been addressed at international level with EMSA supporting the EU in preparing and presenting a detailed proposal for regulating remote surveys and audits at the IMO's III sub-committee.

In 2023, at the 9<sup>th</sup> session of the III Sub-Committee a proposal based on an EU position was adopted for submission to the 33<sup>rd</sup> session of the IMO Assembly. The proposal was finally adopted at the IMO Assembly by way of two assembly resolutions. EMSA continues to support the European Commission through participation in the intersessional correspondence group that has been established to develop further technical guidelines for remote surveys and audits.





EMSA has introduced a new operational service aimed at supporting Accident Investigation Bodies (AIB) in collecting crucial evidence from sunken ships to aid in understanding accidents and preventing similar incidents in the future. The service, which uses observation-class Remotely Operated Vehicles (OC/ROV), provides underwater surveys and is specifically designed to meet the challenging needs of AIB.

## ACCIDENT INVESTIGATION

EMSA works to further develop the accident investigation capabilities of EU Member States as well as to enhance the collection and analysis of casualty data at EU level. It does this through two main structures: the Permanent Cooperation Framework of Accident Investigation Bodies (AIB), for which EMSA acts as Secretariat; and, the European Maritime Casualty Information Platform (EMCIP) which is populated by the AIB and whose casualty data can subsequently be analysed and contribute to an enhanced safety culture at sea.

EMSA continued providing services as the Secretariat of the Permanent Cooperation Framework and facilitated the technical cooperation between EU Member States AIB which is essential for the proper implementation of the Accident Investigation Directive. The Agency also supported the Permanent Cooperation Framework's activities related to the impact assessment of the Accident Investigation Directive and led the working groups on the integration of the Human Element perspective in accident investigation and training. Furthermore, it supported additional PCF working groups dealing with technical topics concerning accident investigation.

During 2023, the Agency has started for the first time providing operational support in safety investigations by offering, upon request, AIB underwater surveys through Observation-Class Remotely Operated Vehicles (ROV). The service strengthens the AIB capacity to conduct safety investigations related to very serious and serious casualties. The service may also be used for other coast guard related activities. During 2023, five deployments were successfully conducted around EU waters.

In 2023, EMSA continued managing the European Marine Casualty Information Platform (EMCIP), including its Business Intelligence tool supporting bespoke reports, dashboards, and analytics, based on EMCIP data. The EMCIP public portal underwent major enhancements turning it into a one-stop-shop for accident data for the general public. EMSA also organised the annual EMCIP Governance Group meeting composed of AIB and Maritime Administrations.

In 2023, the Agency published the annual overview of marine casualties and incidents covering EMCIP derived data for the 2014-2022 period. The publication was further modernised becoming more user friendly and accessible. Through this overview, the Agency presents detailed statistics on marine casualties and incidents involving ships flying a flag of an EU Member State, accidents in the territorial sea and internal waters of Member States or wherever the interests of Member States are involved.



The Agency delivered several training courses (covering core skills for accident investigators, an advanced course for accident investigators and a Voyage Data Recorder course) for investigators of the EU Member States, but also for non-European countries through EU cooperation programmes. Work has also been initiated to include the Accident Investigation training activities within the portfolio of the EMSA Academy.

An EMSA team joined the Italian Accident Investigation Body (DIGIFEMA) and ACSM ROV specialists for a mission in the North Adriatic Sea in February 2023.

# 2023

## MARITIME CASUALTIES

KEY FIGURES (extracted in January 2024)



## MARITIME SECURITY

Maritime security refers generally to measures taken for protection against unlawful acts such as piracy, armed robbery, terrorism and maritime violence. As the security of the entire maritime transport chain is important, EMSA provides support to the European Commission to monitor the implementation of Regulation (EC) No 725/2004 on enhancing ship and port facility security.

In 2023, EMSA provided 34 inspector-weeks to help the European Commission and EFTA Surveillance Authority in assessing and verifying the implementation and enforcement of maritime security legislation in the Member States. The Agency subsequently delivered 64 inspection reports detailing the maritime security measures, procedures and structures in place in the Member States.

In parallel, EMSA continued to support the European Commission and the Member States in various tasks related to the implementation and improvement of EU and international security legislation by participating in the Maritime Security Committee (MARSEC) and the Stakeholders' Advisory Group on Maritime Security (SAGMAS).

In 2023, EMSA and the European Commission's Directorate-General for Mobility & Transport (DG MOVE) issued the second updated version of the "Interim Guidance on Maritime Security for Member States' Competent Authorities" to reflect the experience gained during European Commission Maritime Security inspections and disseminate best practices among Member States.

In relation to cybersecurity, and considering the increasing risks posed by cyber-attacks to the maritime domain, EMSA carried out further actions to enhance maritime cybersecurity awareness and information exchange. In particular, the Agency organised its first maritime cybersecurity conference on 26 October 2023 with the in-person participation of more than 100 EU maritime cybersecurity stakeholders coming notably from the European Commission, European Union Agency for Cybersecurity (ENISA), Member States, port authorities, industry and academia. The topics addressed included the effectiveness of regulation in enhancing cybersecurity in shipping; cybersecurity in shipping and supply chains, present and future; enhancing cross-collaboration; and workforce training.

In addition, EMSA published "Guidance on how to address cybersecurity onboard ships during audits, controls, verifications and inspections". The purpose of the document, elaborated in cooperation with DG MOVE and EU Member States, is to offer guidance to Member State administrations and national inspectors/auditors/surveyors on how to address cybersecurity related elements during audits, controls, verifications, and inspections of ships, under the International Ship and Port Facility Security (ISPS) Code and taking into account International Safety Management (ISM) elements.

At the request of the European Commission and Member States, the EMSA Academy also developed and delivered a Maritime CyberSecurity (MCS) training course specifically designed for national administration officers having a role in developing or enforcing cybersecurity regulations in the maritime domain. The first training course was delivered at the end of 2023.

## CHAPTER 4

### SIMPLIFICATION





## SAFESEANET

Vessel and voyage related information across the EU is shared among targeted users through the SafeSeaNet system. The information flows and system functionalities are designed to enhance maritime safety and security, as well as to boost the efficiency of maritime traffic and transport. EMSA works to provide the national administrations (port authorities, coastal stations, search and rescue, vessel traffic services, pollution response bodies, etc.) with 24/7 access to the system.

Importantly, EMSA works alongside national authorities to ensure the interaction of their systems with SafeSeaNet. This allows SafeSeaNet to serve as a European platform for maritime data exchange. Mandatory functions cover the collection and distribution of data on vessel traffic monitoring, port call information, dangerous and polluting cargo, bunkers, security, waste, persons on board passenger ships, and incident and accident reports. The various central databases that form part of the SafeSeaNet ecosystem help to improve the data quality of the individual national databases.

In 2023, progress was made regarding the development of five databases: the Central Ship Database which receives and stores up-to-date information on ship identifiers and which serves as a reference for national systems; the Central Hazmat Database for information on dangerous and polluting goods which is particularly useful for decision-making on places of refuge for ships in need of assistance; the Central Location Database for information on locations and port facilities codes; the Central Organisations Database for information on authorities and organisations; and, the Central Geographical Database for information on geographical areas of interest.

In the case of the Central Ship Database, the set-up was expanded using system-to-system communication for the integration of LRIT ship data, THETIS Port State Control inspection data, SafeSeaNet ship data and information from commercial data providers for ships of 100 GT and above. In the case of the Central Geographical Database, EMSA incorporated a functionality making it possible to view the areas associated with different organisation's responsibilities, e.g. Search and Rescue (SAR), Vessel Traffic Services (VTS) and Mandatory Ship Reporting Systems (MRS).

Gaining a better understanding of marine traffic – identifying where the main shipping lanes are and which ship types are navigating on which lanes, for example – is another way in which users can benefit from the SafeSeaNet service, through Traffic Density Maps, which can be generated according to specific criteria such as timeframe and ship type. Additional categories of maps were developed in 2023.



The development and testing of solutions to facilitate the reporting procedures from ship to shore and improve the coastal stations' situational awareness continued in 2023. The "Integrated Reports Distribution" (IRD) tool proved that there is an untapped potential to simplify the work of both ships and coastal stations through the re-use of data and the "reporting once" principle allowing the reduction of voice communication. The concept was tested by EMSA with the participating Member States.

Also in connection with the IRD project, EMSA supported the EUREKA Consortium by contributing to the implementation of technical solutions for modernising the IMO adopted Ship Reporting System (SRS) in the Adriatic Sea (ADRIREP). The EUREKA Consortium consists of representatives of the maritime administrations of Albania, Italy, Croatia, Greece, Montenegro, Slovenia and Bosnia and Herzegovina.

## DATA PROCESSED BY EMSA INFORMATION SERVICES (activities on 30/06/2023)

39 525 251 ◀ S - AIS  
14 854 044 ◀ T - AIS  
129 517 ◀ VMS  
31 402 ◀ LRIT  
1 529 ◀ MRS



**54 million**  
NUMBER OF **POSITIONS**  
RECEIVED BY EMSA  
IN ONE DAY



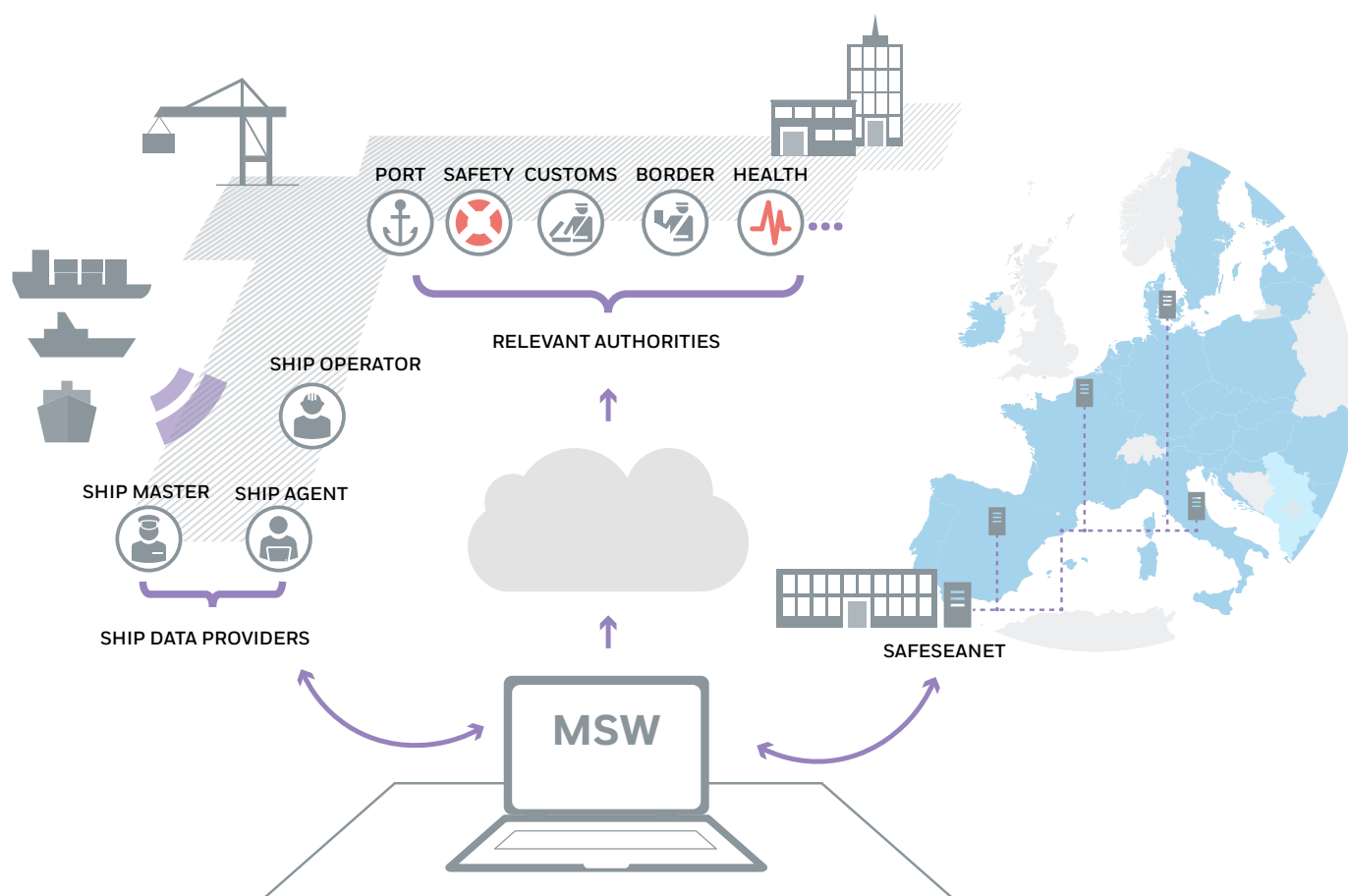
**154 360**  
NUMBER OF UNIQUE  
**VESSELS** DETECTED  
IN ONE DAY

## EUROPEAN MARITIME SINGLE WINDOW

When a ship enters, stays, or leaves a port, its maritime transport operator has to submit a set of information to a number of bodies. This reporting process is currently not harmonised between ports, placing an excessive administrative burden on shipping operators. The entry into force of Regulation (EU) 2019/1239 on the European Maritime Single Window environment (EMSWe) brings all the reporting linked to a port call together into one digital space, to harmonise reporting procedures for shipping operators and to ensure the efficient sharing and reuse of data. Full implementation of the regulation must be achieved by 15 August 2025.

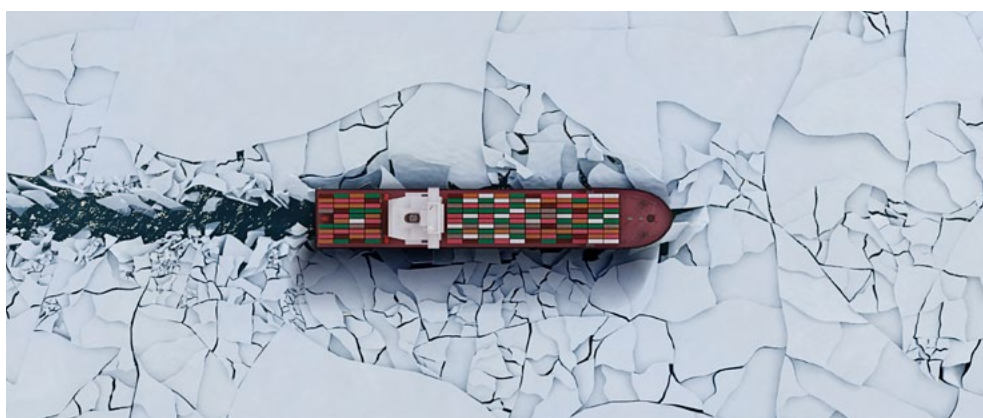
In preparation for this, EMSA has worked with experts of the European Commission, the Member States and shipping industry's associations to elaborate the EMSWe dataset and Message Implementation Guide, which form a harmonised specification of the information exchanges between ship operators and the Maritime National Single Windows of the Member States. Such harmonisation should facilitate reporting and further reduce administrative burden, which is the objective of the EMSWe Regulation (EU) 2019/1239. EMSA also started the development of the common EMSWe ship, location and hazmat databases required by the EMSWe Regulation. These databases should enable the reuse of the information provided through the Maritime National Single Windows and facilitate the submission of information by declarants.

On behalf of the European Commission, EMSA also contributed to the elaboration on the IMO Compendium on Facilitation and Electronic Business which defines a harmonised worldwide standard for the electronic fulfilment of reporting obligations in Maritime Single Windows. In 2023, EMSA attended the IMO Expert Group on Data Harmonisation (EGDH) set up by the Facilitation Committee which is responsible for the technical maintenance and extension of the IMO Compendium.



## LONG RANGE IDENTIFICATION AND TRACKING (LRIT)

EMSA continued hosting, operating and maintaining the European Union LRIT Cooperative Data Centre (EU LRIT CDC) and the European Union LRIT Ship Database (EU LRIT Ship DB) on behalf of the European Commission and participating countries, i.e. EU Member States, Norway and Iceland (EEA), and Montenegro, Georgia and Tunisia. The Agency also continued hosting, operating, and maintaining the LRIT International Data Exchange (LRIT IDE) on behalf of the International Maritime Organisation (IMO) and SOLAS contracting governments. The International LRIT Data Exchange (IDE) interconnects 72 LRIT Data Centres and 137 contracting governments and territories, making it possible for LRIT users worldwide to request and receive LRIT position reports from ships in a secure, effective and timely manner.



## E-CERTIFICATION

The digital transition is gradually bringing shipping closer to paperless documentation. In 2023 EMSA completed its work in the process of finalising the business and technical specifications for the establishment of an EU Seafarers' Certification Platform to facilitate the issuing of e-certificates to seafarers. In this way, the Agency will be offering economies of scale as efforts are centralised in the process of developing, hosting and operating a state-of-the-art system. The platform – that will start being developed in 2024 – will make it possible for interested Member States to issue electronic STCW certificates via a secure, accredited and transparent channel.





## CHAPTER 5

## DIGITALISATION

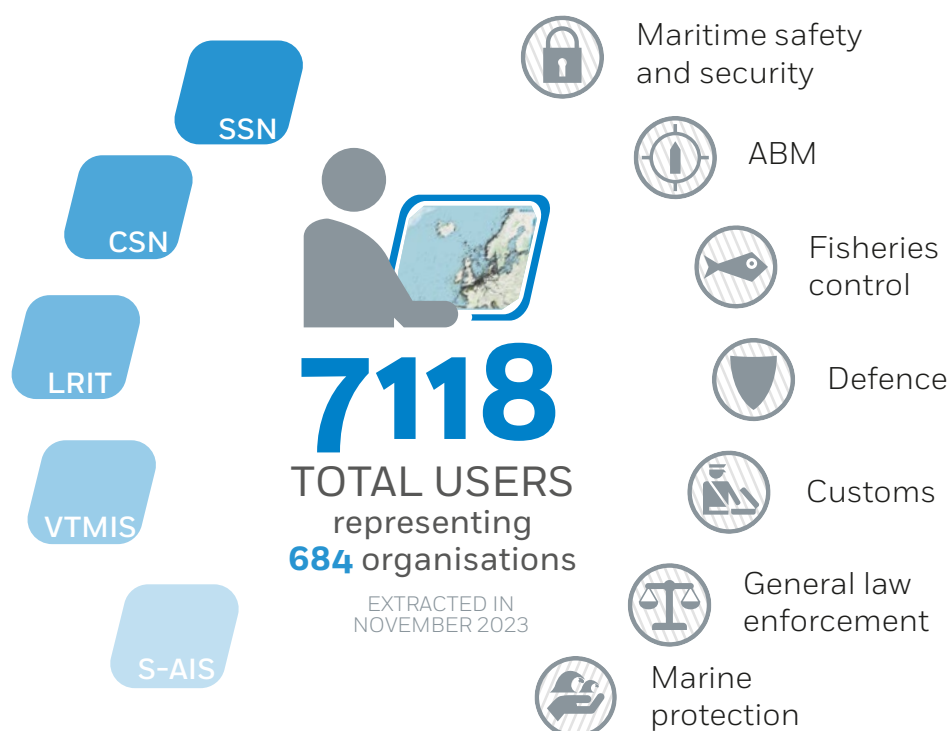


## MARITIME DIGITAL SERVICES

EMSA as the main provider of the maritime picture in Europe continued the development of its Integrated Maritime Services (IMS), producing comprehensive near real time maritime traffic visualisation with the integration of new data, information and functionalities. In 2023 the number of users of IMS increased by almost 12% and counted for 7344 individuals while the number of operational bodies rose to 684 marking an annual increase of 3%.

IMS were delivered to 26 Member States and Montenegro and five EU agencies and bodies covering an ever wider range of maritime functions including coast guard cooperation. IMS users remained in the centre of consultations on new developments. EMSA successfully organised two IMS User Group meetings and one Automated Behaviour Monitoring (ABM) and advanced analytics workshop facilitating discussions on the operational usage of the IMS, planning and prioritising further needs.

Through IMS, EMSA provides an enhanced, global maritime awareness picture. Drawing on a range of data from multiple sources, the Agency's services support Member States regarding the safety of maritime traffic, identify various risks in the maritime domain, assist in improving response to accidents and dangerous situations at sea, and contribute to preventing and detecting pollution by ships. EMSA's systems and thematic services are now a pivotal part of Member State monitoring, information and surveillance functions, and benefit many user communities.



Cloud-based solutions, possible machine learning, and leveraging artificial intelligence are progressively part of EMSA's digitalisation drive in the context of the Agency's 5-Year Strategy. Development of the first in-the-cloud, AI-based operational service took place in 2023 using positions from the Long Term Storage. Some Advanced Analytics capabilities and new dashboards were added to the analytical tools and services for Member States and EU agencies and EU bodies. IMS receives more than one billion messages per month. This 'Big Data' pool is then exploited by various maritime applications.

Throughout 2023, EMSA continued to enhance Automated Behaviour Monitoring (ABM), adding new, global, continuously running algorithms detecting port calls, at-sea encounters, drifting, speed anomalies and gaps in reporting. Graphical interfaces, SEG and IMS mobile app, as well as APIs/webservices used the new data and functionalities, thereby adding value for a growing number of end users with an interest in tailor-made services integrated in national applications. Registered users now also have the possibility of accessing voyage related data events for vessels trading around the world, thanks to the recently created ABM algorithms detecting reported changes of draught, destination or ETA.

The newly continuously running Automated Behaviour Monitoring features were added to the updated version of the IMS Mobile App, and users can access AIS-based detection of port calls for any ship or port worldwide. Additionally, EMSA provided new analytical dashboards as part of the maritime analytics tool (EMAT), and Flag State users may for instance analyse all ABM (anomalous or specific) events for their flag ships around the world, while coastal users may focus on their geographical areas of interest.

Under the framework of the EMSA-EFCA Service Level Agreement (SLA), an overhaul of the EMSA IMS EFCA service continued, implementing and integrating horizontal solutions that benefit all EMSA IMS users, while allowing a degree of customisation needed for the fisheries control community. For Frontex, EMSA continued to provide IMS data system-to-system, amounting to more than 12 billion vessel position messages over the course of the year and 220 000 unique vessels per day. This data forms the core component of the maritime picture shown in Frontex's graphical interfaces.

EMSA provided an IMS based service to support Europol in the areas of law enforcement and organised crime activities at sea. The number of users continued to grow in 2023, mainly from the Member State side. Europol considers the "Member State Pilot project" campaign has been a success and has generated a very beneficial tool for law enforcement authorities in the Member States. Therefore, and in agreement with the SafeSeaNet High Level Steering Group, since 2024, the service is permanently open for Member States.

EMSA provided access to IMS for EUNAVFOR Med Irini via the IVTMIS operation. Technical issues at EUNAVFOR Med Headquarters which had been hampering the cooperation were resolved in May 2023. Consequently, since August 2023, new users including EUNAVFOR Med watchkeepers have reliable 24/7 access to the IVMIS operation. Overall, EUNAVFOR Med staff are becoming more familiar and active regarding the use of the IMS service.

EMSA provided IMS in support of EUNAVFOR Atalanta to enhance maritime situational awareness. The EMSA EUNAVFOR Atalanta Cooperation Agreement was amended in May 2023 reflecting that Somalia became a partner in the EUNAVFOR Atalanta

operation. Since the end of December 2023, in relation to the increased piracy activities in the Red Sea and the Gulf of Aden, EUNAVFOR Atalanta is provided with access to the EMSA Dashboards to check Israeli related vessels detected in their Area of Operation in the last 48 hours.

EMSA also provides surveillance tools and services to MAOC (N) to support Europe's fight against drug trafficking in the Atlantic and Mediterranean maritime domain. EMSA services are used mainly by the MAOC (N) analysts, and are available to their Country Liaison Officers with the exception of the UK. In 2023, for the first time, MAOC (N) provided financial support for the development of new IMS functionalities.

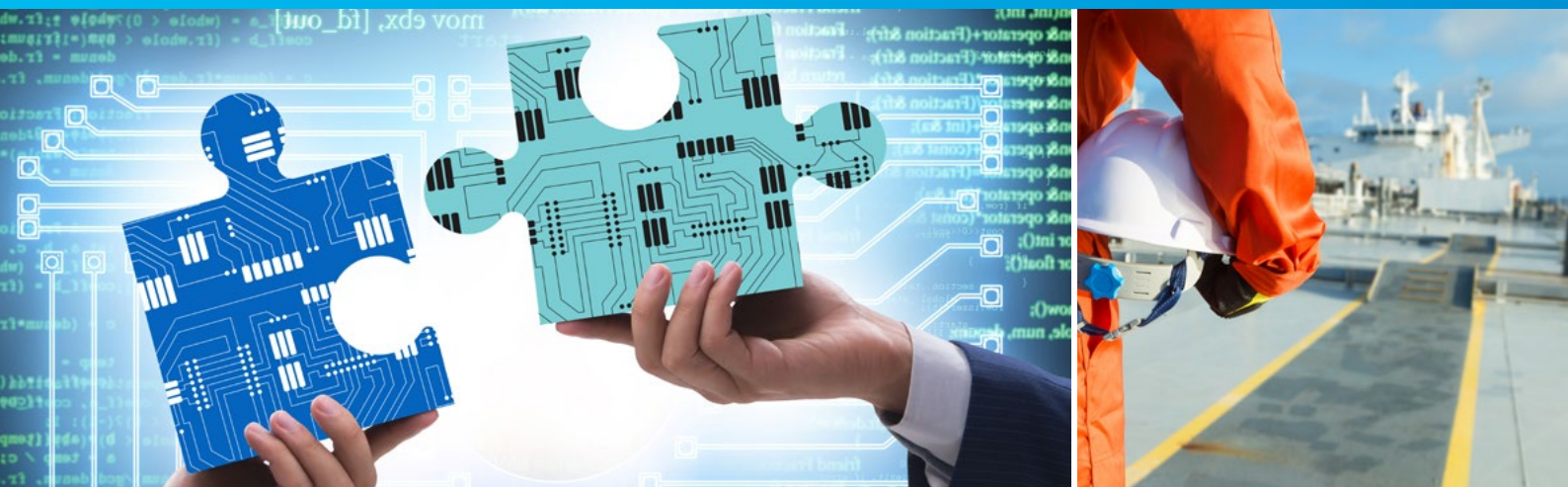
## THETIS INFORMATION SYSTEM

Efforts to enhance maritime digital services aimed at supporting the daily work of Member State authorities in the areas of Port State Control and ship inspections continued throughout 2023. EMSA worked on the ongoing development and operation of the THETIS information system and its modules in line with the various requirements of the applicable legal acts and user communities.

Both inspection databases – THETIS-PSC and THETIS-EU – were fully operational, and the first set of Frequently Asked Questions was published. EMSA rolled out three major releases of THETIS, introducing 16 new features and three major releases of THETIS-EU with nine new features. These efforts are designed to simplify the inspectors' tasks, reducing inspection duration times and raising overall inspection quality levels. To comply with the implementing acts of the Port Reception Facilities Directive, THETIS-EU now integrates functionalities to facilitate Risk Based Targeting and the calculation of Sufficient Dedicated Storage Capacity.

The air emissions component of THETIS-EU successfully fulfilled its objective of collecting emission measurements reported by RPAS, whether from EMSA's available service or from Member States' own services, thereby benefiting the sulphur inspection community. In 2023, a total of 1170 SO<sub>x</sub> measurements were reported in THETIS-EU





from 970 individual ships triggering 308 alerts. These automatic alerts are particularly beneficial for Member State sulphur inspection authorities as they may then result in follow-up, on-board inspections.

The THETIS-MRV system remained operational throughout the year, allowing companies to declare CO<sub>2</sub> emissions from ships for 2022, the data for which became public at the beginning of July 2023. EMSA's THETIS-MRV helpdesk team replied to a total of 2 734 requests from the industry over the course of the year. A new Fit-for-55 helpdesk was set up to facilitate the handling of requests with a view to providing timely guidance and assistance to the industry when completing their reporting obligations.

THETIS-MRV was also the focus of further development efforts to cater for the extension of the EU ETS to maritime transport and the related revision of the EU maritime transport MRV Regulation. In 2023, the system was enhanced with ETS-related functionalities to support new types of users, a new workflow was put in place for the approval of the monitoring plan, and partial reporting of emissions was added (in case a ship changes company).

Preparatory work continued in relation to ship related eCertificates, using THETIS as the platform to store relevant information and to make them available to Member States in their capacity both as Flag and Port States. Once horizontally implemented, the availability of digital information on ship certificates to Port State Control Officers within THETIS will contribute to the reduction of the administrative burden on shipping and helps to improve the efficiency of port state control activities.

THETIS-Animal Welfare continues to support the reporting of the control of livestock vessels and benefit competent authorities responsible for the enforcement of Regulation (EC) 1/2005, aimed at protecting the welfare of animals during transportation. In cooperation with the European Commission's DG SANTE, THETIS-Animal Welfare was enhanced with the possibility to record full details of the "Certificate of Approval" as a basis for a mandatory enforcement check to be carried out by veterinary inspection authorities of the Member States. This is now available to the user community of this specific inspection module. A statistical analysis module was also developed for the benefit of DG SANTE and Member State authorities.



On 24 January EMSA received the visit of the Portuguese State Secretary for European Affairs, Prof Tiago Antunes.



On 18 January, EMSA received the visit of the German Ambassador to Portugal, Dr Julia Monar.

## MARITIME SUPPORT SERVICES

The EMSA Maritime Support Services (MSS) is defined as the point of contact for any assistance required in the context of a maritime accident or event where EMSA services could be needed, e.g. in case of pollution or search and rescue cases, as defined in EMSA's Contingency Plan and the Working Arrangement with the European Commission's Directorate-General for European Civil Protection and Humanitarian Aid Operations (DG ECHO). In 2023, the Contingency Plan was activated on a total of 29 occasions.

Together with this, the MSS continued providing helpdesk services to EMSA's user communities and monitoring the performance of EMSA's different IT maritime applications. Tasks are to react timely when IT services were unavailable, report on specific ships/traffic regularly or when required, and to manage digital certificates deployed to secure IT system-to-system communications with EMSA stakeholders. MSS also continued supporting Member States with the data quality of the SafeSeaNet and LRIT systems.

The monitoring and reporting on vessels of interest continued throughout 2023. The MSS gathered information from different EMSA services, assisting the European Commission and the Member States with the monitoring of sanctions against the Russian Federation, the monitoring of traffic in the Black Sea, the identification of trends in certain types of ship activity, such as hotspots for ship-to-ship transfers around the EU, and on monitoring the evolution of geopolitical issues on a global scale, such as the security issues in the Red Sea, which are impacting the merchant fleets of the Member States.

## CHAPTER 6

### TECHNICAL ASSISTANCE



Special training session held in Bulgaria in which Ukrainian delegates learnt how to deploy two different types of pollution response equipment.

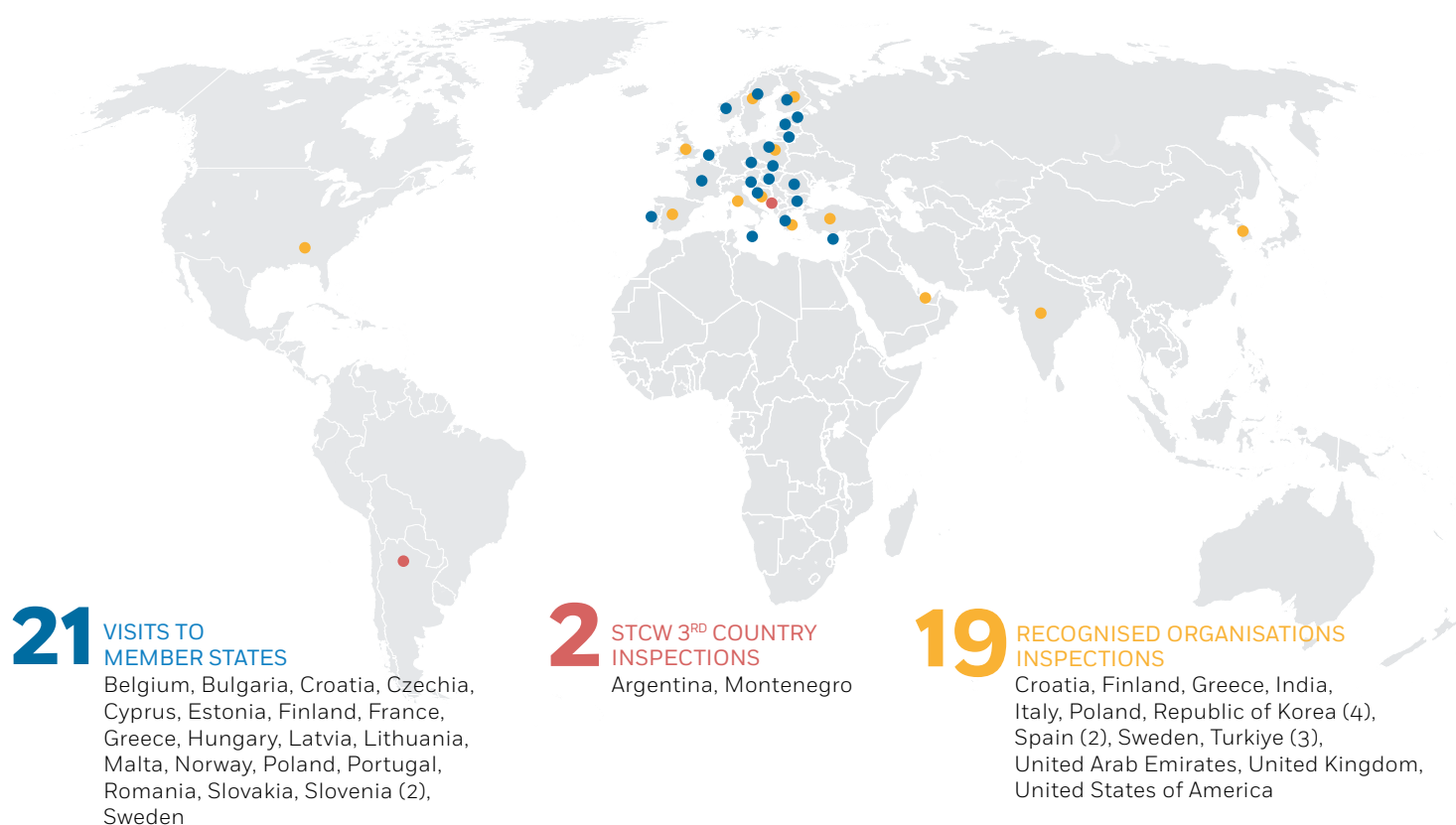
## VISITS AND INSPECTIONS

EMSA plays a vital role in supporting the development and implementation of EU standards and regulations within the maritime sector. This is achieved through a series of visits and inspections, corresponding reports and cumulative horizontal analyses.

During the year, three cycles of visits continued addressing standards for seafarers, the safe loading and unloading of bulk carriers, and passenger ship safety, including the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service. In addition, the cycle of visits looking at marine equipment and the enforcement of Directive 2014/90/EU came to an end and preparatory work was completed for a new cycle of visits for the Port Reception Facilities Directive that starts in 2024.

One horizontal analysis was delivered in 2023 with a focus on the implementation of the directive on the sulphur content of fuels with the objective of identifying issues of cross-cutting relevance and drawing general conclusions on the effectiveness and cost-efficiency of the measures in place. It also facilitated the development and dissemination

## VISITS AND INSPECTIONS CONDUCTED IN 2023





The EMSA Academy successfully completed the first edition of the Basic Level of the Curriculum on Principles and Techniques for Flag State Inspections. The 12-week course, delivered through a structured modular format, engaged 39 participants from EU Member States and EEA countries.

of best practices and lessons learnt, enhancing the flow and exchange of information. The horizontal analyses, including a cost-efficiency evaluation, confirmed their significant benefits for both Member States and the European Commission.

EMSA continued to carry out inspections of third countries to verify their compliance with the requirements established under the STCW Convention. Taken together with the visits to Member States, the Agency is the only organisation in the world to have been in the field in all continents to verify the implementation of the STCW Convention, in this way contributing to a better level playing field in this regard.

EMSA carries out inspections of Recognised Organisations to verify their performance, a process which includes visits to head offices and selected regional, field and site offices, as well as visits to ships. In 2023 EMSA continued with the programme of visits to examine the quality of the survey work carried out by the RO in relation to SOLAS fire safety requirements in passenger ships. The subsequent findings have led to improvements in fire safety on board passenger ships.



## CAPACITY BUILDING, THE EMSA ACADEMY AND ANALYTICS

EMSA offers to Member States, candidate and potential candidate countries and neighbouring countries sharing EU sea basins an increasingly innovative, collaborative and flexible capacity building toolbox, that can be specialised and tailor-made and relies increasingly on successful existing services, tools and applications as well as new technologies and learning services outside formal education.

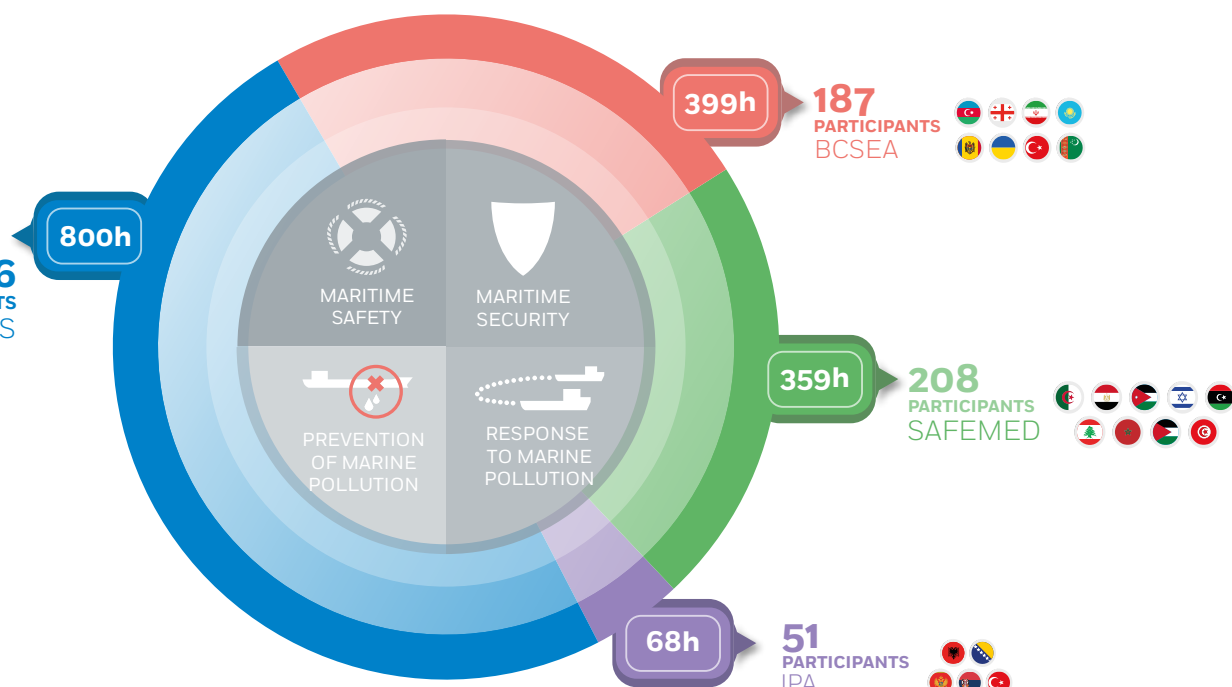
In 2023 the Agency continued its flagship project, under the label of EMSA Academy, and several ISO certified learning services were designed, developed and delivered. These learning services constituted the backbone of the different activities planned in support of the competent authorities of the Member States and beneficiaries of the ENP/IPA projects. Identified following a bottom-up approach, they aim at enhancing competencies and skills, thereby fostering capacity at national level towards homogeneous implementation and enforcement of safety, security and sustainability rules and regulations in the EU and beyond.



# 2023

COMMON CORE CURRICULA,  
WORKSHOPS & TRAINING EVENTS

 **1156**  
PARTICIPANTS  
MEMBER STATES



Focussing on functions, and combining state-of-the-art tools, such as the eLearning platform MaKCs and the Virtual Reality Environment for Ship Inspections (VRESI), the Agency has put together various products in support of professional development such as Common Core Curricula, part-time courses and short courses. These innovative learning services were delivered in a blended-learning mode (i.e. a combination of online synchronous and asynchronous modules and in-person classroom meetings), leading to certification upon demonstration of acquisition of knowledge and specific skills, and are related to identified job profiles, to EU/International maritime legislation or to EMSA's operational maritime applications and tools.

In 2023, three common core curricula were delivered for Sulphur Inspectors, Flag State Inspectors and Maritime Auditors covering ISM and ISPS codes. The curricula are designed to develop the necessary individual competencies for carrying out duties associated with each of these specific functions. They provide learners with the opportunity to increase the knowledge, skills and attitudes required to carry out inspections and audits professionally, efficiently and effectively and to the required standards established by law and benchmarked industry practice.

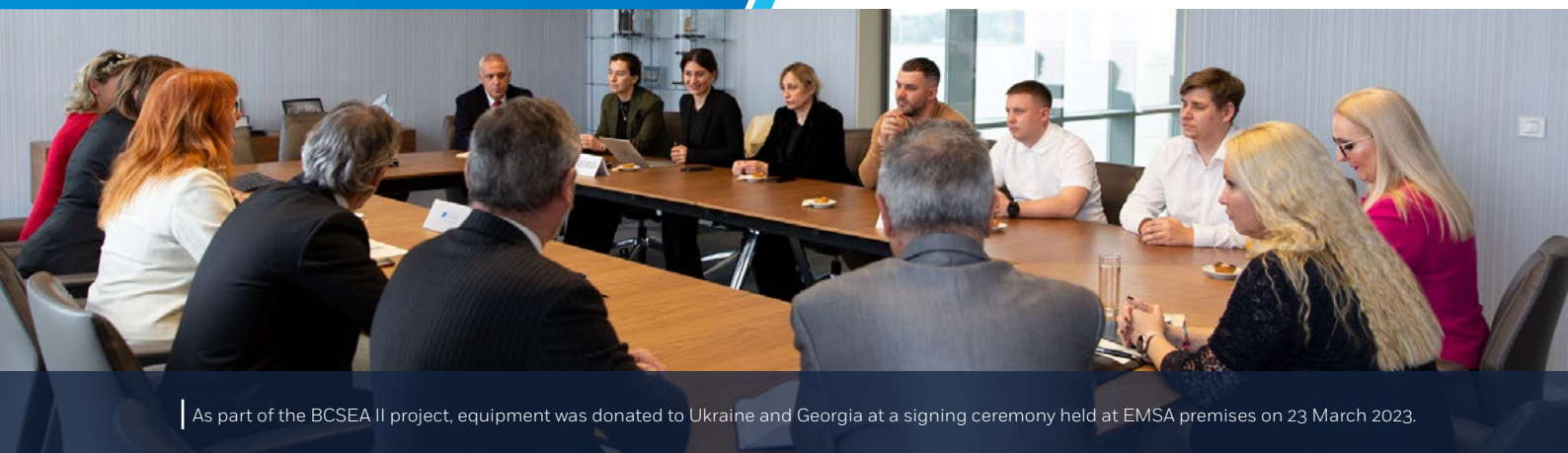
The development of two additional common core curricula for Safety Investigators (under the Accident Investigation Directive) and Port State Control officers were also finalised in 2023. The common core curriculum for Port State Control Officers became a mandatory element of the training policy of the MED MOU, with the same approach to be followed in 2024 by the Paris MOU and the Black Sea MOU, further confirming the value of the EMSA Academy's learning services.

In 2023, a total of 80 training sessions were conducted, benefitting a grand total of 1 585 participants. Specifically tailored for EU Member States, Norway, and Iceland, 52 learning services were delivered, attracting participation of 1 156 individuals. Additionally, within the framework of the SAFEMED project, 13 specialised learning services were given, engaging 225 participants. Similarly, under the BCSEA project, 15 distinct learning services were delivered, with a total of 153 participants actively involved in enhancing their skills and knowledge.

The portfolio of the EMSA Academy continues to be extended, aligned with the needs expressed by the Member States, with new products such as the Maritime cybersecurity training course.

The Dynamic Overview of National Authorities (DONA) platform continued through its country profiles section to offer information on the EU Member State authorities responsible for Flag, Port, and Coast State functions. This is an important step towards digitalisation and simplification that provides users with added value information. Through the DONA Reporting Gate, Member States can also provide reports to the European Commission on the implementation of specific legal acts with much less of an administrative burden.

During 2023, the EU Maritime Profile continued to be maintained and updated, with the inclusion of new sets of data made available to the general public. As a one-stop-shop, user-friendly statistics are made available, to raise awareness on the importance and relevance of the maritime sector and share data related to maritime safety, sustainability, human element.



As part of the BCSEA II project, equipment was donated to Ukraine and Georgia at a signing ceremony held at EMSA premises on 23 March 2023.

## PRE-ACCESSION AND EUROPEAN NEIGHBOURHOOD COUNTRIES



Special training session in Bulgaria in April and June during which Ukrainian delegates learnt how to deploy two different types of pollution response equipment.

The Agency maintained its status as a centre of excellence for capacity building initiatives assigned to EMSA by the European Commission for Pre-Accession and European Neighbourhood Policy countries. The project titled “Preparatory measures for the future participation of relevant IPA II beneficiary countries in the European Maritime Safety Agency (EMSA)” funded by the EU through the Instrument for Pre-accession Assistance (IPA) with beneficiary countries Albania, Bosnia-Herzegovina, the Republic of North Macedonia, Montenegro, Serbia and Turkey, which began on 1 May 2020 ended in June 2023. The project is being continued and will extend through the new initiative, “Preparatory measures for the future participation of relevant IPA III countries in the European Maritime Safety Agency (EMSA)” which started on 1 September 2023 and is set to continue until 31 August 2027.

Given that maritime safety, maritime security and marine environmental protection are shared priorities among EU Member States and third countries sharing the same sea basins, EMSA continued executing the two projects for technical assistance: SAFEMED IV for the Mediterranean Sea and BCSEA for the Black and Caspian Sea. Both projects have a very ambitious action plan, combining the priorities set at EU level by the European Commission and reflected in the 5-Year Strategy pursued by the Agency. The overarching goal is to aid in aligning standards related to maritime safety, security, and pollution prevention and response.

EMSA donated eight sets of pollution response equipment to Ukraine and Georgia. This was followed by dedicated training sessions to ensure familiarisation with the equipment, with both theoretical sessions to explain the technical specifications and capabilities as well as hands-on experience to operate the equipment in real conditions including deployment in water. These actions are aimed at building up the pollution response capacities of the ENP Beneficiary Countries under the BCSEA project, thereby contributing to the protection of the marine environment in the Black Sea.

In response to the interest expressed by third countries, the EMSA Administrative Board granted access to tools that facilitate Port State Control activities across various regions of the world. This development confirms the potential to extend the Agency’s expertise and, by extension, EU standards and solutions beyond the European geographical dimension. Currently, all nine Port State Control regimes worldwide, along with the Australian Maritime Safety Authority, are using EMSA tools, specifically RuleCheck and/or MaKCs.

## CHAPTER 7

## STRATEGIC SUPPORT



## EUROPEAN COOPERATION ON COAST GUARD FUNCTIONS

The European Union and its Member States have a strategic interest across the global maritime domain in identifying and addressing relevant challenges linked to the sea. Within the EU, there are more than 300 civilian and military authorities responsible for carrying out coast guard functions. These functions comprise tasks related to safety and security at sea, search and rescue, border control, fisheries control, customs activities and environmental protection and response.

EMSA together with the European Fisheries Control Agency (EFCA) and the European Border and Coast Guard Agency (Frontex) work jointly to support these national authorities as they carry out coast guard functions at national, EU and, where appropriate, international level.

In 2023, the sixth annual European Coast Guard Event took place in hybrid format on 27-28 June, hosted by EMSA in Lisbon, marking the end of EMSA's second chairmanship of the Tripartite Working Arrangement which ran until June 2023. The event was the occasion to present the many concrete and tangible services being delivered as part of the framework of European cooperation on coast guard functions.

The Agency also coordinated the first ever EMSA-led Maritime Multipurpose Operation (MMO) under the Tripartite Working Arrangement. This active operation was held across June, July and August 2023 in the Baltic Sea in cooperation with Estonia, Finland and Latvia and with the involvement of EFCA and Frontex. A range of EMSA operational and supporting services enhanced the cooperation on coast guard functions between the three Baltic Member States and the partner agencies. EMSA also contributed to the EFCA-led Adriatic Sea MMO 2023 and the Frontex-led Black Sea MMO 2023. In the framework of the Adriatic Sea MMO, EMSA coordinated with the Rescue Coordination Authorities of Italy, Slovenia and Croatia, a real SAR exercise that took place in the North Adriatic Sea.



Representatives from coast guard authorities across the EU convened at the Annual European Coast Guard Event held at EMSA premises in Lisbon on 27-28 June. The event served as a platform for fostering collaboration, discussing interagency cooperation, and presenting concrete initiatives within the European coast guard cooperation framework.

## FRONTEx SERVICE LEVEL AGREEMENT

Since 2013, EMSA has been supporting Frontex to conduct operations to address irregular migration and cross-border crime along European maritime borders including the implementation of the European Border Surveillance System (EUROSUR) through an indefinite service level agreement between the two agencies. Activities in 2023 were carried out within the framework of an agreed annual programme and associated maritime information services.

Through the Vessel Monitoring and Tracking service (VMT), Frontex received both a live and historical global maritime situational awareness picture, delivered as customised layers directly via the Frontex interface to the border control community. In 2023, EMSA sent Frontex more than 19 billion vessel related messages covering more than 750 000 unique vessels. These were complemented with Earth Observation products related to the detection of vessels at sea and for the monitoring of specific areas of interest, whether at sea, on the coastline or in port. In total more than 17 200 optical or synthetic aperture radar images were acquired for Frontex and shared with the Member States and other agencies.

EMSA also provided analytical services and products, such as the EMSA Maritime Analytics Tool (EMAT), that can assist Frontex in implementing its mandate. Overall, seven specific EMAT maritime related dashboards were in operation analysing a range of aspects such as vessel flag, vessel type and Paris MoU black flags. In parallel, the Vessel Reporting Service covered four requested geographical areas, detecting a total of 414 unique vessels for further investigation by Frontex.

Frontex also continued to make extensive use of EMSA's Automated Behaviour Monitoring (ABM) capability. There were more than 130 different ABM configurations in operation covering 10 different geographical areas which delivered more than 320 000 alerts.

## EFCA SERVICE LEVEL AGREEMENT

Since 2012, EMSA has been supporting the European Fisheries Control Agency to tackle illegal, unreported and unregulated (IUU) fishing through the coordination of joint deployment plans through an indefinite service level agreement between the two agencies. On one side, the SLA sets out the conditions of use when EFCA provides EMSA with access to the Vessel Monitoring System (VMS) data and vessel identifiers of fishing vessels. On the other, it sets out the conditions for EMSA to provide EFCA with surveillance tools such as Integrated Maritime Services (IMS) including Copernicus satellite imagery. RPAS are also part of this agreement and are being made available to EFCA for operational services.

Following the signature of a new SLA in December 2022, the multidisciplinary collaboration between the two agencies was strengthened in 2023 with the EFCA-funded recruitment of two staff entirely dedicated to the support of the IMS for EFCA and the financing of new developments aimed for improving fisheries control activities. IMS continues to be a major operational tool for an increasing EFCA community with nearly 1 450 users, making available more than 19.6 billion vessel related messages.



On 27 November 2023, EMSA welcomed a delegation of 50 Frontex standing corps, as part of their training programme, to learn about the services EMSA offers in support of the wider coast guard community, including Frontex itself.



On 17 January our Executive Director Maja Markovčić Kostelac represented EMSA at the presentation of the Ocean Guardian, Ocean Protector and Ocean Sentinel – the three new patrol vessels chartered by the European Fisheries Control Agency.



In Ravenna, EMSA and EFCA successfully installed oil pollution response equipment on board the Ocean Sentinel. This marked the first of three EFCA chartered vessels to receive equipment, thereby expanding the collective capacity to respond to oil pollution in EU waters.

2023 also marked the importance of the Automated Behaviour Monitoring (ABM) as a key instrument for EFCA not only allowing the detection of Illegal, Unreported and Unregulated (IUU) activities but also the efficient allocation of the appropriate resources for fisheries monitoring and control. As of December 2023, there were 551 ABM configurations in operation and more than 8 0000 alerts delivered during the year.



## MARITIME ANALYSIS AND OPERATIONS CENTRE

EMSA supports MAOC (N) in its efforts to suppress illicit drug trafficking by sea and air, under a Cooperation Agreement that has been automatically renewed since December 2020. By providing a wide array of maritime monitoring and surveillance tools and services, the Agency effectively helps to counter narcotics operations. MAOC-N is an initiative by six EU member countries (France, Ireland, Italy, Spain, the Netherlands, Portugal) and the UK and is co-funded by the Internal Security Fund of the European Union. From when it became operational in 2007, MAOC-N has supported the seizure of over 360 tons of cocaine and over 670 tons of cannabis.

The global data coverage available via EMSA IMS-MAOC (N) assists in monitoring vessels of interest in the Atlantic Ocean and Mediterranean Sea. In 2023, for the first time, MAOC (N) provided financial support for the development of new IMS functionalities that will support all IMS communities.

## EXECUTIVE AND CORPORATE SERVICES

### Implementation of EMSA's 5-year strategy

This publication reports back on the fourth year of implementation of EMSA's 5-year Strategy for 2020-2024. The activities undertaken and completed by the Agency correspond to the strategic priorities identified in the areas of Sustainability, Surveillance, Safety, Security and Simplification - the "5 S" - as well as Digitalisation and Technical Assistance.

### Administrative Board meetings

In 2023, EMSA's Administrative Board played a crucial role in overseeing the Agency's operations and the work of the Executive Director. Comprising representatives from all EU Member States, Iceland, Norway (EFTA countries), and four Commission representatives, along with four non-voting members from diverse maritime sectors, the Administrative Board held three ordinary meetings during the year. The March meeting took place via video conference, while the June and November meetings were conducted at the Agency's Headquarters in Lisbon. Preceding each session, the Administrative and Finance Committee convened to scrutinise technical, financial, and administrative matters, providing recommendations and opinions in line with its mandate. This allowed the Administrative Board to concentrate on strategic orientations for EMSA's activities and engage in substantive discussions, ensuring effective supervision and guidance in the pursuit of the Agency's objectives.

## Extension of the term of office of the EMSA Executive Director

2023 was an important year for the management of the Agency. The excellent performance of the Executive Director, Ms Maja Markovčić Kostelac, in her first years was confirmed by the extension of her term of office, in line with the proposal by the European Commission. The exemplary role that the Agency played under her leadership was acknowledged, particularly during the COVID pandemic and ongoing crisis in Ukraine.

## Chairmanship of the EMSA Administrative Board

The November 2023 EMSA Administrative Board meeting marked the conclusion of Mr Andreas Nordseth's tenure as Chairman. With a longstanding representation for Denmark at the Administrative Board and serving as Chairman since December 2017, Mr Nordseth led the Board through numerous accomplishments that significantly benefited the Agency's governance, stakeholders, and staff.

Following their unanimous election in November 2023, Mr Wojciech Zdanowicz (PL) and Mr Benito Nunez Quintanilla (ES) assumed the roles of the new Chairman and Deputy Chairman, starting from 5 December 2023. Simultaneously, during the same Administrative Board meeting, Mr Eric Banel (FR) was appointed as the Chairman of the Administrative and Finance Committee, signalling a smooth transition in leadership roles within the organisation.



Picture taken during the 68<sup>th</sup> Administrative Board meeting of EMSA, held on 14-15 November. From left to right: incoming chairperson, Wojciech Zdanowicz, Director of the Maritime Office in Szczecin at the Polish Maritime Administration; Maja Markovčić Kostelac, EMSA's Executive Director; outgoing chairperson, Andreas Nordseth, Director General of the Danish Maritime Administration; deputy chairperson, Benito Nuñez Quintanilla, Head of the Spanish Maritime Administration.

## Quality & environmental management

The Agency's quality management system ensures that stakeholder needs and expectations are met, and that the quality of EMSA's services remain at a consistently high level.

The Agency's Integrated Quality and Environmental Management System (IQEMS) ensures that stakeholder needs and expectations are fulfilled and EMSA services are provided to a high level of quality and in an environmentally friendly manner. The certification by the external Certification Body (TUV Portugal) is the documented evidence of the effective implementation of the system.

The Agency has now achieved ISO certification for three Standards: ISO 9001 for Quality Management System, ISO 14001 for Environmental Management System and ISO 29993 for training services outside formal education. During 2023, certification was maintained and an internal audit was performed in preparation for the external audit annual verification scheduled for 2024.

In addition, EMSA is registered under the EU Eco-Management and Audit Scheme (EMAS) and has in place a dedicated environmental management system. This helps to ensure that the Agency not only endorses sound environmental management but also follows through on making continuous improvements. EMSA's commitment to environmental sustainability is evident through a comprehensive range of initiatives, embracing both operational changes and staff engagement in greening practices.



EMSA celebrated International Women's Day with a special conference on promoting gender balance and diversity in the maritime industry. The event, held on 8 March, was hosted by Stela Suils Cuesta, Regional Leader of Lean In Portugal, and was attended by EMSA staff members.

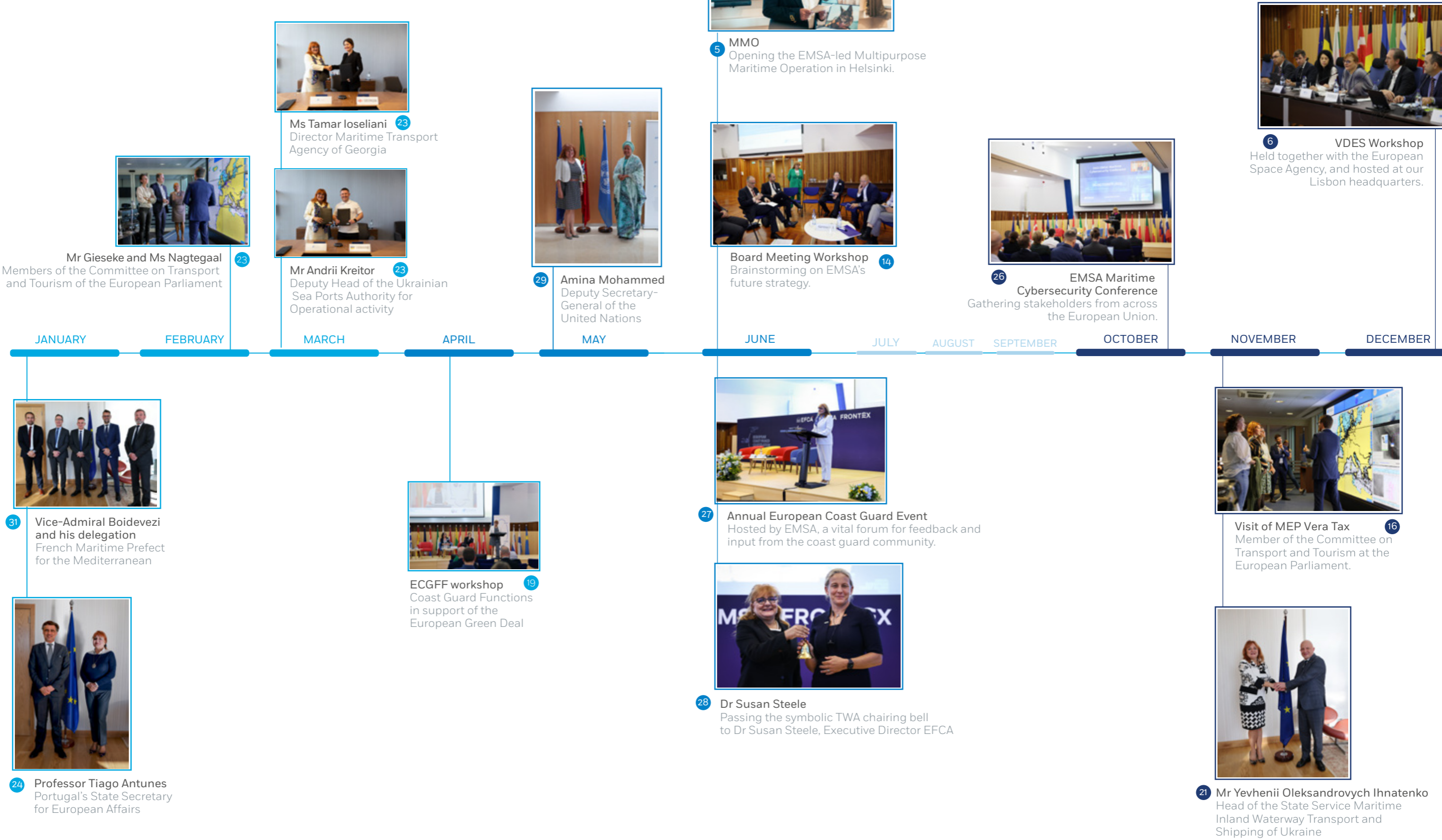
## Gender balance

EMSA continued its strong commitment to improving gender balance and equality in the maritime sector by continuing to implement actions from its Gender Action Plan for 2022-2025. Given EMSA's low turnover rate, the plan focuses on improving gender balance and equality in the long term at EMSA on a qualitative basis. This is being achieved through various actions such as awareness campaigns, outside activities challenging stereotypes, equality regarding working conditions and the promotion of EMSA and maritime careers.

Members of the EMSA Women's Network have assisted in the implementation of the Gender Action Plan through the very successful Speed Networking Initiative and Ambassador Programme which aim to attract women and the younger generation not only to EMSA, but to the transport, maritime and ICT sectors as well.

# 2023

Highlights timeline





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## ABOUT THE EUROPEAN MARITIME SAFETY AGENCY

The European Maritime Safety Agency is one of the European Union's decentralised agencies. Based in Lisbon, the Agency's mission is to ensure a high level of maritime safety, maritime security, prevention of and response to pollution from ships, as well as response to marine pollution from oil and gas installations. The overall purpose is to promote a safe, clean and economically viable maritime sector in the EU.



### Get in touch for more information

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