

EMSA Consolidated Annual Activity Report 2024

Assessment by the EMSA Administrative Board

The Administrative Board's assessment covers three main areas: strategic achievements, operational achievements and the management of the Agency. The assessment takes into account the relevant legal, strategic, and resource framework, as well the applicable annual work programme.

The Administrative Board appreciates the structure of the Consolidated Annual Activity Report 2024 which reflects that of the EMSA Single Programming Document 2024-2026.

Each activity is clearly linked to its legal basis and placed in strategic context through references to the relevant articles of the EMSA Founding Regulation and to the relevant objectives of the EMSA 5-year Strategy. This demonstrates the consistency of the annual activities with the tasks assigned by the legislator and the strategic outlook adopted by the Administrative Board. Furthermore, the allocation of budget and staff to each activity clarifies relative impact on resources.

A) EMSA's strategic achievements in 2024

The EMSA 5-year Strategy 2020-2024 on which the Single Programming Document 2024-2026 was based, established EMSA's strategic priorities in the areas of Sustainability, Surveillance, Safety, Security and Simplification - the "5 S" - as well as Digitalisation and Technical & Operational Assistance. This 5-year Strategy reflects the important role played by EMSA to support the Commission priorities in EU policy areas related to the seas in order to strengthen Europe's competitiveness, sustainable growth and Blue economy, as well as contribute to the EU's security agenda and international profile.

The Administrative Board welcomes the fact that the CAAR provides clear examples of EMSA's achievements that contribute to achieve the multi-annual strategic priorities or "5 S" and the underlying multi-annual strategic objectives.

The Administrative Board noted that overall, EMSA implemented the actions planned, and by that made progress towards achieving the strategic priorities of the Agency.

In our view, the present report addresses the key deliverables of the Agency in 2024 and demonstrates that the objectives set, in particular for the five strategic priorities were met.

The highlights of the strategic achievements in each work area in 2024 are outlined below.

Sustainability

Strategic priority:

[Contribute to the European Green agenda for maritime transport by strengthening the EU capacity to protect the marine environment, manage climate change and respond to new environmental challenges](#)

Strategic achievements in 2024

During 2024, EMSA successfully supported the implementation of the extension of the EU Emissions Trading System (EU ETS) to maritime transport, by providing the relevant IT tool, timely technical assistance in relevant fora, as well as raising awareness and building capacity through webinars and guidance documents. In parallel the necessary building blocks for the implementation, by January 2025, of the FuelEU Maritime Regulation were put in place, notwithstanding the challenge represented by secondary legislation still in the make.

The Agency was also at the side of the Commission and Member States in the efforts that lead to the adoption in November 2024 of the amendment of the Ship-source Pollution Directive, in support of more sustainable shipping.

Underwater Radiated Noise (URN) from ships was another area where the Agency engaged and succeeded to make available the first pan-European report to provide historical and future forecast underwater noise data for all European seas.

In 2024, the Agency started the work to adapt the pollution response services (PRS) toolbox to emerging risks stemming evolving traffic patterns and the introduction of alternative fuels.

The efforts in filling knowledge gaps continued in 2024, with the establishment of a framework for a new series of studies on promising technologies, as well as on the behaviour of alternative fuels to determine the future pollution response strategies and means.

Finally, the Agency continued to act as facilitator for the mapping exercise of the Member States' data needs for marine pollution risk assessment and fostered the exchange of operational experience in the fields of HNS marine pollution and oil spill sampling.

Surveillance

Strategic priority:

[Strengthen EMSA's role as the core information management hub for maritime surveillance](#)

Strategic achievements in 2024

EMSA's Earth Observation services continued to develop and deliver advanced surveillance capabilities, providing support for a wide range of use cases and services. These efforts focused on CleanSeaNet, Copernicus Maritime Surveillance, the response to maritime emergencies at sea under EMSA's contingency plan, and support to Frontex under an existing service level agreement.

In 2024, EMSA made a significant investment to expand its Earth Observation portfolio by organizing and successfully completing three distinct pre-operational qualification tests involving the Cosmo-SkyMed, Cosmo-SkyMed Second Generation, and Pleiades Neo constellations. Following these tests, a procurement procedure for Cosmo-SkyMed was launched in 2024, with a contract for satellite services expected in early 2025. Regarding Pleiades Neo, the constellation passed EMSA's acceptance checks and will be included in EMSA's portfolio in 2025.

During 2024 EMSA reinforced its regional strategy for multipurpose maritime surveillance by supporting multiple entities across different countries, thereby promoting more efficient use of resources in the execution of coast guard functions. The existing Remotely Piloted Aircraft System (RPAS) portfolio features five types of remotely piloted aircraft systems, including medium-sized vertical take-off and landing (VTOL) drones, medium-sized fixed-wing aircraft, a medium-sized fixed-wing aircraft with extended coastal range, and two smaller quadcopter models for pollution monitoring, multipurpose maritime surveillance, and emissions monitoring. EMSA RPAS services were actively used in the EMSA organised MMO in La Manche and the Southern North Sea aiming to further strengthening regional cooperation between participating authorities from France and Belgium.

In 2024, EMSA launched procurements to renew its RPAS services portfolio for multipurpose maritime surveillance, emissions monitoring, and the deployment of light RPAS on board EMSA's OPRVs, as well as on board Member State and EU Agency vessels.

In parallel, EMSA continued delivering global satellite AIS data services (SAT-AIS) to end-users, ensuring real-time coverage through high-performance satellites while providing a supplementary service as a complementary feed and backup solution. EMSA also strengthened its collaboration with the European Space Agency (ESA) to advance integrated space-based solutions for operational maritime activities, with both Agencies identifying ways to maximize the potential of space-based technologies in enhancing maritime safety and surveillance services.

Safety & Security

Strategic priorities

[Contribute to higher maritime safety standards, anticipate new maritime safety challenges and expectations, and provide knowledge-based solutions with the aim of contributing to the reduction of marine casualties and human loss.](#)

[Strengthen maritime security in Europe and globally where there is a European interest.](#)

Strategic achievements in 2024

The introduction of new fuels and powering systems in shipping brings safety challenges that must be addressed. Within this context, EMSA continued to contribute towards ensuring a safe fuel transition through the publication of studies with the ultimate goal being that of the development of practical guidance for the authorities and industry. More specifically, in 2024 the guidance on the safe bunkering of biofuels was finalised and discussed with the stakeholders with a view to be published in 2025. In addition, the Agency started working on the development of two guidance documents on the safe use of ammonia and hydrogen as fuels. During 2024 the interim reports for ammonia and hydrogen were also published.

The increase in the number of electric cars transported, especially, on ro-ro cargo and passenger ships create new risks on ships which are already vulnerable to fires. In line with these developments, in 2024 the Agency published a new tender for carrying out experimental tests with electric vehicles fires.

Another change in shipping is the acceleration of the digitalisation and increased automation on ships. This transition brings uncertainties in terms of safety as there is no experience and no specific regulatory framework. EMSA is contributing to this challenge by conducting studies and, especially, through the development of a risk-based assessment tool (RBAT) which is tailor made for ships with higher automation to facilitate the work of the authorities and industry when approving and designing them. In addition, a new tender was published in 2024 with the prime objective being that of analysing the communications, connectivity and navigation challenges of these ships. EMSA also continued to

provide support within the IMO context in the development of the new Maritime Autonomous Surface Ships (MASS) Code.

The Agency continued to focus on the large majority of the fleet, which will be still conventional in the coming two decades. Within this context, there are also challenges in relation to the aging of the EU fleet, especially of passenger ships and fishing vessels, the implementation of the new safety package on Port State Control, Flag State and accident investigation, the growth in size of cruise ships, etc. EMSA has been supporting the Commission and Member States during the revision of the Directives within the safety package which was published in 2024. In addition, the Agency has continued providing technical input to the Passenger Ship Safety Expert Group and contracted a new study on the evacuation of large passenger ships and the alternative design of oversized lifeboats.

The new Remotely Operated Vehicle (ROV) service for underwater surveys, started in 2022, is experiencing an increasing demand. Whereas accident investigation was the main focus of the service in 2024, with operations in the Tyrrhenian Sea, Baltic Sea, Adriatic Sea and Atlantic Coast, EMSA also participated in exercises in France and Belgium where other use cases were tested, including support to environmental projects and monitoring and inspection of maritime infrastructure fields.

In terms of security, the geopolitical situation is having an impact on shipping. Prevention is a key element, but there are new hybrid threats with cybersecurity getting a more prominent role, and new weapons, like the massive use of drones. EMSA is taking all these developments into consideration and, in cooperation with the Commission and Member States, carried out security inspections and took initiatives to enhance knowledge on cybersecurity. A conference on Maritime Cyber Security was organised with the participation of the most relevant EU stakeholders. It was agreed that there was a need for EMSA to take initiatives in the information sharing field at EU level. In addition, at request of the Commission, the Agency is developing a risk assessment methodology for attacks of drones to port infrastructure.

As concerns the Human Element, EMSA worked at the side of the Commission and the Member States during the comprehensive review of the STCW Convention and Code at the IMO and supported the implementation of the MLC, 2006 Convention, providing training to ensure compliance and enforcement to both EU Member States and third countries.

With the objective of filling knowledge gaps emerging from the green and digital transformation of shipping in relation to the Human Element, the Agency published a study on the identification of competences for seafarers working on board ships using alternative fuels.

Digitalisation & Simplification

Strategic priority

[Facilitate the simplification of EU shipping by supporting EU-wide digital maritime solutions](#)

Strategic achievements in 2024

Supporting the Commission, EMSA has elaborated and delivered the common specifications and database services for the European Maritime Single Window environment (EMSWe) facilitating the simplification, harmonisation and rationalisation of reporting formalities applicable in the ports of the Union.

EMSA continued hosting, operating, and maintaining the European Union LRIT Cooperative Data Center (EU LRIT CDC) and the European Union LRIT Ship DB (EU LRIT Ship DB) on behalf the Commission and Participating Countries. The Agency also continued hosting, operating, and maintaining the International LRIT Data Exchange (LRIT IDE), both Production and Developmental

Testing environments, on behalf the International Maritime Organization (IMO) and SOLAS Contracting Governments. The International LRIT Data Exchange (IDE) interconnects 72 LRIT DCs and 138 Contracting Governments and Territories, making possible for LRIT users worldwide to request and receive LRIT position reports from ships in a secure, effective, and timely manner.

EMSA addressed the Cybersecurity Regulation 2023/2841 starting, with the initial cybersecurity assessment.

EMSA developed THETIS-MRV to cater for the extension of the EU ETS to maritime transport in accordance with the Implementing Act of November 2023 by completing the new MRV Report, MRV Monitoring Plan and Company Emission Report.

In support of the implementation of Regulation (EU) 2023/1805 on the use of renewable and low-carbon fuels in maritime transport, THETIS-MRV was developed enabling shipping companies to electronically submit their Fuel EU Monitoring Plan within the legal deadline.

EMSA developed the new RPAS Data Centre solution offering a state-of-the-art video distribution platform to support RPAS operations in Member States from 2025.

Dynamic Overview of National Authorities (DONA) was developed to cater for Member States' notifications foreseen by both Directives 2009/45/EC and 98/41/EC to Commission simplifying reporting obligations and further deliberations.

Under the EU seafarers' eCertification platform project the service enabling the signing and sealing of STCW certificates by the authorising officers in the interested Member States has been completed.

As the main provider of the maritime picture in Europe, the Agency continued the development of its Integrated Maritime Services (IMS) producing comprehensive, global, near real time maritime traffic visualization with the integration of new information, data products and functionalities, and development of analytical data. The transition of some key components of the maritime picture in the cloud were achieved in 2024. The number of IMS users continued to increase. The IMS, by using cloud services, was maintained and improved providing an archive of over 5 years of vessel position data (tracks and raw position data) and several added value functionalities.

Further improvements were made on the IMS Search and Rescue (SAR) toolbox such as the development of the IMS drift demonstrator and the preparation of Phase 2 of the IMS drift project (implementing a Metocean layer and integrating an open-source drift model).

The most recent EFCA-EMSA Service Level Agreement, signed in December 2022, encompasses a broad spectrum of activities, with the core focus being the provision of tailored integrated maritime services, complemented by Earth Observation products acquired through the Copernicus Maritime Surveillance (CMS) service to support fisheries monitoring and control operations. This user community is the second largest of EMSA's integrated maritime services. The two lightweight RPAS deployed aboard two EFCA-chartered offshore patrol vessels continued to be a valuable asset in supporting fisheries control activities.

EUNAVFOR Atalanta successfully utilised the EMSA IMS in several high-impact operational situations in 2024, showcasing the versatility and effectiveness of EMSA services in a number of relevant maritime activities. EMSA reporting dashboards streamlined the detection and monitoring of maritime incidents for EUNAVFOR Atalanta.

Regarding the EUNAVFOR Aspides operation, a new Cooperation Agreement to provide the legal basis for the future collaboration with EMSA was prepared and endorsed by the EMSA Administrative Board.

As concerns EUNAVFOR MED, Operation Irini reported that the use of the EMSA IMS during 2024 changed their way of working. EUNAVFOR MED started using the Copernicus Maritime Surveillance

services and plan effectively where and when to send their assets to monitor for vessels of interest. Since September 2024, following Member States agreement, EUNAVFOR MED is entitled to have access to LRIT data inside their area of operations.

EMSA continued to provide services to Frontex contributing to the protection of the EU's external border. Key is the integrated maritime picture provided through IMS, Automated Behaviour Monitoring and Earth Observation services based on fusing satellite imagery with vessel related information. This was shared with Frontex and EFCA with the required customisation in the framework of coast guard cooperation and specific bilateral Service Level Agreements (SLA).

Efforts to support the digitalisation/simplification of maritime transport within the context of the new SafeSeaNet (SSN v.5) continued. EMSA provided support to Member States in executing the commissioning tests and transition to operation of their national systems. The upgrade of national systems to version 5 progressed in 2024 and all Member States are already in operation with the new version concluding the transitional phase.

EMSA's cooperation with EUROSTAT on maritime statistics also progressed and a cooperation agreement defining the type of support and services EMSA will provide to EUROSTAT to facilitate the production of relevant maritime statistical information was signed in 2024.

In June 2024, the High Level Steering Group set up a Working Group (WG) on AIS Spoofing and approved its Terms of Reference (ToR). EMSA provides the secretariat and coordinates the WG consisting of representatives of volunteer Member States and the Commission. Though the mandate of the WG is limited to AIS spoofing, it became immediately evident that AIS spoofing is directly linked to the "dark or shadow fleet" that engages in illicit activities to smuggle sanctioned goods. Despite the short duration of its activities, the WG sparked the interest of various stakeholders within the shipping industry.

In June 2024, EMSA successfully completed the Transitional Phase of CISE and kicked off the Operational Phase. Throughout 2024, EMSA continued to promote the CISE initiative, increasing the number of stakeholders that have joined, upgrading nodes to make them available for information exchange and promoting the signature of the cooperation agreement. Importantly with the start of the operational phase, the setting up of the classified network has become one of the top priorities, aiming to have an initial network established by 2026.

Technical & Operational Assistance

Strategic objectives

[Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation](#)

[Extend and formalise EMSA training schemes](#)

[Support EU neighbourhood and sea basin policies to level-up and harmonise standards](#)

Strategic achievements in 2024

EMSA continued to offer to Member States, candidate and potential candidate countries and neighbouring countries sharing sea basins with the EU, an increasingly innovative, collaborative, and flexible capacity building toolbox, with a diversified catalogue of learning services outside formal education that meet the needs of the competent authorities and state of the art tools and applications.

In 2024, the Agency offered several ISO certified learning services through the EMSA Academy. Identified following a bottom-up approach and a structured training needs analysis, they aim at enhancing knowledge, competencies and skills, thus fostering the enhancement of capacity at national

level towards homogeneous implementation and enforcement of safety, security and sustainability legislation and standards in the EU and beyond. Three different types of learning services were offered, namely Common Core Curricula, part-time courses and short courses, related to identified job profiles, to EU/International maritime legislation or to EMSA's operational maritime applications and tools, leading to certification upon demonstration of acquisition of knowledge and specific skills. Several of them were enriched with realistic scenarios using the Virtual Reality Environment for Ship Inspections (VRESI), whilst others were integrated with contributions from experts providing learning and valuable insights or enriched with immersive experiences for the audience.

The Agency continued to be a centre of excellence for capacity building actions entrusted to EMSA by the Commission for Pre-Accession and European Neighbourhood Policy countries. The project "Preparatory measures for the future participation of relevant IPA III countries in the European Maritime Safety Agency (EMSA)" funded by the EU through the Instrument for Pre-accession Assistance (IPA) with beneficiary countries Albania, Bosnia and Herzegovina, Montenegro, Serbia and Turkey continued to be implemented to enhance the national capacity of the beneficiaries.

As maritime safety, maritime security and protection of the marine environment are common concerns of the Member States and third countries sharing the same sea basins, EMSA continued to implement the two projects for technical assistance for the Mediterranean Sea (SAFEMED V) and the Black and Caspian Sea (BCSEA II). Both projects have a very ambitious action plan, combining the priorities set at EU level by the Commission and reflected in the 5-Year Strategy pursued by the Agency, and aim to contribute to the approximation of standards related to maritime safety, security, pollution prevention and response.

Following the interest expressed by third countries, access to tools in support of Port State Control (PSC) activities in different regions of the world continued to be ensured, therefore confirming the potential for exporting the Agency's knowledge and by extension EU standards and solutions beyond the European geographical dimension. Currently, 9 out of 9 PSC regimes in the world, as well as the Australian Maritime Safety Authority, are using relevant EMSA tools, namely RuleCheck and/or MaKCs.

The contribution of the Agency to the development and implementation of EU standards and regulations in the maritime sector is delivered through a programme of Visits and Inspections, corresponding reports and horizontal analyses for cycles of visits to Member States that support the harmonised implementation and enforcement of relevant legislation across the EU and identify also possible improvements. The continued focus on implementing the Methodology for Visits to Member States, as adopted by the EMSA Administrative Board, ensured that the Agency succeeded in reducing the administrative burden for Member States, developing and sharing best practices and lessons learnt, and strengthening the flow and exchange of information. The horizontal analyses, which incorporate a cost-efficiency assessment, confirmed their added value both for Member States and the Commission.

2024 marked the conclusion of the cycle of Member State visits concerning the implementation of the Bulk Directive. A new cycle of visits on the legislation for Port Reception Facilities was launched in 2024.

Finally, within the framework of the European Coast Guard cooperation with Frontex and EFCA, the Agency delivered on all the projects included in the yearly adopted Annual Strategic Plan. In particular, during 2024, EMSA strengthened its participation to maritime security exercises (MARSEC EU) and further enhanced its cooperation with global and European Coast Guard Regional Forums, provided information sharing and surveillance services to its sister Agencies, organised exchanges and capacity building activities among national coast guard authorities and implemented MMOs in selected

sea basins. The above brought a substantial contribution to the implementation of the European Strategy for Maritime Security (EUMSS) adopted by the Council in late 2023.

B) EMSA's operational achievements in 2024

The Administrative Board took note of the different operational achievements that contributed to the Strategic Objectives, as highlighted at the beginning of the CAAR 2024, and of the information on the operational outputs against previously set objectives as per the Single Programming Document 2024-2026, as detailed in Part I "Achievements of the year". We consider that the overall performance and quality of the outputs were high and contributed to reaching the strategic objectives.

C) Management

An overall effective and efficient monitoring of programme implementation was in place to track the delivery of planned outputs and performance per activity and signal potential risks throughout the year and across the Agency.

The Administrative Board commends the work carried out by the Agency in the context of Russia's war of aggression against Ukraine. This entailed a constant support to the Member States and the Commission with the provision of information and surveillance services, assisting in the implementation of the different sanctions applied by the Union against the Russian Federation.

The Key Performance Indicators used by the Agency to measure the continuity and quality of the EMSA external services have met their respective targets overall. As per previous years, cases in which targets have not been met have been duly justified.

The high level of implementation of the work programme resulted in an excellent budget implementation. The Agency executed €92,451,581 in Commitment Appropriations (CA), representing 99.22% (compared to 99.94% in 2023) of the total budget for the year, and €90,501,588 in Payment Appropriations (PA), amounting to 97.13% (compared to 98.44% in 2023) of the total budget.

Based on information outlined in Parts II, III and IV of the CAAR 2024 and on the work of the Administrative and Finance Committee throughout the year, the Administrative Board notes the Agency's exhaustive and meticulous approach to the follow-up of the outcome of audits by the various auditing bodies. In particular, the Administrative Board appreciates the fact that the Internal Audit Service of the Commission (IAS) and the European Court of Auditors (ECA) did not issue any critical audit recommendations or observations that could lead to a reservation in the annual declaration of assurance and that at the end of 2024, all audit recommendations issued and due by 31/12/2024 and earlier had been implemented.

Furthermore, the Administrative Board notes that measures are in place to maintain an appropriate risk and control environment and provide an appropriate level of assurance. Building blocks of assurance leading to the Declaration of the Authorising Officer are in place, as are measures to address any serious management and control weaknesses identified.

Conclusion

The Administrative Board of the European Maritime Safety Agency concludes that the Agency has met its objectives in accordance with the annual work programme for 2024 and the overall multi-annual strategic framework.

The Administrative Board notes with satisfaction how the Agency is committed to its core tasks and also with dedication contributes to improved European cooperation and efforts to contribute to the EU green deal while continuing to take on a pioneering role in the digital transformation of maritime transport by incorporating new technologies into the maritime situational picture as well as into services that increase the efficiency and effectiveness of maritime administration and enforcement.

The recent geopolitical instability around the EU sea basin and beyond has had an impact on maritime transport and EMSA has quickly deployed monitoring and reporting services to support the European Commission and Member States in addressing these challenges.

Finally, the Administrative Board greatly values the excellent performance of the EMSA staff in carrying out the tasks of the Agency, even throughout another particularly challenging year, enhancing maritime safety, security and prevention of pollution and paving the way for the use of new technology to the benefit of the European maritime community.

Done at Lisbon, 12 March 2025



Signed

Wojciech Zdanowicz

Chairman of the Administrative Board