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Looking back on the events of the past year, it is evident that 2023 was a year filled with activity and success for EMSA. The demand for the Agency’s services, along with the call for their further development, underscored EMSA’s crucial role in the EU maritime domain. EMSA, true to its mandate, strove to deliver excellent services, contributing significantly to the benefit of the maritime sector.

In the face of current challenges, EMSA demonstrated its capacity to enhance safety, security and efficiency, while also preparing for future needs. This commitment is clearly outlined in the workplan designed for the upcoming year, and presented here in the EMSA Outlook 2024.

For 2024, EMSA anticipates another busy year and is poised to once again provide valuable services and solutions for the maritime domain. The competence and dedication of the Agency’s staff and management are integral to this success.

As the outgoing Chair, I want to express my sincere admiration and appreciation to the Agency and its staff. Serving as Chair for the past six years has been an honour, allowing me to contribute to the facilitation of EMSA’s work.

To the new Chair, Wojciech Zdanowicz, and the entire EMSA team, I extend my best wishes for fair winds, smooth sailing, and continued success in all future endeavours.

Andreas Nordseth
Former Chairman of the Administrative Board
The year 2024 presents itself as a year filled with both challenges and opportunities for EMSA. These encompass initiatives set to take effect under the European Green Deal, the dynamic landscape of autonomous shipping (MASS), the finalisation of the works on the new EU Maritime Safety Package and EMSA Regulation, and the significance of the human element can certainly not be overlooked.

As incoming Chair of the EMSA Administrative Board, I am confident that EMSA is well-prepared to navigate through the complexities of this demanding year. It is crucial for EMSA to provide support to the EU industry, EU Member States, and the European Commission in steering through these challenges safely. A glimpse into the EMSA Outlook 2024 reveals the planning and dedication of its exceptional staff.

This marks my first opportunity as the newly elected Chair of the EMSA Administrative Board, and it is indeed an honour to guide the board smoothly and support EMSA in executing its plans for 2024. The atmosphere of openness and cooperation will be integral to our collective success. I would also like to express my appreciation to the outgoing Chair, Mr Andreas Nordseth, for his excellent six years of leadership.

Wojciech Zdanowicz
Chairman of the Administrative Board
As we embark on a new year, I am delighted to welcome you to the latest edition of our EMSA Outlook publication. Our plans for 2024 are not just outlines, they are a testament to our commitment to contribute to a future of maritime excellence.

Our strategic priorities, rooted in the 5 S – sustainability, surveillance, safety & security and simplification – along with the cross-cutting strands of digitalisation, technical assistance and strategic support, form the foundation of our endeavours. These priorities align with the European Union’s vision for a sustainable and digital maritime domain, and particularly as regards the ambitious goal of making Europe climate neutral by 2050.

Under the European Green Deal’s Fit for 55 package, EMSA stands at the forefront of reinforcing the EU’s efforts in the maritime transport sector. The extension of the Emissions Trading System to maritime, effective from January 2024, marks a significant milestone. And, we stand ready to provide effective tools for monitoring and enforcement, ensuring a seamless transition. We will continue our outreach programme guiding our stakeholders in the use of our tools. Similarly, through FuelEU maritime, EMSA will support the transition to renewable and low-carbon fuels as well as to substitute sources of energy. By releasing further studies, our support will also help to strengthen the uptake of alternative fuels.

Three years ago we published the first European Maritime Transport Environmental Report, which was a vital contribution to the regulatory frameworks that translated the European Green Deal in practice. This year we will issue the second edition of the report – EMTER 2.0 – providing an updated overview of the environmental status of maritime transport and thereby a tool to track our progress towards a sustainable future.

In 2024 EMSA will continue its work on a wide range of maritime safety and security topics. Particular attention will be paid to the safety aspects of innovative developments that are taking place in the maritime field: autonomous ships (MASS) and cleaner propulsion technologies. In addition, a new study will be carried out on the identification of specific requirements for seafarer training on ships using alternative fuels.

The Agency will continue to address safety concerns and challenges which came out of the first European Maritime Safety Report (EMSAFE) published in 2022, including the evacuation of large passenger ships, fishing vessels, fires on containerships and the uptake of improved international steering and manoeuvring standards. With the unprecedented uptake of technology and digitalisation in the sector, cybersecurity is more relevant than ever. Therefore, in 2024 cybersecurity will be incorporated in the ISPS-based security inspections.

In the surveillance domain, we are maximising resource efficiency and enhancing interoperability through the Common Information Sharing Environment (CISE). Surveillance systems, bolstered by Earth Observation products and Remotely Piloted Aircraft services, will also continue to play a pivotal role in supporting Member States in various maritime surveillance activities.
Our simplification efforts revolve around advancing the European Maritime Single Window environment, preparing for its full application in August 2025. By enhancing SafeSeaNet capabilities, we aim to facilitate uniform reporting across all EU ports, reducing administrative complexities.

As we navigate the challenges and opportunities of the approaching year, I express my gratitude to the Administrative Board for their ongoing support, and particularly to our outgoing Chairperson, Mr Andreas Nordseth, for his exemplary leadership. I also extend a warm welcome to the incoming Chairperson, Mr Wojciech Zdanowicz from the Polish Maritime Administration and sincerely wish him a successful term.

This is also an opportune moment to appreciate the efforts of EMSA’s staff, whose contributions and dedication make our achievements possible. Looking ahead to 2024, we anticipate reaching new milestones, drawing on over 20 years of accumulated expertise and experience, in partnership with our many stakeholders.

Maja Markovčić Kostelac
Executive Director

Picture taken during the 68th Administrative Board meeting of EMSA, held on 14 and 15 November. From left to right: Incoming chairperson Wojciech Zdanowicz-Director of 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 Chair Benito Nuñez Quintanilla-Head of the Spanish Maritime Administration
Executive summary

The EMSA Outlook 2024 outlines the Agency’s strategic priorities for the upcoming year. Aligned with the overarching multi-annual strategic goals, these key focus areas are derived from the officially endorsed Single Programming Document (2024-2026), a robust roadmap adopted by EMSA’s Administrative Board in November 2023.

Structured around seven thematic categories, this publication places a strong emphasis on Sustainability, Safety & Security, Surveillance, and Simplification, reinforcing the Agency’s commitment to addressing the associated fundamental maritime challenges. Complementing these core areas, is the Agency’s focus on three cross-cutting themes – Digitalisation, Technical Assistance and Strategic Support.

This strategic framework steers EMSA’s operational initiatives and serves as the structure for this publication. Each chapter provides a comprehensive overview of the Agency’s efforts within these domains. Below, we offer a preview of some noteworthy highlights for the year ahead.
EMSA is dedicated to minimising the environmental impact of the EU maritime sector. Serving as a facilitator and technical hub, the Agency actively supports EU priorities, including decarbonisation, smart mobility, sustainable alternative fuels, and zero pollution goals. Notable contributions involve backing the European Green Deal, particularly the ‘Fit for 55’ package, and aiding in the implementation of the FuelEU Maritime Regulation and the extension of the Emissions Trading Scheme (ETS) to maritime transport. Air pollution, underwater noise and marine litter are also on EMSA’s agenda.

THETIS and its associated modules will continue to be developed as valuable implementation support tools, addressing compliance in areas like sulphur, port reception facilities, and the monitoring, reporting, and verification of CO₂ emissions, with the main workstream for the new tool in support of the extension of the ETS to maritime transport and FuelEU Maritime.

In 2024, EMSA will conduct additional studies on synthetic fuels and explore the potential of nuclear energy for shipping, with the aim of filling knowledge gaps and supporting the green transition. The Agency will continue to provide its contribution in the European Sustainable Shipping Forum and the European Ports Forum. Internationally, support to the Commission and the Member States in the ongoing discussions on the environmental agenda at IMO, especially in reducing greenhouse gas emissions, remain a priority.

The upcoming European Maritime Transport Environmental Report (EMTER 2.0) in 2024 will provide a comprehensive overview of the current environmental status of maritime transport.

EMSA’s pollution response services play a crucial role in protecting the European coastline from ship and offshore oil and gas spills. These services, available to Member States, involve a network of chartered vessels equipped for pollution response. In 2024, the services will expand further, adding intermediate storage capacity for more efficient recovery operations at sea and HNS dedicated equipment in the EAS stockpiles.

To enhance pollution detection and monitor clean-up operations, EMSA’s response vessels are increasingly equipped with lightweight Remotely Piloted Aircraft Systems (RPAS). In 2024, 13 vessels of the network will be equipped with RPAS. EMSA will manage pollution response services, offer training, and start the development of a simulation tool for oil pollution response operations.

EMSA’s pollution monitoring services include CleanSeaNet and RPAS. CleanSeaNet uses satellite imagery to identify ship-sourced discharges, potential polluters and to support response operations in case of large accidental spills. In 2024, the service will be expanded to include oil spill classification and quantification reports, which are useful when supporting pollution response operations.

RPAS equipped with gas sensors make it possible to measure sulphur emissions from passing ships, thereby helping to detect non-compliant vessels. This information is crucial for ensuring compliance with sulphur limits. In 2024, EMSA will sign new contracts for operations in 2025 enabling the monitoring of nitrous oxide emissions.
EMSA offers multipurpose maritime surveillance using Remotely Piloted Aircraft Systems (RPAS) to EU agencies and Member State authorities engaged in coast guard functions. Currently, there is a strategic shift towards regional deployments, aiming to establish permanent installations serving multiple national administrations. These deployments support various maritime surveillance aspects, including search and rescue operations, environmental observations, and vessel emission measurements.

During incidents involving oil spills, lightweight RPAS are used from onboard EMSA’s standby oil spill response vessels, enhancing flexibility for monitoring and detecting pollution at sea. Upon request, these may also be integrated with Member States pollution response vessels. Light RPAS services will be provided to EFCA, contributing further to sea-fisheries control in 2024. In 2024 new procurements will be launched with the aim to renew EMSA’s portfolio of RPAS used for maritime surveillance purposes, expected to be deployed to operations in 2026. EMSA is also exploring the operational value of cutting-edge RPAS platforms, such as High-Altitude Pseudo Satellites (HAPS), contingent on technological advancements.

Satellite-based services and surveillance innovation play a pivotal role in EMSA’s maritime surveillance strategy. Earth Observation satellites are employed for routine, cost-effective, and reliable maritime surveillance. EMSA will also continue to provide Satellite-AIS data services to users to monitor vessels globally in near real-time.

The Copernicus Maritime Surveillance Service, implemented by EMSA, provides Earth Observation products supporting fisheries control, maritime safety, security, customs, law enforcement, and marine pollution monitoring. In 2024, efforts will focus on strengthening links with Copernicus R&D projects within the framework of the Strategic Research Agenda of the EU’s Copernicus Programme.

The Agency will continue its collaboration with the European Space Agency (ESA) focusing on exploring the usability of new satellite-based sensors to enhance maritime safety and surveillance services.

The Common Information Sharing Environment (CISE) initiative, aimed at making EU maritime surveillance systems interoperable, is a key focus for EMSA. The Agency is actively involved in the transitional phase of CISE, supporting its full operationalisation. Efforts will be directed towards ensuring the preparedness of connected Member States, extending participation to other Member States and EU agencies, and promoting the comprehensive maritime surveillance benefits of the CISE network.
EMSA is dedicated to improving commercial shipping safety and marine equipment quality standards in collaboration with the European Commission. By leveraging technical expertise from Member States and industry, EMSA ensures a diverse perspective on safety issues, enriching outcomes. The Agency fosters stakeholder collaboration, commissions studies to support decision-making, and addresses uncertainties related to new technologies.

In 2024, emphasis will be on the safety aspects of innovative developments, such as cleaner propulsion methods and autonomous ships (MASS). EMSA will be introducing a pilot risk-based assessment tool for MASS and coordinating efforts on safety challenges of using ammonia for propulsion and the bunkering of biofuels, among others. EMSA will continue to address safety concerns identified in the first European Maritime Safety Report (EMSAFE) published in 2022.

Work on the Marine Equipment Directive (MED) will involve updating EU legislation on standards, providing the technical secretariat to the MARED group, and expanding the MED portal. The Agency will actively support the European Commission and Member States updating EU and IMO maritime safety standards and providing advice on technical issues, including those arising from market surveillance activities.

With regard to Port State Control, the support provided within the context of the Paris MoU contributes to the elimination of sub-standard shipping. The Agency will also provide technical support to implement the modifications introduced by the amendment of the PSC Directive. Finally, the coordination of the IMO Correspondence Group on PSC will promote the harmonisation of procedures at international level, so facilitating the operation of EU ships globally.

EMSA manages Equasis, an online global database providing details on global Port State Control inspections and ship and company-related information. The Agency will support database operations, publish an annual statistical report, and aims to enhance the user experience in 2024 with a dynamic dashboard. Efforts will include updating data sharing agreements with data providers and the visual appearance of the website.

Recognising the human element’s crucial role, EMSA will continue to contribute actively to the planned revision at IMO of the STCW Convention and Code. In 2024, a new study will address the competences needed for seafarers for ships using alternative fuels. EMSA will also publish the annual statistical review of the European labour market, offering insights for policymakers, ship owners, and operators.

EMSA’s role in technical investigations into marine casualties involves developing a uniform approach, providing technical support, and running the EMCIP database. The Agency analyses EMCIP data to identify lessons at EU level, enhancing safety indicators, and facilitating data dissemination globally. In 2024, EMSA will continue providing underwater survey services for serious casualties and explore ways to streamline operational support to accident investigation bodies.

In the area of security, EMSA contributes to assessing and improving the implementation of EU maritime security legislation. The Agency assists with security inspections, maintains reporting modules, and supports the accreditation process for national security inspectors. Over the course of the year, EMSA will provide practical guidance, support the implementation of EU and international maritime security legislation, and enhance cybersecurity awareness. A dedicated Task Force focuses on understanding cyber threats, engaging stakeholders, and assessing the need for additional guidance to address cybersecurity challenges.
CHAPTER 4

SIMPLIFICATION

EMSA supports greater simplification through a variety of digital services designed to enhance maritime operations. Efforts in 2024 will focus on leveraging technology to enhance information exchange, streamline reporting and further promote the digitalisation of maritime operations.

The quality of ship and ship-related information is crucial for maritime digital services. EMSA will continue supporting Member States in implementing and testing the SafeSeaNet system, with a focus on version 5 in 2024. A long-term archive of SafeSeaNet data will be created for extended analysis using cloud-based solutions and advanced data analysis techniques.

SafeSeaNet will also undergo further upgrades to offer facilitation services to coastal stations for ship-to-shore reporting. The goal is to simplify reporting obligations, reuse information, and consolidate SafeSeaNet as a central platform for maritime information exchange.

EMSA will provide technical assistance to the EUREKA Consortium for modernising the Ship Reporting System in the Adriatic Sea (ADRIREP). This involves integrating Vessel Traffic Service (VTS) systems, operational procedures, and amendments to IMO resolutions.

EMSA will promote modern technologies for ship reporting through operational tests with coastal stations and the shipping industry. The aim is to achieve a harmonised approach to ship reporting in the EU, potentially with a single graphical user interface.

Central reference databases will allow consistent and harmonised information sharing on organisations, port facilities, ship identification, and certificates among Member States, EU bodies, and other user communities.

Further development of the Traffic Density Map service and other data consolidation services will support analysis of ship movements, identification of trends and risks, and the implementation of EU environmental policies.

EMSA will cooperate with EUROSTAT to use SafeSeaNet data for early statistical indicators in maritime activities. A cooperation agreement in 2024 will define the support and services EMSA provides to EUROSTAT for producing relevant maritime statistical information.

Technical specifications will be developed to support the further evolution of SafeSeaNet in line with the European Maritime Single Window environment (EMSWe) Regulation. These specifications aim to ensure interoperability between national SafeSeaNet systems and Maritime National Single Windows.

EMSA is also supporting the shift towards digitalisation with a voluntary eCertification platform, aiding Member States to digitalise STCW Certificates. In 2024 the Agency will implement the first phase of the project, offering a secure, accredited and transparent means of signing and sealing eCertificates for seafarers. The platform centralises efforts to develop, host, and operate a state-of-the-art system, promoting efficiency gains and reducing the administrative burden for stakeholders.
Integrated Maritime Services (IMS) will continue to be enhanced with additional customised features, functionalities, data sets and individual services in line with the evolving requirements of the growing user communities. Collaboration through webinars, hybrid training and the EMSA Academy will drive further developments in 2024.

Technological upgrades to IMS will enhance performance, particularly benefiting users with low internet bandwidth. New services, responding to specific Vessel Traffic Monitoring & Information System (VTMIS) needs will be delivered through IMS toolboxes to various Member State authorities.

New Automated Behaviour Monitoring (ABM) algorithms, including near real-time, historical and ‘always-on’ services will enhance analytical and awareness capabilities. The development of historical and combined ABM algorithms aims to provide insights into anomalous situations for port call verifications.

Continuous development of IMS situational awareness functionalities and services, integrating new data sets, will support various communities, introducing Artificial Intelligence (AI) services based on innovative solutions. The application of AI and Machine Learning in IMS will standardise the AIS destination message, significantly improving vessel traffic predictability. AI and Machine Learning techniques will be used for strategic and analytical purposes, aiding incident reporting, risk assessment, and early warning on potential dangers.

Interfaces and standards for voluntary coastal radar picture provision will be established, allowing Member States to benefit from processing capabilities of ABM algorithms across both radar and AIS traffic pictures.

The expanded EMSA Maritime Analytics Tool (EMAT) will offer stakeholders analytical capabilities, supporting monitoring of SafeSeaNet reporting obligations and improving maritime safety risk assessments through combined data sets.

EMSA’s Maritime Support Services (MSS) functions as the primary contact point for the European Commission and Member States requiring assistance in maritime accidents or events necessitating EMSA services, such as pollution or search and rescue cases. The MSS provides 24/7 helpdesk services and monitors EMSA ICT maritime applications. As the central hub for vessel traffic data, the MSS analyses and provides reliable data, aiding in defining recovery policies during crises like the COVID-19 pandemic.

The MSS will continue to monitor global maritime traffic, offering periodical and ad-hoc reports related to EU-imposed sanctions and crisis impacts, exemplified during Russia’s military aggression against Ukraine. Automatic warning services for vessels of interest are being transformed into self-service tools for authorised users, reducing manual intervention.

In line with the European Commission’s proposed new mandate for EMSA, the MSS aims to evolve into a maritime awareness centre, aligning with the European Commission’s Emergency Response Coordination Centre (ERCC) mandate. This envisaged centre, subject to inter-institutional negotiations, is anticipated to be the primary support hub for the Commission and Member States during maritime crises like the COVID-19 pandemic and geopolitical events such as Russia’s aggression against Ukraine.
The learning services provided by the Agency through the EMSA Academy contribute to build capacity at national level and support harmonised implementation and enforcement in the EU and beyond, thereby fostering safety, security and sustainability.

Following a bottom-up approach to align the learning services offered to the Member States’ needs, in 2024 the EMSA Academy’s catalogue will include four common core curricula, six part-time courses and eight short courses.

State-of-the-art tools, such as MaKCs, EMSA’s Learning Management System (including the national extensions for Member States that requested such a service and the ‘User Interface Language Pack’, enabling the translation of the National Extensions’ interface) and the Virtual Reality Environment for Ship Inspections (VRESI) will continue to be used and further enhanced, thereby ensuring an enriched learning experience.

In addition, the Agency may explore the possibility of offering learning services against fees to a wider stakeholder community including relevant industry.

The projects supporting countries sharing a sea basin with the EU will continue to be a vehicle to export EU solutions and work towards the approximation of standards in the Mediterranean Sea, Black Sea and Caspian Sea regions.

EMSA’s visits and inspections continue to be a key tool for improving maritime safety, security and sustainability, through the identification of strengths and weaknesses in the implementation of EU law. Combined with the horizontal analyses carried out on the findings established during the visits, the Member States and the European Commission gain a clear picture of where additional effort would be beneficial or changes to EU law may be desirable.

In 2024, EMSA visits to Member States will cover various legislative acts, including the safe loading and unloading of bulk carriers, passenger ship safety, and port reception facilities for waste delivery from ships.

EMSA will continue to conduct inspections in third countries supplying seafarers to EU Member States flagged ships, ensuring compliance with the IMO’s Convention on Standards of Training, Certification, and Watchkeeping (STCW Convention). These inspections contribute to a level playing field for seafarer standards in the EU and enhance ship safety. In 2024, EMSA aims to conduct eight missions related to STCW visits and inspections.

The STCW information system managed by EMSA contains objective and comparable information on seafarers holding EU certificates/endorsements.

More than 50 classification societies worldwide develop and apply technical standards to ship design, construction, and survey. Eleven of these organisations are recognised at the EU level and EMSA regularly inspects them. The reports submitted by EMSA guide the European Commission in assessing these Recognised Organisations every two years, enabling corrective measures and policy decisions to enhance certification quality. In 2024, EMSA is planning to conduct up to 20 inspections of Recognised Organisation inspections, in alignment with the European Commission’s programme. EMSA will also support international discussions on remote surveys and inspections.
Multipurpose Maritime Operations (MMO) will continue across Europe in 2024, fostering strengthened cooperation on coast guard functions to the benefit of the participating Member States.

CHAPTER 7

STRATEGIC SUPPORT

In the upcoming year, EMSA will leverage its diverse range of services to ensure financial efficiency and operational effectiveness, benefiting other EU stakeholders through collaborative experiences and shared contributions.

EMSA remains committed to providing various services through bilateral cooperation agreements to EU bodies and stakeholders with maritime-related functions, supporting their overarching objectives. Recipients of these services include key organisations such as the European Fisheries Control Agency (EFCA), European Naval Forces (EUNAVFOR Atalanta and EUNAVFOR Med), European Union Agency for Law Enforcement Cooperation (Europol), the European Border and Coast Guard Agency (Frontex), the Maritime Analysis and Operations Centre – Narcotics (MAOC (N)), and the Emergency Response Coordination Centre (ERCC). The ongoing support to the ERCC will persist within the framework of the anticipated new Working Arrangement between EMSA and the European Commission’s DG ECHO.

In the realm of EU-level coast guard cooperation with EFCA and Frontex, EMSA will continue providing Remotely Piloted Aircraft System (RPAS) services and advocate for the collaborative sharing of resources. Specifically, EMSA plans to equip one of EFCA’s chartered vessels with RPAS and SATCOM services, focusing on pre-boarding activities and supporting EFCA’s Joint Deployment Plans. The Agency will also explore opportunities to support some of the Multipurpose Maritime Operations (MMO) organised by EFCA and Frontex by offering its RPAS services to Member States and Agencies operational under the MMO provided the necessary conditions are met.

Building on the insights gained from the first EMSA-led MMO in the Central and Eastern Baltic Sea in 2023, EMSA is set to organise another MMO in 2024. This operation will be conducted in collaboration with identified Member States, emphasizing coast guard functions within EMSA’s mandate. The specifics, including modalities, duration, and assets, will be discussed and agreed upon with the relevant co-organising authorities.
EMSA acts to lessen the environmental impact exerted by the maritime sector in the EU. In its role as facilitator and technical hub, the Agency supports the EU’s priorities in the areas of decarbonisation, smart mobility, sustainable alternative fuels, ship energy efficiency and carbon intensity, accelerated use of on-shore power supplies, protection of biodiversity and zero pollution ambitions.

EMSA offers expertise in the field of environmental protection, helping the European Commission and EU Member States to address a wide variety of ship-sourced water and air pollution. In the year ahead, the Agency will be further contributing to the European Green Deal – a set of policy initiatives by the European Commission with the overarching aim of making Europe climate neutral by 2050 – in particular, supporting the implementation of the ‘Fit for 55’ package which encompasses the Zero Pollution Action Plan, the FuelEU Maritime Regulation, the Alternative Fuel Infrastructure Regulation and the extension of the Emissions Trading System (ETS) to maritime transport.

With the new legislative framework in place and its two pillars of the extension of the ETS to maritime transport and the FuelEU Maritime regulation, the Agency is on the front line to support their implementation and enforcement, including through the development of relevant tools. Implementation support tools will continue to be developed through THETIS and its associated modules which address compliance with rules in the areas of sulphur, port reception facilities, ship recycling, the monitoring, reporting and verification of CO₂ emissions as well as ETS and FuelEU Maritime.
In the legislative arena, in addition to the initiatives listed above, assistance in 2024 will be directed towards discussions related to air pollution, including the revision of the Ship Source Pollution Directive, greenhouse gas emissions, marine litter including container loss and plastics, port reception facilities, liability and compensation, ship-source pollution, ship energy efficiency and carbon intensity, ship recycling, sustainable alternative fuels and technologies and cleaner power technologies and underwater radiated noise.

Through the FuelEU Maritime Regulation, the European Commission – with EMSA’s assistance – is aiming to increase the use of sustainable alternative fuels in European shipping and ports by addressing market barriers and uncertainty over which technical options are market-ready. Coming on the back of the studies on biofuels and ammonia released in 2022, and hydrogen and wind-assisted propulsion released in 2023, EMSA will take forward two additional studies in 2024 focussing on the use of synthetic fuels for shipping and on the potential of nuclear energy for shipping.

Despite hurdles like low energy density and distribution costs, hydrogen-fueled vessels may find a niche in short-sea shipping, leveraging land-based experience for a smooth transition.

In other environmental areas, EMSA will also follow up on the study on underwater radiated noise assisting Member States by assessing the level of underwater noise at national and regional level with the help of sound maps. In 2024, results from the NAVISON project (Modelling of Continuous Underwater Radiated Noise (URN) from Ships) will be made available.

The Agency will continue to act as technical secretariat of the European Sustainable Shipping Forum which has been providing a platform since 2013 for structured dialogue among maritime industry stakeholders and the European Commission in order to address the environmental sustainability challenges confronting the EU maritime transport sector. Support will also be given to the Sustainable Ports sub-group of the European Ports Forum which brings together both trade associations and national authorities to exchange information and provide advice on port-related matters.
On the international front, EMSA will continue to contribute to the wide-ranging developments at IMO including the implementation of the 2023 IMO Strategy on the reduction of GHG emissions from ships. In particular, this will involve supporting the development and implementation of carbon intensity and alternative fuel regulations, mid-term measures, guidelines and standards for shipping, as well as a focus on the corresponding safety, technological and operational challenges. The upcoming work on alternative fuels and technologies – particularly on developing technical requirements and standards for use – will be critical to their uptake at both global and EU level.

The second edition of the European Maritime Transport Environmental Report (EMTER 2.0) will be released in 2024 in cooperation with the European Environmental Agency (EEA). This report offers a comprehensive overview of the current status of maritime transport and its impact on the environment. It may feed into the planned work by the European Commission particularly as regards the implementation of the FuelEU Maritime regulation and the extension of the ETS to maritime transport.

**OPERATIONAL POLLUTION RESPONSE SERVICES**

EMSA offers a range of pollution response services to protect the areas in and around the European coastline. Various options are available to Member States on request via the European Commission’s Emergency Response Coordination Centre, which is run by the Directorate General for European Civil Protection and Humanitarian Aid Operations (DG ECHO). These can be selected based on the particular characteristics of the spill and the type of pollutant involved.
Specialised pollution response equipment is available for use by Member States through EMSA’s EAS, which also includes near-shore equipment deployable by non-dedicated vessels. The flexibility of the service enables a swift response to evolving risks.
EMSA’s services target marine pollution from both ships and offshore oil and gas installations, and are intended to top up the capacity of coastal states in the event of a major spill at sea. The services are also available to countries sharing a regional sea basin with the EU.

EMSA pollution response services are based on a network of chartered commercial vessels which have been adapted and equipped to offer pollution response services. These vessels are on standby all year long and are positioned around the European coastline. The various services take into account the existing response capacities of the Member States, in order to offer a quick response. While mechanical recovery of oil remains the main response strategy, some vessels are also equipped to use dispersants and these are available from stockpiles located in several spots along the EU coastline.

To diversify the response means, several Equipment Assistance Services (EAS) have been established, providing Member States with specialised response equipment – including near-shore equipment – which can be used by non-dedicated response vessels. The EAS arrangements for the North Sea and Baltic Sea are expected to become operational in 2024 following contract signature in 2023 and procurement will be relaunched for Southern Europe taking into consideration increased risks and needs in the area, to replace the non-renewable contracts expiring in 2025. The stockpiles will be reinforced with specialised HNS equipment.

In addition to this, EMSA is also working to establish a large intermediate storage capacity to improve the efficiency of response operations when recovering oil at sea. This complementary service would involve the use of a vessel habitually engaged in ship-to-ship transfer operations. Then, during a major incident, a request for assistance could activate the vessel arrangement at short notice in order to support recovery operations by providing intermediate storage. The first at-sea intermediate storage service is expected to become operational in 2024 for the North Sea and Baltic Sea, subject to the successful outcome of the procurement procedure.

In order to enhance pollution detection and monitor clean-up operations, EMSA’s response vessels can be equipped with lightweight Remotely Piloted Aircraft Systems (RPAS) offering a live video stream to help identify areas of pollution and provide indications of the thickness of the oil slicks detected. In 2024, 13 vessels will be equipped with RPAS.

In the year ahead, EMSA will continue to manage these pollution response services, offering training as necessary to ensure a high level of readiness at all times and kick off the development of a prototype for a tool to simulate oil pollution response operations at sea. Also, as part of ongoing cooperation on coast guard functions, EMSA will take an active part in supporting international multi-partner, multi-purpose exercises at sea with Member State authorities.

Both of EMSA’s MAR-ICE and MAR-CIS services will continue to offer access to expertise in the event of a chemical spill whether through specialised chemical experts and/or chemical substance datasheets.
Europe-wide oil spill monitoring and polluter identification is made possible through a combination of different services offered by EMSA to EU and EFTA coastal states to support their users in identifying illegal discharges from sea-going vessels.

CleanSeaNet is the near real time European satellite-based oil spill monitoring and vessel detection service, set up and operated by EMSA since 2007. It analyses satellite images to detect possible oil on the sea surface, to identify potential polluters and to monitor the spread of oil during maritime emergencies.

The existence of the CleanSeaNet service serves as a powerful deterrent to would-be polluters and is available to all participating states. These include EU Member States and their overseas territories, candidate countries and EFTA/EEA states, as well as beneficiary countries participating in programmes of the European Commission, such as IPA (Pre-Accession Assistance), SAFEMED IV and the ENP-programme for the Black and Caspian Sea which have signed the conditions of use for the system. Each country has access to the service through a dedicated user web interface.

Rapid access is possible to a wide range of Earth Observation products based on Synthetic Aperture Radar (used for routine oil spill monitoring) and optical images (used mostly to support response operations linked with large accidental spills). In 2024, EMSA is extending the service to include the production of oil spill classification and quantification reports during emergencies, drawing on medium resolution optical sensors (e.g. Sentinel-2) to further support Member State authorities with their activities.
In addition to satellite imagery and vessel positioning data, Remotely Piloted Aircraft Systems (RPAS) are also particularly useful for the overall surveillance chain. At the request of one or more Member States, RPAS equipped with gas sensors can be deployed in areas of high traffic density to fly in the plume of passing merchant vessels to take measurements of their air emissions. This makes it possible to determine whether or not the vessel checked is using heavy fuel for propulsion exceeding the permitted sulphur limits, in which case coastal authorities will be alerted. These alerts are recorded in the THETIS-EU system and can lead to follow-up by inspectors at the ship’s next port of call.

In 2024, EMSA will take preparatory actions for activities planned in 2025 factoring in the planned expansion of sulphur emission control areas (SECA) in Europe under the Smart and Sustainable Mobility Strategy.

For incidents involving oil spills at sea, Member State authorities have the option of adding a lightweight RPAS to their own vessels or to use a quadcopter available on one of EMSA’s standby oil spill response vessels. These quadcopters are operated from onboard a vessel and allow for increased flexibility for monitoring and detection of pollution when responding to an incident at sea. In 2024, this service will be maintained through regular drills and expanded as far as technically feasible.
Unmanned aircraft coupled with satellite communication have taken maritime awareness to the next level, enabling real-time maritime information transmission from assets at sea to personnel on shore. EMSA offers a service based on Remotely Piloted Aircraft Systems (RPAS) which are free of charge to EU Agencies and Member State authorities executing coast guard functions for use in a whole range of maritime scenarios.

With the focus on regions of shared operational interest, the aim is to establish more permanent deployments, serving a broader array of national administrations across various function areas, and cater for multiple Member States per operation, enhancing regional cooperation. The Agency’s objective is to carry out these operations supporting Member States on a regular basis, encompassing all facets of maritime surveillance. From wide area monitoring for vessels and objects of interest, to identification of specific activities onboard of vessels, EMSA will offer support to Member States in a wide range of activities at sea, including search and rescue.

The Agency will also continue to offer the availability of RPAS services to EFCA as well as to offer participation in Multipurpose Maritime Operations in cooperation with EU agencies and Member State authorities. In 2024, EMSA’s Light RPAS and SATCOM services will be used from onboard one of EFCA’s chartered vessels to support fisheries control and compliance checks under EFCA’s Joint Deployment Plans.

In 2024 new procurement procedures will be launched with the aim of renewing EMSA’s portfolio of RPAS services used for maritime surveillance purposes. These procurements aim to ensure continuity of service, to integrate new operational requirements and to benefit from state-of-the-art technologies as concerns aircrafts and sensors. It is expected that these new capabilities will be available for deployment in operations for 2026.

Depending on technological advancements by industry, the Agency will also continue evaluating the operational added value of the very latest RPAS platforms (including High Altitude Pseudo Satellites - HAPS) which could optimise existing services and provide new capabilities.
EMSA’s portfolio of remotely piloted aircraft and the main services associated with each type

**Multipurpose maritime surveillance**

**Emissions monitoring & multipurpose maritime surveillance**

**Support to pollution response from vessels or in coastal areas**

**Multipurpose maritime surveillance**

**Emissions monitoring from vessels or in coastal areas**

**Multipurpose maritime surveillance**

**EMSA RPAS services across the EU**

**FRANCE**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** General directorate for maritime affairs, fishery & aquaculture (DGAMER)

**NORTH SEA (DENMARK)**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Royal Danish Navy, Customs, Fisheries Inspection

**GERMANY**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Federal Maritime and Hydrographic Agency

**BALTIC (ESTONIA, FINLAND & LATVIA)**
- **Mission:** Multipurpose Maritime Surveillance
- **Support to MMO Users:** Estonian Police and Border Guard Board, Finnish Border Guard, Latvian Coast Guard Service

**NORTH ATLANTIC**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Spanish SASEMAR, Spanish Customs, Portuguese General Directorate for Natural Resources, Safety and Maritime Services (DGRM/ANP)

**MEDITERRANEAN**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Italian Coast Guard, French Navy

**BAY OF BISCAY and RIVER LIMOUSIN**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Financed by EFCA

**ATLANTIC**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Spanish SASEMAR, Spanish Customs, Portuguese General Directorate for Natural Resources, Safety and Maritime Services (DGRM/ANP)

**CANARY ISLANDS**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Financed by EFCA

**MIDDLE EAST**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Financed by EFCA

**LITHUANIA**
- **Mission:** Emission Monitoring
- **Users:** Environmental Protection Department under the Lithuanian Ministry of Environment

**ANTIPOLLUTION SERVICES**

**NORTH SEA (DENMARK)**
- **Mission:** Emission Monitoring
- **Users:** Danish Ministry of Environment

**FRANCE**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** General directorate for maritime affairs, fishery & aquaculture (DGAMER)

**GERMANY**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Federal Maritime and Hydrographic Agency

**BALTIC (ESTONIA, FINLAND & LATVIA)**
- **Mission:** Multipurpose Maritime Surveillance
- **Support to MMO Users:** Estonian Police and Border Guard Board, Finnish Border Guard, Latvian Coast Guard Service

**NORTH ATLANTIC**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Spanish SASEMAR, Spanish Customs, Portuguese General Directorate for Natural Resources, Safety and Maritime Services (DGRM/ANP)

**MEDITERRANEAN**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Italian Coast Guard, French Navy

**BAY OF BISCAY and RIVER LIMOUSIN**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Financed by EFCA

**ATLANTIC**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Spanish SASEMAR, Spanish Customs, Portuguese General Directorate for Natural Resources, Safety and Maritime Services (DGRM/ANP)

**Canary Islands**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Financed by EFCA

**MIDDLE EAST**
- **Mission:** Multipurpose Maritime Surveillance
- **Users:** Financed by EFCA

**WHERE WE ARE FLYING**

**Multipurpose maritime surveillance**

**Emissions monitoring & multipurpose maritime surveillance**

**Support to pollution response from vessels or in coastal areas**

**Multipurpose maritime surveillance**

**Emissions monitoring from vessels or in coastal areas**

**Multipurpose maritime surveillance**

**EMSA Outlook 2024**

**DECEMBER 2023**
Earth Observation satellites offer a unique view of our oceans, seas, and coasts. Satellites, and their on-board sensors, provide routine, cost effective, reliable, and wide area maritime surveillance. In the event of a maritime emergency at sea, such as a large-scale oil spill or an incident requiring search and rescue, Member States can activate EMSA’s contingency plan through which Earth Observation products are supplied to support follow-up action.

Using new satellite-based technologies, EMSA will also deliver enhanced oil spill classification and quantification reports to aid the monitoring of substantial accidental spills. These reports, based on medium resolution optical sensors such as Sentinel-2, provide additional support for the activities of Member States during emergency situations.

Significant synergies and optimisation can be achieved when combining Earth Observation products with traditional surveillance means for pollution monitoring purposes and with new in situ surveillance capabilities such as those offered by RPAS.

In 2024, EMSA will continue to provide global Satellite-AIS services which offer the possibility of monitoring vessels worldwide in near real time. In combination with other Earth Observation services, this is also particularly useful for identifying ‘dark vessels’ (i.e. non-reporting vessels) and supporting their closer monitoring by surveillance authorities.

EMSA will continue to develop and test innovative artificial intelligence algorithms to analyse a wide range of datasets to extract maritime relevant elements (e.g. vessel detection, activity detection, feature detection, etc.) and automate alerting systems. These activities benefit all existing user communities of Earth Observation information, increasing the performance, reliability, and quality of the delivered products.

The Agency will also continue to cooperate with the European Space Agency (ESA) in the field of integrated space-based solutions by further leveraging the use of space-based assets and technologies for enhancing maritime safety and surveillance services. Together with ESA, EMSA will continue to explore the usability of new sensors in order to improve surveillance and emission monitoring capabilities, as well as to explore new data products observed from RPAS, HAPS and satellites.
The Copernicus Maritime Surveillance (CMS) Service implemented by EMSA provides Earth Observation products (satellite images and value adding products) to support a better understanding and improved monitoring of activities at sea across six function areas:

- **Fisheries control:** completing the integrated maritime picture through wide area surveillance using synthetic aperture radar (SAR) imagery; providing vessel detection services using correlation algorithms for the identification of potential inspection targets; provision of high-resolution SAR and optical imagery in support of specific operations. EFCA coordinates requests from Member States concerning fisheries control activities.

- **Maritime safety:** tracking objects at sea; vessel locating and identifying.

- **Maritime Security:** routine analysis of Earth Observation products enhancing the maritime picture for anti-piracy and maritime security purposes, particularly in hotspot areas for piracy and armed robbery or where vessel reporting information is scarce.

- **Customs:** detection of potentially suspicious vessels involved in trafficking or smuggling of goods; monitoring of ship-to-ship transfers; early warning and identification of criminal trafficking and smuggling.

- **Law enforcement:** the detection and tracking of suspicious targets; monitoring of shorelines; identification of vessels carrying out suspicious activities. Law enforcement may also include environmental compliance related activities.

- **Marine Pollution monitoring:** detection and tracking of illegal ship-source pollution; identification of possible polluters by combining information on oil spill detections with information on vessel positions and routes; monitoring the extent and spread of oil over time following a large-scale accident.

- **International cooperation in the maritime surveillance domain:** wide area surveillance with vessel detection and correlation of reporting and non-reporting vessels; high resolution imagery to provide detailed information on specific vessels and activities for intelligence-led operations; monitoring of shoreline activities. within a wide range of operational functions such as maritime safety and security, fisheries control, customs, law enforcement, marine environment pollution monitoring, and others.

This CMS component is part of the Security Service of the EU’s Copernicus Programme and comes under the direction of the Directorate-General for Defence Industry and Space with which the Agency has a Contribution Agreement until 2027. In 2024, the Agency will make efforts to forge links with Copernicus Research and Development projects in the scope of Copernicus Strategic Research Agenda (SRA) with the aim of generating additional operational benefits extending beyond the reach of CMS to all EMSA’s Earth Observation Services.
Surveillance

Monitoring human activity at sea, the CMS service supports end users in their maritime operations thanks to its global coverage provided by a wide range of SAR and optical satellites. The optical image shown here serves as an excellent example.

COMMON INFORMATION SHARING ENVIRONMENT

The Common Information Sharing Environment (CISE) is an EU initiative which aims to make European and EU/EEA Member State maritime surveillance systems interoperable, by giving all relevant authorities from different sectors the possibility on a voluntary basis of exchanging surveillance information when they need to conduct missions at sea. The authorities involved in the CISE network belong to several sectors: defence, customs, safety, fisheries, law enforcement, environmental, border control, and transport. Since April 2019, EMSA has been involved in the setting up and enabling of the transitional phase which will take the project forward by turning it into a fully operational system. As this objective nears, EMSA’s efforts will be focused on actively supporting the Member States already connected to ensure full preparedness, as well as on extending participation to other Member States and EU agencies so that they too can benefit from the CISE network.
CHAPTER 3
SAFETY AND SECURITY
EMSA aims to contribute to the improvement of the safety of commercial shipping and quality standards of marine equipment. It does this by working with the European Commission to ensure a high level of harmonised safety standards is in place and fit for purpose. The Agency is uniquely positioned to do this, as it brings together technical expertise from the Member States as well as that from industry. This allows each safety issue to be considered from a variety of different perspectives, thereby enriching the outcome, and making it more robust.

EMSA provides a platform where all stakeholders contribute to the implementation of the relevant legislation and harmonisation of standards in the EU. Studies commissioned by the Agency support the decision-making process for future actions in maritime safety as well as clarify safety related concerns in relation to new technologies. Particular attention will be paid in 2024 to the safety aspects of innovative developments that are taking place in the maritime field: cleaner propulsion technologies and the development of autonomous ships (MASS).

Regarding autonomous vessels, EMSA will offer a pilot risk-based assessment tool targeted to support Member State administrations to deal with MASS projects/applications in close cooperation with the relevant authorities and stakeholders. As for the use of cleaner technologies on board ships, EMSA has commissioned studies on the safe use of ammonia as fuel and the bunkering of biofuels. In addition, a new study is planned to begin in 2024 on the safety of hydrogen as fuel. On electrification, the work on the transport of Alternative Fuelled Vehicles, especially electrical vehicles, will continue in 2024, as well as on shore-side electricity, for which it has already developed safety guidance. Similarly, the Agency will continue to address safety concerns and challenges which came out of the first European Maritime Safety Report (EMSAFE) published in 2022, including the evacuation of large passenger ships, fishing vessels, fires on container ships and the uptake of improved international steering and manoeuvrability standards.

Work related to the Marine Equipment Directive (MED) will progress with EMSA making a technical review of the EU legislation on standards, safeguard clause cases submitted, supporting MED stakeholders, especially the MARED group, and expanding the MED portal. This portal includes the capability to implement the new electronic tag (e-tag), which might be replaced in the mid-term by a “digital passport”, and a mobile application with the possibility to scan e-tags.

In 2024, EMSA will proactively support the European Commission and the Member States in the work carried out at EU and IMO level in the field of maritime safety standards, putting forward initiatives where safety problems have been identified. Autonomous shipping, passenger ship safety, fire safety, container ship safety, life-saving appliances, steering and manoeuvrability standards, safety standards for the use of alternative sources of energy, and the International Safety Management (ISM) code are all areas in which EMSA will be active.

EMSA supports with its expertise and experience certain improvements in the relevant legislation as well as the proper implementation of Port State Control within the EU, thereby contributing to the elimination of sub-standard ships and fostering adequate safety and environmental protection standards for the ships coming to EU ports, as well
as aiming at a level playing field through harmonisation of standards and procedures. The support provided within the context of the Paris MoU also helps to bridge the gap between the EU and non-EU states. The coordination of the IMO Correspondence Group on Port State Control facilitates the harmonisation of procedures at international level, by doing so facilitating the operation of EU ships globally.

In 2024, EMSA will also assist the European Commission, if and where needed, with the interinstitutional discussions on amending the Flag State, the Port State Control and the Accident Investigation Directives. The Agency will assist the Commission on the evaluation of the Directive on the safety of fishing vessels, while continuing to provide training and safety analysis in relation to fishing vessels.

EQUASIS

EMSA provides the management unit of Equasis, which is an online worldwide database giving details on Port State Control inspections, ship and company-related information from classification societies and P&I (insurance) ship specific data. The information is supplied by Port State Control regions (Paris MoU, Caribbean MoU, Indian Ocean MoU, US coast guard, etc.) as well as by industry. EMSA will continue to support the day-to-day operation of the database and will also make efforts to improve and enhance the production of statistics, through a dynamic dashboard, while also updating the data sharing agreements in place with the various data providers. The objective remains to encourage quality shipping and eradicate substandard practices.
The human element is an important factor in maritime safety and encompasses the entire spectrum of human activities performed by ship crews, shore-based management, regulatory bodies and others.

Technical assistance to the European Commission and the Member States regarding the amendment, adoption and implementation of European and international legislation will be a key focus in 2024. In particular, a new study will be carried out on the identification of specific requirements for seafarer training on ships using alternative fuels. The results of this study, together with the outcome of the study on the identification of competences related to the operation of autonomous ships (MASS) concluded in 2023, will feed into the discussion on the revision of the STCW Convention and Code. In this way, the Agency will help to ensure a full consideration of the new challenges faced by those working in shipping.

The Agency will also continue to publish a statistical review offering a snapshot of the European labour market in terms of the number of seafarers holding valid certificates and endorsements, via information encoded in the STCW Information System. This review serves both EU Member States, the European Commission and the European Parliament for policy-making purposes, as well as ship owners and ship operators in terms of knowing the magnitude of manpower available in the EU to crew their vessels.

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**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

<table>
<thead>
<tr>
<th>EU COUNTRIES</th>
<th>182,207 MASTERS AND OFFICERS CERTIFIED BY EU COUNTRIES</th>
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<tbody>
<tr>
<td>TOP 5 EU COUNTRIES WITH THE HIGHEST NUMBER OF CERTIFIED OFFICERS</td>
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<tr>
<td>Greece (21,541)</td>
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<tr>
<td>Poland (19,533)</td>
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<tr>
<td>Norway (17,375)</td>
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<tr>
<td>Croatia (15,395)</td>
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<tr>
<td>Italy (13,546)</td>
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<tr>
<td>TOP 5 EU COUNTRIES WITH MOST OFFICERS RECOGNISED BY OTHER EU COUNTRIES</td>
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<tr>
<td>Poland (8,765)</td>
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<tr>
<td>Greece (6,640)</td>
<td></td>
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<tr>
<td>Romania (6,257)</td>
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<tr>
<td>Croatia (5,905)</td>
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<tr>
<td>Bulgaria (3,778)</td>
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<tr>
<th>NON-EU COUNTRIES</th>
<th>127,452 MASTERS AND OFFICERS FROM NON-EU COUNTRIES RECOGNISED BY EU COUNTRIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>TOP 5 EU COUNTRIES RECOGNISING THE HIGHEST NUMBER OF NON-EU OFFICERS</td>
<td></td>
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<tr>
<td>Malta (5,265)</td>
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<tr>
<td>Cyprus (4,834)</td>
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<tr>
<td>Portugal (3,625)</td>
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<tr>
<td>Norway (3,574)</td>
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<tr>
<td>The Netherlands (8,979)</td>
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<tr>
<td>TOP 5 NON-EU COUNTRIES WITH MOST OFFICERS RECOGNISED BY EU COUNTRIES</td>
<td></td>
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<tr>
<td>Philippines (47,713)</td>
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<tr>
<td>Ukraine (24,532)</td>
<td></td>
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<tr>
<td>Russia (17,865)</td>
<td></td>
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<tr>
<td>India (9,681)</td>
<td></td>
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<tr>
<td>Turkey (6,710)</td>
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</tbody>
</table>

**AVERAGE AGE**

EU COUNTRIES: 44 YEARS

NON-EU COUNTRIES: 41 YEARS

**GENDER**

EU COUNTRIES: 126,572 MALES | 84,453 FEMALES

NON-EU COUNTRIES: 104,652 MALES | 22,800 FEMALES

**OVERALL NATIONALITIES**

EU COUNTRIES: Philippines (52,986), Croatia (15,167), Italy (15,873), Norway (13,942), France (12,315), Poland (9,183), Greece (8,781), Russia (5,411), Romania (3,657), Turkey (2,777)

NON-EU COUNTRIES: Philippines (47,713), Ukraine (24,532), Russia (17,865), India (9,681), Turkey (6,710)

Source: EMSA
Technical investigations into marine casualties contribute to raising the overall level of maritime safety in Europe by helping to better understand circumstances resulting in loss of life, loss of ships and pollution. EMSA’s role in this process involves gathering the Member States’ accident investigation bodies, in the Permanent Cooperation Framework (PCF) on Accident Investigation, to develop and implement a more uniform approach as well as to provide technical support and training.

EMSA will continue discussing existing operational needs with the accident investigation bodies of the Member States, and will explore further ways to facilitate, streamline and expand provision of operational support to these bodies. In this regard in 2024, EMSA will continue providing upon request underwater survey services through remotely operated vehicles (ROVs) to accident investigation bodies and other authorities to support safety investigations related to very serious and serious casualties.

EMSA manages the EMCIP database of accidents, to which accident investigation bodies submit data. The information contained in this database is a valuable basis for conducting safety analyses the outcome of which will contribute to sound decision-making in all safety areas, as has been demonstrated in the past for matters relating to navigation accidents and accidents involving passenger ships, ro-ro ferries, container ships and fishing vessels. More than 3 000 casualties and incidents are recorded on average each year in the database.

In 2024, EMSA will continue analysing EMCIP data to identify lessons to be learned at EU level according to ship type, and will work to further provide safety analysis of available data developing relevant safety indicators. This will build on the studies released on lessons learnt from casualties, such as the study conducted on navigational accidents (collisions, groundings and contacts) involving passenger, cargo and service ships.

Through EMCIP, EMSA will assist accident investigation bodies and maritime safety authorities with the dissemination of investigation data at regional and global level, such as to the IMO’s Global Integrated Shipping Information System (GISIS) and the Helsinki Convention (HELCOM) Agreement, without any extra effort required from Member States.
Key figures from the 2014–2022 period as reported in the EMCIP and covering EU-27 and EEA

**CASUALTIES & INCIDENTS**: 23,814

**SHIPS INVOLVED**: 26,108

**SHIPS LOST**: 184

**INVESTIGATIONS LAUNCHED**: 1,090

**SERIOUS CASUALTIES**: 6,784

**VERY SERIOUS CASUALTIES**: 638

**POLLUTION EVENTS**: 542

**INJURIES**: 6,781

**FATALITIES**: 604

**MARITIME SECURITY**

Within the EU’s legislative framework, maritime security refers generally to preventive measures taken for protection against unlawful acts such as piracy, armed robbery, terrorism and maritime violence. EMSA assists the European Commission and the EFTA Surveillance Authority by helping them to assess the implementation of EU maritime security legislation in the Member States and to identify any changes that may be needed to improve the overall level of maritime security.

In 2024, EMSA will assist the European Commission and the EFTA Surveillance Authority with their maritime security inspections. EMSA will continue to maintain the reporting module in THETIS-EU, which assists Member State authorities when conducting maritime security inspections on board ships. The Agency will also assist the European Commission in the accreditation process for national security inspectors in line with EU legislation and will continue to work on security matters providing practical guidance to Member State authorities.

EMSA will continue to provide support for the implementation of EU and international maritime security legislation both through the EU’s MARSEC (maritime security) Committee as well as through the Stakeholder Advisory Group on Maritime Security chaired by the European Commission.

EMSA is facilitating a better understanding of the cyber threats and cyberattacks aimed at disrupting the EU maritime domain. EMSA will keep on enhancing maritime cybersecurity awareness and information exchange, notably through engagement with the main stakeholders (e.g., the EU Agency for Cybersecurity, ENISA) to provide technical support to the European Commission and Member States to better address maritime cyber risks. The Agency will further assess whether more guidance to Member States is needed to address cybersecurity challenges.
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, security, waste and cargo residues, and incident and accident reports. The various central databases that form part of the SafeSeaNet ecosystem help to improve data quality on the individual national databases.

Four central databases allow for the sharing of consistent and harmonised reference information and will continue to be maintained and enhanced in 2024: the Central Ship Database which receives and stores up-to-date information on ship identifiers and which serves as a reference for national systems will continue to be expanded to cover a broader range of ship data and ship types; 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; and, the Central Organisations Database for information on authorities and organisations.

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. In 2024, EMSA will continue to enhance this service providing more sophisticated features enabling users to better evaluate the overall shipping density and vessel movement patterns within selected areas. This service presents valuable benefits for safety and security purposes and also supports the implementation of existing and future EU environmental policies.

The SafeSeaNet system also accommodates the legal requirements laid down by two sets of EU rules: one on the registration of persons on board passenger ships; and the other on port reception facilities for waste from ships. Crew and passenger data must be registered digitally, using standardised administrative procedures (the National Single Window). This data can then be shared for the purpose of search and rescue operations in case of an emergency. As regards port reception facilities, the rules make sure that waste from ships is not discharged at sea but rather disposed of properly in ports with adequate waste reception facilities. Related waste information is transferred to the associated THETIS-EU inspection database.

SafeSeaNet will offer facilitation services to coastal stations for ship-to-shore reporting. Following the request from Croatia’s Ministry of the Sea, Transport and Infrastructure, on behalf of the EUREKA Consortium (Italy, Greece and Slovenia) as well as non-EU Member States (Albania, Bosnia and Herzegovina and Montenegro) and the approval of
the EMSA Administrative Board, EMSA has been providing Technical Assistance to the EUREKA Consortium for modernising the IMO-adopted Ship Reporting System (SRS) in the Adriatic Sea (ADRIREP).

The main objective of amending ADRIREP is to automatise reporting from ships, as much as possible, reducing ships’ administrative burdens while at the same time improving navigation monitoring through the use of modern technologies and tools. This includes integration with the Integrated Report Distribution (IRD) SafeSeaNet service developed under the Facilitation of Ship-to-Shore Reporting Pilot Project performed by EMSA. The Agency’s IRD will be upgraded to support the interface for electronic ship reporting and act as a platform for sharing reports received from the ships between coastal stations participating in the ADRIREP system. A modernised ADRIREP could serve as a test bed and example for other Ship Reporting Systems (SRS) in the EU to implement more modern systems.

Following the outcome of the study in 2023, EMSA will continue to cooperate with EUROSTAT to use SafeSeaNet data (plus other EMSA data such as detected port calls) to produce the Early Statistical Indicators used by the EU’s Statistical Office. A Cooperation Agreement is to be prepared in 2024 to define the type of support and services EMSA will provide to the EU’s Statistical Office to facilitate the production of relevant maritime statistical information.

The maps above show traffic density in EU waters as a whole (left) and by ship type (right) filtered in this instance by passenger ships.

**EUROPEAN MARITIME SINGLE WINDOW ENVIRONMENT**

Maritime transport operators face a wide range of legal reporting requirements each time a ship arrives at or leaves a port. To reduce this administrative burden, EMSA worked closely with the European Commission to replace the Reporting Formalities Directive with a new Regulation which was finally adopted in July 2019. The new Regulation, which is to be fully implemented by 2025, will bring together all reporting associated with a port call in a coordinated and harmonised way through the new European Maritime Single Window environment.
The Regulation (EU) 2019/1239 establishing a European Maritime Single Window environment (EMSWe) significantly increases the potential of digitalisation in many areas including port-call optimisation and is an important step forward for the implementation of the single market in the maritime sector based on digital solutions.

EMSA will continue to support the European Commission and the Member States in the elaboration of the common data set, the harmonised specifications and rules for the EMSWe ensuring that the same data sets can be reported in all ports of the EU in a harmonised manner. EMSA will also develop common database services for the EMSWe and support the Commission and Member States during the development, validation and deployment of the different elements of the EMSWe architecture.

Furthermore, EMSA on behalf of the European Commission will contribute to the maintenance of the IMO Compendium on Facilitation and Electronic Business which aims at defining a harmonised worldwide standard for the electronic fulfilment of reporting obligations in Maritime Single Windows.

As Member States will be upgrading their National Single Windows, the Agency will be offering technical assistance to ensure full compliance and interoperability. In particular, SafeSeaNet will be further upgraded offering data exchange services between National Single Windows with a view to simplifying the fulfilment of reporting obligations by reusing already reported information and applying the ‘once only’ principle.

LONG RANGE IDENTIFICATION AND TRACKING

EMSA operates the European Union LRIT Cooperative Data Centre (EU LRIT CDC), through which Member States, Iceland, Norway, Georgia, Montenegro and Tunisia users can access the LRIT information of their ships worldwide as well as of any non-EU LRIT CDC participating country vessel bound to EU ports or sailing within 1000 nautical miles of EU waters. The central module, known as the International LRIT Data Exchange, is also hosted and operated by EMSA and interconnects 69 LRIT Data Centres worldwide which provide services to 133 SOLAS Contracting Governments and Territories.

eCERTIFICATION

The shift towards digitalisation is driving shipping ever closer to paperless documentation. Through a voluntary eCertification platform, EMSA is supporting and facilitating the efforts of Member States with regard to the digitalisation of their STCW Certificates. The availability of this platform will allow secure, accredited, and transparent means of signing and sealing eCertificates issued to seafarers by interested Member States. The EU seafarers’ eCertification platform will allow Member States to modernise their administrations without having to develop standalone solutions, thereby resulting in efficiency gains due to the centralisation of the efforts to develop, host and operate a state-of-the-art system. By facilitating the verification of the authenticity and validity of the issued certificates, the platform is also expected to reduce the administrative burden for all the stakeholders involved.

Simplification
Getting a comprehensive overview of activity at sea is challenging yet to implement maritime policies effectively, governments and authorities need detailed, reliable knowledge about what happens at sea, in real time. EMSA offers a whole host of digital services designed to provide optimum maritime awareness to well over 150 different national authorities across the EU and EFTA Member States, as well as to the European Commission and related European bodies.

Chief among these is EMSA’s Integrated Maritime Services (IMS) which support national authorities engaged in maritime-related tasks, as well as the European Commission and several European bodies including Frontex (border control), EFCA (fisheries monitoring), Europol (law enforcement), EU Naval Forces: Operations Atalanta and Irini, and MAOC(N) (law enforcement – narcotics). IMS is also available as part of EMSA’s capacity building activities to non-EU countries, for which EMSA provides operational support, training and helpdesk assistance.

By integrating and correlating data from EMSA applications and external sources, services are delivered responding directly to a user’s specific needs. The data effectively becomes actionable operational knowledge. Users benefit regardless of whether their needs lie in search and rescue, law enforcement or border control operations. In addition, as operational needs evolve, the services can be refined and developed. A Maritime Picture API (Application Programming Interface) will continue to be made available through a system-to-system connection based on interoperable standards that enable integration with national Vessel Traffic Monitoring and Information Systems (VTMIS).

Behaviour algorithms are used to detect unusual or suspicious ship behaviour near real time as part of the Automated Behaviour Monitoring feature of IMS. This form of ‘always-on’ maritime surveillance can be used for a wide range of purposes, including safety, security, traffic monitoring, fisheries, border control, and accident/incident prevention. The algorithms also offer the possibility of detecting interlinked situations, exploiting historical data and can be expanded to include new behaviours based on specific needs. EMSA is the primary service provider for such services to Member States and EU bodies.

The establishment of the maritime picture in the Cloud, which began in 2022 and continued through to 2024, will facilitate the possibility of transition of IMS from a near-real time maritime traffic picture into the real time maritime traffic picture experience as a pre-condition for the Agency to offer a new generation of services with more advanced analytical solutions and applications enhanced by Artificial Intelligence (AI) and machine learning in the following years.

The availability of AI and machine learning techniques will offer the opportunity to systematically analyse, monitor, identify and derive maritime features, trends and patterns at national, regional and even global level. Maritime authorities will be able to use these services for tactical, strategic and analytical purposes, e.g. for predicting vessel movements, supporting incident reporting and risk assessment, or early warning on the developing, potentially dangerous situations.

Over the year, EMSA will promote and further improve services related to the Search and Rescue (SAR) toolbox. Access to additional data sets, supporting maritime safety,
SAR and pollution monitoring/response will be maintained and enhanced. A SAR drift model demonstrator will provide to the user community basic functions for comparative modelling of drifting vessels and other objects on the sea surface.

As CISE enters into its operational phase Member State authorities will be consulted on the associated services to help identify areas of potential synergy and complementarity with IMS.

**THETIS INFORMATION SYSTEM**

The THETIS information system was initially set up to allow port state authorities in the EU and Paris MoU countries (Canada, Iceland, Norway, Russia and now the UK) to manage inspection data in a single window. It enables these authorities to target the right vessels for inspection, assists the European Commission by providing statistics on inspection results, and helps monitor the performance of Member States in relation to their international and European legal obligations.
Additional functionalities have been added to the system, thereby supporting a wider range of Member State authorities and facilitating the enforcement of a broader set of European laws. Seven inspection and reporting regimes are now catered for under the THETIS-EU umbrella, covering: Sulphur, Port Reception Facilities, Maritime Security, Ro-Ro passenger ships, Ship Recycling, Animal Welfare and Greenhouse Gas emissions.

The animal welfare module supporting inspections of livestock vessels and safeguarding the wellbeing of the transported livestock will be enhanced further as required in 2024, in cooperation with the European Commission’s DG SANTE. This module allows veterinarian inspectors to target ships for inspection, declare cases of non-compliance and generate inspection reports for follow-up action.

The sulphur module helps sulphur inspectors in ports to check a ship’s sulphur compliance in the open sea. With direct information relay, EMSA’s Remotely Piloted Aircraft Systems – together with remote means from Member States – transmit air emission measurements taken when flying in the plume of a ship. Indications of excess sulphur content can then trigger inspections at the next port of call by alerting inspectors through the THETIS-EU system.

The THETIS-MRV module dedicated to CO₂ monitoring, reporting and verification has been in use by companies since 1 January 2018 for monitoring and reporting on ship data covering CO₂ emissions and fuel consumption. This feature is to be extended further to support the implementation and enforcement of legal acts associated with the emission of greenhouse gases under the European Green Deal, such as the extension of the EU Emissions Trading System (ETS) to maritime transport and the FuelEU Maritime Regulation.

The THETIS-MED information system, which entered into service in 2020, will continue to support the members of the Mediterranean Memorandum of Understanding (Algeria, Cyprus, Egypt, Israel, Jordan, Lebanon, Malta, Morocco, Tunisia and Turkey) by helping them to target ships for inspection, as well as to record and share the results of these inspections. In this way, EMSA contributes to the harmonisation of standards and procedures globally.
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). Together with this task, the MSS provides helpdesk services to EMSA’s user communities and monitors the performance of EMSA IT maritime applications.

During EMSA-led Multipurpose Maritime Operations, such as that organised in the Baltic Sea and Gulf of Finland in 2023, the MSS acts as the European Coordination Centre comprising the focal point for all associated activities with both the corresponding Member State authorities and participating EU Agencies, EFCA and Frontex.

As the information centre where most of the vessel traffic data is collected, the MSS will continue to analyse vessel traffic data and provide reliable data and figures when required, such as was done to assist in the definition of the recovery policies and specific measures during and in the aftermath of the COVID-19 crisis.

The MSS will continue to monitor maritime traffic on request, as has been the case with Russia’s unprovoked and unjustified military aggression against Ukraine. This service assists the Member States and the European Commission by providing specific periodical and ad-hoc reports related to the implementation of sanctions imposed by the EU and impact of crisis situations on maritime traffic and seaborne trade.

Linked to the invasion, the MSS will continue to set automatic warning services for vessels of interest, or dedicated reports. These services are being developed into self-service tools, accessible to authorised Member State users and the European Commission, without the need for any manual intervention from the MSS.

The MSS will also continue to work with Member States to deliver regular reports on SafeSeaNet and LRIT implementation, and data quality at Member State sites, in this way contributing to the improved quality of the underlying data.
In 2024, the Dynamic Overview of National Authorities (DONA) will continue to offer three specific functionalities. It will provide information to the general public on the competent authorities responsible for the implementation of EU and international maritime legislation, it will contribute to the reduction of the administrative burden for Member States through the reporting gate, and it will support the work of the Member States with the provisions of reliable and up-to-date statistics. DONA will also be further expanded with a module designed to support exemptions, derogations, equivalences, safeguard measures and additional safety requirements.
CHAPTER 6
TECHNICAL ASSISTANCE
Classification societies develop and apply technical standards to the design, construction and survey of ships. Of more than 50 classifications societies worldwide, 12 are recognised at EU level and are inspected regularly by EMSA. Based on the reports submitted by the Agency, the European Commission assesses each of these recognised societies at least every two years, requests corrective measures and takes policy decisions. The aim is to improve the quality of the certification work undertaken by these Recognised Organisations (RO) and in doing so to increase the overall level of safety in the EU. In 2024 EMSA will conduct up to 20 RO inspections based on a programme decided jointly with the European Commission. The Agency will also support the European Commission and Member States in the discussions held at international level on remote surveys and inspections.

Many EU registered ships are manned by seafarers who are not nationals of EU Member States. To ensure that these crew members are appropriately educated and trained, EMSA carries out inspections in the supplying countries. EMSA staff have been conducting such inspections for over 15 years, assessing their level of compliance with the requirements of the IMO’s Convention on Standards of Training, Certification and Watchkeeping (the STCW Convention).

In 2024 EMSA will conduct up to five inspections to non-EU countries and up to four visits to EU countries, thereby contributing to a level playing field for the standards of seafarers in the EU and improved ship safety on board EU registered vessels and in EU waters. In addition to these inspections, EMSA also runs the STCW information system. This system contains objective and comparable information on seafarers holding EU certificates/endorsements and therefore able to work on board EU registered ships.

EMSA has been monitoring the implementation of EU law in the Member States since its very beginning. Visits to Member States offer a valuable link between legal objectives and operational application. In this way, the European Commission can assess the extent to which EU law is being properly implemented in a given field. The visits provide a feedback chain on the effectiveness of the legislation and identify gaps where legal objectives are not being met.

Combined with the horizontal analyses carried out on the findings established during the visits, the Member States and the European Commission gain a clear picture of where additional effort would be beneficial or changes to EU law desirable. The end-of-cycle workshops held following the conclusion of each visit cycle provide a clear opportunity in this regard.

Visits in 2024 will cover a broad range of implementation areas: the cycle of visits related to the safe loading and unloading of bulk carriers launched in 2018 will be concluded (two visits); the cycle of visits related to passenger ship safety will continue, including where not already addressed the system for inspections for the safe operation of ro-ro passenger ferries and high-speed passenger craft (five visits) plus a separate one on the same subject. In addition, visits will begin in relation to port reception facilities for the delivery of waste from ships (five visits).
CAPACITY BUILDING & THE EMSA ACADEMY

The EMSA Academy has been set up to provide learning services outside of formal education to all beneficiary organisations and their members. These include the EU Member States and EEA countries, European neighbouring countries, EU candidate and potential candidate countries, and members of the Paris MoU and Med MoU.

The EMSA Academy is also working together with Frontex and EFCA within the context of interagency cooperation and contributing to learning services which are open to these agencies’ user communities. Joint training courses will be held in 2024, as per the agreed annual plan.

In line with the structured and modular approach implemented by the EMSA Academy, work will focus on delivering four common core curricula for Sulphur Inspectors and Flag State Inspectors, as well as for Port State Control Inspectors and Accident Investigators. This will be complemented by a wide portfolio of training courses and part-time online courses, on maritime legislation and EMSA’s operational applications, identified through a bottom-up approach that involves the competent authorities of the Member States.

The EMSA Academy has adopted a blended training approach, therefore in addition to traditional training activities, support will be offered through e-learning courses, available in EMSA’s Maritime Knowledge Centre (MaKCs), while through the virtual reality platform (VRESI) learners can perform ship inspections in a safe, realistic and controlled environment. This, together with an increasing portfolio of distance learning modules, will enable the Agency to reach a wider audience while maintaining the quality and depth of the training offered.

Finally, RuleCheck, the repository of relevant maritime legislation, will be further enhanced to support EU Member States in their capacity as flag and port states and eight out of nine regional port state control regimes in the world, thereby enhancing access to the up-to-date regulations, fostering further global harmonisation of the implementation of the international conventions and ensuring a level playing field.

The Agency will continue to provide data and statistics to the European Commission to support the revision of legislation, as well as to the general public through the EU Maritime Profile and to specialist audiences through the production of targeted reports.
EUROPEAN NEIGHBOURHOOD COUNTRIES

EMSA works to build up the national capacity of European neighbourhood countries, thereby helping to reinforce safety, security and environmental standards in a much broader geographical context than simply at EU level. Through the projects for the Mediterranean Sea (SAFEMED V) and the Black and Caspian Sea (BCSEA II), EMSA offers training courses and workshops, as well as access to tools (e.g. RuleCheck, MaKCs, THETIS-MED and VRESI) and services (e.g. IMS, CleanSeaNet). The project has been entrusted to the Agency following an approach that links the different functions covered by a maritime administration (as defined by IMO in the III Code) with the strategic priorities of the European Commission and those defined in the EMSA 5-year strategy. This approach foresees that each thematic area entails three types of action, namely tools and services, technical activities and training activities. In this way, the projects serve to foster support in flag state, coastal state and port state matters; offer access to the services of the EMSA Academy; and foster maritime safety, sustainability and digitalisation in the relevant regions. Specific bilateral activities in support of Ukraine will also be considered, where feasible.

Under the BCSEA II project, EMSA donated pollution response equipment to Ukraine and Georgia in an effort to minimise the potential impact of military operations on the marine environment in the Black Sea region.
European cooperation on coast guard functions refers to the joint work of three EU agencies (EMSA, EFCA and Frontex) and national authorities from across the EU. These functions comprise tasks related to safety and security at sea, such as search and rescue, border control, fisheries control, customs activities and environmental protection. The objective is to bring added value to the national coast guard authorities as well as to promote cooperation among them at EU level.

EMSA’s tasks, as set out in the Annual Strategic Plan for 2024, cover the development of new fields of cooperation and enhanced cooperation in the following areas: information sharing through the Maritime Data Catalogue to raise awareness of the different datasets available via the three agencies; surveillance and communication services which include the provision of Earth Observation data to support coast guard activities; capacity building through, for example, the Practical Handbook on European Cooperation on Coast Guard Functions; risk analysis to assess and address Member State needs; and, capacity sharing by way of Multipurpose Maritime Operations undertaken at the request of the Member States.

The agencies will also continue to contribute to the EU’s Maritime Security Strategy (EUMSS) which aims to protect the strategic maritime interests of the EU worldwide. These are extensive in scope including areas such as overall security and peace, rule of law and freedom of navigation, external border control, maritime infrastructure (ports, underwater pipelines and cables, windfarms etc.), natural resources and environmental health, and climate change preparedness.

In terms of coast guard cooperation at EU level with EFCA and Frontex, EMSA will continue to offer RPAS services and promote the sharing of resources. Cooperation with EFCA is foreseen in particular by equipping EFCA chartered vessels with RPAS and SATCOM services namely for pre-boarding activities but also by supporting EFCA’s Joint Deployment Plans with synergies in the priority regions where EMSA intends to establish a more permanent regional RPAS service.

Based on the experience gained in 2023 from the first EMSA led Central and Eastern Baltic Sea Multipurpose Maritime Operation (MMO), and subject to the formal request from interested Member States, the Agency will take the responsibility to organise an MMO in 2024. During the dedicated period, EMSA’s Maritime Support Services will act as the European Coordination Centre though which the MMO is coordinated ensuring a high level of cooperation with all participating stakeholders. EMSA will also undertake to support, as far as possible and where relevant, the MMO organised by the other two other coast guard agencies (EFCA and Frontex).

In 2024, EMSA will participate actively in the Annual European Coast Guard Event (AECGE) under the coordination of EFCA as current chair of the Tripartite Working Arrangement. This forum provides the ideal setting to consult national authorities performing activities under the remit of the coast guard functions and helps to strengthen cooperation with other EU and international partners on the three agencies’ respective activities.
On this occasion, EMSA will present the outcome of the Greening Award Initiative announced at the 2023 AECGE in Lisbon. This initiative is designed to boost sustainability actions carried out and developed across the more than 300 authorities that make up the European coast guard community. Recognition will be given to projects and activities which further the green transition and which support, directly or indirectly, the goals of the European Green Deal.

**EFCA SERVICE LEVEL AGREEMENT**

EMSA supports the European Fisheries Control Agency in working to tackle illegal, unreported and unregulated fishing through the coordination of joint deployment plans. A service level agreement has been in place with EMSA since 2015 and is renewed yearly. On the one side, this agreement sets out the conditions for EFCA to provide 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 and Copernicus satellite imagery. Remotely piloted aircraft are also part of this agreement and are being made available to EFCA for operational services. EMSA will continue to follow up on the major overhaul of the tailored Integrated Maritime Services provided for fisheries monitoring and completed in 2021. In particular, the automatic exchange of information between EMSA and EFCA ship databases is expected to bring significant added value as it offers consolidated ship details to fisheries control authorities and completes the data related to fishing vessels for the benefit of all maritime authorities. EMSA will also explore the possible integration of information available at EFCA – such as that collected on scene during RPAS surveillance operations – with a view to enhancing the information available to fisheries control authorities.

In addition, EMSA will continue providing support to EFCA by equipping its three chartered Offshore Patrol Vessels (OPV) with oil pollution response equipment, thus making available the EFCA OPV to assist Member States with pollution incidents in EU waters.
FRONTEX SERVICE LEVEL AGREEMENT

EMSA supports Frontex in conducting operations to address irregular migration and cross-border crime along European maritime borders. The service level agreement between Frontex and EMSA was extended indefinitely and includes support for the implementation of the European Border Surveillance System (EUROSUR). Activities in 2024 are based on an annual programme and service description agreed between the agencies. Among the many services provided to Frontex is Earth Observation which allows for the delivery of very high resolution optical imagery for the monitoring of areas of interest, whether at sea, on the coastline or in port. In 2024 this support will continue and will include the sharing of incidental sightings of potential marine pollution to Member State coastal authorities through the CleanSeaNet system. EMSA may also support Frontex activities in the field of risk analysis relevant to the maritime domain. This would be done by combining datasets traditionally presented separately with the aim of mapping vessel activity and increasing search and query capabilities.

MARITIME ANALYSIS AND OPERATIONS CENTRE (MAOC-N)

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 until October 2023, MAOC-N has supported the seizure of over 340 tonnes of cocaine and over 667 tonnes of cannabis.
The Annual European Coast Guard Event brings together representatives from coast guard authorities across the EU. The event serves as a platform for fostering collaboration, discussing interagency cooperation, and presenting concrete initiatives undertaken within the European coast guard cooperation framework.
EMSA’s management team has the aim of building up the Agency as a recognised centre of excellence for a safe, secure and sustainable maritime sector which serves the needs of Member States and the European Commission alike. The management team is responsible for implementing this work programme and delivering on the objectives set, while reinforcing the Agency’s role as an innovative and reliable partner for the maritime cluster in both Europe and beyond.

Good corporate governance, transparency, efficiency and flexibility are all essential qualities which EMSA’s management team uphold and promote among staff in their respective functions. 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.

A comprehensive Gender Action Plan is in place, addressing gender disparity which is prevalent in the maritime, transport and ICT sectors in which EMSA operates. The plan, covering 2022-2025, highlights both short-term and long-term strategies to promote gender equality and parity. Initiatives include participation in conferences to challenge stereotypes, the annual Speed Networking Initiative on International Women’s Day, the Ambassador Initiative involving school visits and presentations to encourage young students, engagement in career fairs to attract diverse talent, and the implementation of a SMART Indicator for the traineeship programme to achieve a minimum of 60% female trainees. Also, as a member of the Women in Transport Network – EU Platform for Change, EMSA actively participates in meetings to exchange ideas and practices for addressing gender disparity in the transport sector.

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 environmental programme is set annually for the following year and made publicly available on the Agency’s website as part of the annual environmental statement.

In particular, EMSA is committed to: minimising carbon dioxide emissions; promoting the efficient use of energy; minimising the use of paper and production of waste; and, encouraging and training staff to become involved in achieving these goals.

In addition, 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.

As the Agency continues to implement the five-year strategy, it will also make a point of increasing the visibility of its actions, ensuring that the work of the Agency in each of its different priority areas is known among relevant target audiences and information multipliers. Effective, cost-efficient communication practices will be prioritised for this purpose.
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.

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Get in touch for more information

European Maritime Safety Agency
Praça Europa 4
Cais do Sodré
1249–206 Lisboa
Portugal

Tel +351 21 1209 200 / Fax +351 211209 210
emsa.europa.eu / Twitter@EMSA_Lisbon