

EMSA Consolidated Annual Activity Report 2021

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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 2021 which reflects that of the EMSA Single Programming Document 2021-2023.

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 2021

The EMSA 5-year Strategy 2020-2024 on which the Single Programming Document 2021-2023 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 maritime sector in order to strengthen its green and digital transition while maintaining a high level of safety, as well as contribute to the EU's security agenda.

The EMSA Single Programming Document 2021-2023 and the concrete actions planned under each of the "5 S" for 2021 were aligned with the strategic priorities of the 5-year Strategy. The Administrative Board welcomes the fact that the CAAR provides clear examples of EMSA's achievements that contribute to the realisation of the multi-annual strategic priorities or 5/S and the underlying 36 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 – while dealing with the COVID-19 pandemic, which saw mostly remote working conditions for staff, Member States and Commission representatives and stakeholders.

In our view, the present report addresses the key deliverables of the Agency in 2021 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 2021 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](#)

EMSA together with the European Environment Agency (EEA) worked on the first European Maritime Transport Environmental Report (EMTER), collecting verified information on the different impacts of shipping on the marine environment and air, as well as climate change. As a first of its kind, this Report represents an essential reading in view of different Commission policy initiatives linked to the European Green Deal. After having consulted all relevant stakeholders on the first draft, the final report was launched on 1st of September 2021. The implementation of this project has also led to enhancing the efforts of the Agency to become a data hub for environmental data related to maritime transport.

EMSA has been also actively participating in several initiatives related to the European Green Deal by providing technical support and data to the European Commission and Member States. This support was mainly focused on the preparation of the Fuel EU Maritime initiative and the proposal on the extension of the ETS to maritime transport, the Zero Pollution Action plan initiative and the work at IMO on energy efficiency and carbon intensity. The technical contribution of the Agency was an essential building block in support of ongoing policy initiatives by the European Commission, such as the "Fit for 55 package" delivered in July 2021, aiming at making Europe climate neutral by 2050.

In the field of response, the Agency has engaged with the Member States and the Commission in a bottom-up approach to reflect on the adequacy of the services it offers. As a result, in addition to maintaining and renewing its existing network of oil recovery vessels and the Equipment Assistance Service, in 2021 the Agency also invested in putting in place an acquisition channel for near shore equipment to complement the existing toolbox by filling the gap in the response to oil spills in shallow waters and proceeded with equipping its stockpiles with medium size equipment. EMSA also continued improving the operational capacities of its vessels by equipping in 2021 two additional vessels with RPAS capacity reaching a total of ten.

Surveillance

Strategic priority:

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

In 2021 EMSA increased the budget dedicated to support with satellite images emergency response linked for example to pollution at sea, search and rescue and anti-piracy. EMSA continued to offer capabilities based on RPAS technology supporting maritime surveillance and further increased its level of activities in becoming a reference at EU and global level for the use of RPAS for maritime surveillance in the civil domain.

In 2021 EMSA has also done a particular effort in renewing and expanding its RPAS portfolio offered to Member States and Agencies. This includes new capabilities deployable from vessels, that can be used also for emissions monitoring and retendering of the service for light RPAS to equip EMSA and EFCA chartered vessels, with an improved sensor payload. In terms of capabilities deployable from land, EMSA contracted a new long range service that besides having new radar sensors and phone detection capabilities can also deploy a life raft for 8 persons. Additionally, and to support EMSA's regional strategy, a

new coastal service was contracted, which has an autonomy of up to 15 hours thanks to a system of antennas along the coast based on radio relay.

Concerning Copernicus Maritime Surveillance, the Agency signed and started the implementation of a new Contribution Agreement with the Commission (DG-DEFIS) that defines the scope of activities to take place between 2021 and 2027.

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.

The Agency confirmed and deepened its relevance as a key partner to the European Commission and Member States at EU and IMO level in the development of the necessary adequate safety and standardisation framework both for traditional ship safety aspects, like steering and manoeuvrability or fire safety, and innovative disrupting technologies, as new alternative energy systems for ships and autonomous systems, multi-dimensional safety aspects of electrical systems related to shore side electricity.

Safety analyses of data from EMCIP provided added value as a tool to identify safety issues and possible improvements towards a further enhancement of the safety culture.

EMSA also provided initial technical support to the European Commission in the process of the revision of three safety Directives (AI, PSC, and FS) in view of setting up the Impact Assessments.

Given the steady increase in cyber-threats and risk of cyber-attacks aimed at disrupting the maritime domain, the main stakeholders, i.e. industry, academies, and Governments have acknowledged that more attention should be paid to this challenge. EMSA has established an internal Task Force to progress relevant work in cooperation with relevant institutions.

As concerns the Human Element, EMSA has worked at the side of the European Commission and the EU Member States during the comprehensive revision of the STCW-F Convention and for the planned revision of the STCW Convention at IMO and has fostered the implementation of the MLC, 2006 Convention, providing training to ensure compliance and enforcement to both EU Member States and ENP countries.

Digitalisation & Simplification

Strategic priority

Facilitate the simplification of EU shipping by supporting EU-wide digital maritime solutions

EMSA's Cloud Strategy was adopted in July 2021. Implementation of this strategy will lead to a state-of-the-art technological landscape capable of accelerating maritime digital services production in EMSA's software factory while providing user community the benefits from cloud technologies. A project for the development of the Maritime Picture in the cloud as envisaged by the 5-year strategy was designed and the proof of concept has been finalized. This will enable EMSA to offer to Member

States a new generation of services, more advanced analytical solutions and tactical applications for management and coordination of maritime operations, Machine Learning and Artificial Intelligence.

The new SafeSeaNet (SSN v.5) became operational according to the agreed schedule by the HLSG and the Central SSN. This new version of the system supports the legal requirements for registration of persons on board passenger ships, the revised Port Reception Facilities Directive and the Exchange of Information with the new PRF inspection system (THETIS-EU), improved incident reports and additional security measures.

The integrated maritime picture provided through IMS, Automated Behaviour Monitoring, Earth Observation services based on satellite imagery and RPAS were shared with Frontex and EFCA with the required customisation in the framework of coast guard cooperation and specific bilateral Service Level Agreements. New Cloud based capabilities (enrolled to limited number of users initially) related to the Long-term Storage of AIS data (HP-IMS) made possible the development of historical ABMs.

With the objective of continuing to offer maritime digital services in support of the daily work of the competent authorities of the Member States EMSA continued working on the development of THETIS and its modules. In particular, work continued in relation to ship related certificates, using THETIS as the platform to store relevant information, so as to make them available to Member States in their capacity both as Flag and Port States.

In the context of the EU's Common Security and Defence Policy, EMSA continued to support two distinct EU Naval Force operations, namely EUNAFOR-Somalia: Operation Atalanta, and EUNAVFOR-Med: Operation Irini. To this end new Cooperation Agreements were signed.

Finally the Agency kicked off the work on a future platform in support of eCertification for Seafarers in line with the upcoming legislative developments.

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](#)

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 cumulative horizontal analyses.

In addition, the Quality Management System for Visits and Inspections, covering the full scope of the Agency's visits and inspections activities continued to be implemented and provides a solid framework for continuous improvement, as one of the building blocks of the wider certification of the Agency's activities.

In 2021 the Agency's flagship project, under the label of EMSA Academy, constituted the backbone of the different activities planned in support of the competent authorities of the Member States. Focussing on functions, and combining state of the art tools, such as the eLearning platform MakCs and the Virtual Reality Environment for Ship Inspections (VRESI), the Agency has put together different learning paths in support of professional development using common core curricula, instructions, guidance, procedures, syllabi.

EMSA offers to Member States, candidate and potential candidate countries and neighbouring countries sharing EU sea basins an increasingly innovative, collaborative and flexible capacity building

toolbox, that can be specialised and tailor-made and relies increasingly on successful existing services, tools and applications as well as new technologies and learning services outside formal education.

Following the interest expressed by third countries, access to tools in support of Port State Control activities in different regions of the world was authorised by the EMSA Administrative Board, in accordance with the relevant procedure. Currently, eight out of nine Port state control regimes in the world are using EMSA tools, namely RuleCheck and/or MaKCs.

B) EMSA's operational achievements in 2021

The Administrative Board took note of the different operational achievements that contributed to the Strategic Objectives, as highlighted at the beginning of the CAAR 2021, and of the information on the operational outputs against previously set objectives as per the Single Programming Document 2021-2023, 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 COVID-19 pandemic continued to affect the activities of the Agency. The Administrative Board welcomed the adaptations and measures EMSA implemented to continuously adjust to the pandemic. The swift adaptation of its working methods allowed the Agency to continue providing its stakeholders with the range and quality of services they expect.

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 Administrative Board welcomed the continuous information provided on the mitigating measures put in place by the Agency to address the effect of the COVID-19 pandemic and the outcome of the Agency's assessments to minimise the impact on the budget.

The high level of implementation of the work programme resulted in an excellent budget implementation and the Agency executed 84,797,211 € in Commitment Appropriations (CA), representing 99.67% of the total budget of the year, and 82,798,089 € in Payment Appropriations (PA), amounting to 97.32% of the total budget¹.

Based on information outlined in Parts II, III and IV of the CAAR2021 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

¹ Counting C1 Funds (appropriations voted in the current budget).

assurance and that at the end of 2021, all audit recommendations issued and due by 31/12/2021 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. The Agency welcomed the adoption of the Agency's new Anti-Fraud Strategy. 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 2021 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 Administrative Board at the same time notes great uncertainty due to the invasion by Russia of Ukraine. EMSA should continue to monitor the situation closely and provide up-to date information to Member States and the Commission on maritime safety, security and the marine environment, as was already done with the EMSA report on "Impact of developments in Ukraine on maritime traffic and seaborne trade".

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, pollution prevention and the overall sustainability of the sector, paving the way for the use of new technology to the benefit of the European maritime community.

Done at Lisbon, 23 March 2022



Signed

Andreas Nordseth

Chairman of the Administrative Board

Executive Summary / Introduction

The framework for the activities of the European Maritime Safety Agency is shaped by the Agency's Founding Regulation, in which the legislator lays down and amends the tasks of the Agency; its 5-year Strategy, through which the Executive Director and the governing body, the EMSA Administrative Board, provide a strategic outlook in an evolving policy context; the EU political priorities and the programming of resources for decentralised agencies, which outlines the level of human and financial resources which may be made available to this particular Agency in order to carry out its tasks in the field of maritime safety and security, traffic monitoring, prevention of pollution by ships and response to oil pollution cause by ships and oil and gas installations.

The annual programme of work for 2021, as published in the EMSA Single Programming Document 2021-2023, was drawn up within the multi-annual framework outlined above.

Despite the persistent restrictions created by COVID-19 pandemic, the objectives set out for 2021 were achieved overall, through a high level of implementation of the annual work programme.

Thanks to good governance, sound management, resilient and dedicated staff the Agency delivered the operational services, the analysis and expertise, and the technical support that the Commission, the Member States and a growing canvas of users in the maritime sector need to help them make the sector cleaner, safer and more efficient. The Agency also continued to deliver services to further support its stakeholders in the context of the pandemic factoring in new working methods and an increase use of online tools.

The following section, Achievement of Strategic Objectives highlights key contributions in 2021 towards the realisation of the Agency's multi-annual strategic priorities and objectives as outlined in the EMSA's 5 year strategy. Detailed reporting on operational objectives in 2021 can be found in Part I - Achievements of the Year.

Achievement of Multi-Annual Strategic Objectives

After 20 years of operation, EMSA positions itself as the main EU technical maritime partner for both the Member States and the Commission. In the third 5-year strategy document covering the period 2020-2024, the Agency strives to add maximum value for its stakeholders in the years to come. The strategic objectives are structured by theme, the key areas to which the Agency contributes – Sustainability, Safety, Security, Simplification and Surveillance – and by function, the role the Agency performs for its key stakeholders – as service provider, knowledge hub, reliable partner and international reference.

Sustainability: 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



1. Support the development and implementation of relevant EU and international climate and environmental legislation

Achievements

In 2021, the Agency, in cooperation with the European Environment Agency, delivered the European Maritime Transport Environmental Report (EMTER). The first ever compendium on the environmental aspects of maritime transport which presents factual up-to-date information on the relevant EU and international environmental standards and describes current and future actions which may contribute positively to the reduction of the impact of maritime transport on the environment.

The Agency was actively involved in initiatives related to the European Green Deal including the FuelEU Maritime initiative, the Zero Pollution Action Plan initiative and work at IMO on energy efficiency and carbon intensity. The Agency further supported the Commission in the analysis of CO₂ emissions data in THETIS-MRV which led to a report being published. Moreover, a new framework contract for studies on alternative sources of power for ships was signed and the work on studies on biofuels and ammonia started. The technical contribution of the Agency in these areas was an essential building block in support of ongoing policy initiatives by the Commission, such as the “Fit for 55” package presented in July 2021.

The technical work developed by the Agency was also key in support of the Commission in the revision of the Port Reception Facilities Directive including related implementing acts and adaptations in the THETIS-EU module. This was in addition to the technical work in relation to the Sulphur Directive, evaluation of the Directive on ship-source pollution, AFS Convention, and emerging areas such as alternative fuels and sources of renewable energy, marine litter or underwater noise.

The waste notification message was implemented in SafeSeaNet version 5 following the requirements of the new Port Reception Facilities Directive.

The dedicated THETIS-EU Port Reception Facilities inspection module was further enhanced in support of the Port Reception Facilities Directive (EU) 2019/883. The newly update PRF inspection module went live in July 2021.

2. Intensify pollution prevention activities by building Member State capacity and developing practical guidance and tools for the wider maritime cluster

Achievements

The Agency delivered several workshops to Member States to familiarise them with the new Port Reception Facilities Directive, ensuring the dissemination of information on the new features introduced in both SSN and THETIS-EU.

Pollution prevention was introduced as a standard topic for discussion within the context of the annual Inter-Secretariat meeting of the Environmental Regional Agreements around Europe, thus raising awareness and cross-fertilisation between different competent authorities.

The mid-cycle horizontal analysis on the Sulphur Directive was presented in different fora, and lessons learned and common findings shared.

The study SOUNDS provided an inventory of sources of underwater noise from shipping and existing policy, guidelines, as well as recommendations on possible next steps.

Moreover, the new framework contract for studies on alternative sources of power contributed to disseminating state of the art information on these new sources to maritime administrations, shipowners and ports authorities.

3. Promote and support the development and implementation of innovative EU and global solutions to mitigate climate change

Achievements

EMSA is deeply involved in work related to the development of solutions at EU and global level to mitigate climate change.

A contributing factor to this is the expertise the Agency has gathered through the support it has provided over time to the Commission in the discussions at IMO on energy efficiency and its initial GHG strategy, studies conducted in relation to alternative fuels and energy solutions, and importantly in the implementation of the EU MRV Regulation and related reporting database THETIS-MRV.

The Agency continues to act as technical secretariat for and contribute to the ESSF Subgroup on Ship Energy Efficiency and on Sustainable Power for Shipping Subgroups. Also, the Agency supports the Commission in the EU Member States Expert Sub-Group on IMO GHG Emission Matters, which has been established to facilitate and prepare the Council negotiations towards the EU coordinated lines for IMO.

At international level, the Agency currently supports the Commission in the coordination of the IMO Correspondence Group (CG) on Carbon Intensity (together with China and Japan). Under this coordinator role, the Agency is directly involved in the completion of the IMO guidelines on the development of the Ship Energy Efficiency Management Plan (SEEMP) and the guidelines for its verification by Administrations. Aside from the coordination role, the Agency provides technical support to the Commission and the Member States in the preparation for and during the discussions within the context of the Inter Sessional Working Group on GHG and at the IMO MEPC Committee.

4. Further develop an agile, effective, innovative and risk-based response toolbox to top up Member State capacity to deter, detect and respond to pollution from ships and oil pollution from gas installations

Achievements

In 2021, the Agency broadened the scope of service for the response to pollution in coastal and shallow waters by supplying medium size equipment to all Equipment Assistance Service (EAS) arrangements and successfully concluding a procurement for near shore response equipment. Delivery of this new specialised equipment - including working boats - for response in shallow waters will take place in 2022.

Concerning the vessel network, the main achievements in 2021 included the improvement of the operational capacities of two additional vessels equipped with lightweight Remotely Piloted Aircraft (RPAS), reaching a total of ten vessels, as well as the preparatory work to innovate the capabilities of the vessel network, through a new concept of vessel storage contract, which will serve as intermediate storage capacity for Member State vessels during oil spill incidents. The procurement for a new EAS in the Black Sea was also successfully concluded.

In 2021, the pollution response services were activated within the required time and successfully deployed for three marine pollution incidents in support of Member States.

As a result of a public procurement in 2021, a contract for a feasibility study for the development of a response simulator tool was successfully awarded. The purpose of this tool is to assist in enhancing the preparedness of Member States to deal with pollution incidents. The project will continue with various phases until 2024.

Through EMSA's CleanSeaNet service the EU coastal waters and those of countries sharing a regional sea basin with the EU have been consistently monitored with satellite-based imagery that served to deter illegal spilling and to alert maritime authorities of potential spills, providing information on the location and evolution of the spill and about potential polluters. In certain areas, EMSA deployed complementary RPAS capabilities for further verification and monitoring of accidental spills in support to the response.

The RPAS services were also intensively used in critical coastal areas of high traffic to measure the sulphur content in the plume of the vessels and by doing so deter the use of fuel oils with sulphur content above the EU limits and follow-up through next port of call inspection on any infringement to these limits.

5. Prepare for response to new, evolving and diversified environmental challenges

Achievements

EMSA continued monitoring relevant scientific research and studies (i.e. IMAROS project) on risks as well as developments in equipment manufacturing in the response to the new low sulphur fuel oils and alternative fuels, in order to adapt the response toolbox as soon as new equipment becomes available.

Activities organised by the Agency to raise awareness on the challenges of managing chemical incidents at sea and to identify response capacity gaps at EU level included a workshop with Member State authorities and key players in HNS incident management as well as a consultation with Member States in the context of the CTG MPPR regarding EMSA enhanced activities for preparedness and response to chemical spills.

Safety: 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.

6. Lead expertise and support the development, implementation and enforcement of safety standards

Achievements

In 2021, EMSA concluded the STEERSAFE study dedicated to updating the steering and manoeuvrability requirements at international level. As a consequence of this work and following several consultations with stakeholders on the results of the study, two EU submissions were sent to the IMO which will discuss this topic during 2022.

With regard to implementation and compliance, EMSA provided support to the Commission in reviewing requests for exemptions under passenger ship safety directives, including 2009/45/EC and 1998/41/EC, as amended.

Within the marine equipment domain, the Agency supported the Commission in updating the Implemented Regulation listing all the relevant standards that EU certified marine equipment must fulfil.

Delayed by the pandemic, the cycle of visits on elements of the passenger ship safety directives (98/41/EU, 2003/25/EU & 2009/45/EU) started in the spring of 2021, using a hybrid model, to assist the Commission in verifying the implementation of the relevant requirements by the Member States in order to safeguard a high level of safety in passenger ships.

EMSA enhanced the MED Portal.

The Agency has continued the work on the development of the Shore Side Electricity (SSE) Guidance, covering different safety and standardisation aspects in interoperability and interconnectivity of shore side electricity and onshore power supply to ships at berth. EMSA organised a Workshop on this topic with more than three hundred participants. The finalisation of the Guidance is expected in the first quarter of 2022.

By the end of 2021, EMSA completed the second cycle of visits to Member States in relation to Directive 2008/106/EC on training of seafarers. The cycle saw visits to twenty-six EU Member States and two EFTA States. During this cycle and particularly following the 2012 amendments to Directive 2008/106/EC, it was also verified how Member States implemented the 2010 Manila amendments to the STCW Convention. The conclusion of this cycle will enable a horizontal analysis to be completed in 2022, highlighting the main horizontal findings and identifying areas where improvement has been made or is further needed, and promulgating lessons learnt and related proposals.

The Agency actively participated in several IMO Correspondence Groups dedicated to developing safety standards, including fire-safety elements of ro-ro passenger ships, mainly based on EMSA studies FIRESAFE I and II, life-saving appliances, fuel-cell guidelines and technical work related to other IGF Code fuels, including LNG and LPG. Still on the IMO front, EMSA provided technical input to support the positions of the EU in the different committees and sub-committees in relation to the development and/or revision of standards.

In 2021 EMSA concluded a campaign of remote inspections of EU Recognised Organisation (RO) head offices, focusing on the ROs' deployment of remote surveys and audits as a consequence of the COVID-19 pandemic. The inspection reports were communicated to the Commission and the relevant Member States, providing valuable information on the performance of the ROs and deeper insight on the issue of remote surveys and audits. A preliminary horizontal analysis report was also submitted in anticipation of the final report which will be completed in early 2022. The results of the campaign were used to shape a submission to the IMO for regulating remote surveys and audits.

Within the context of the revision of Directive 2003/25/EC, EMSA provided technical support to the Commission and Member States in the definition of the new proposed damage stability framework for ro-ro passenger ships. The proposal from the Commission will be discussed with co-legislators in 2022.

7. Support Maritime Administrations in their Flag State implementation effort

Achievements

Inspections of ships flying their flag is the core obligation of a flag State to ensure compliance of the ship with international and EU legislation, thus maintaining high standards of safety, protection of the marine environment and living and working conditions. This can be better achieved if flag State inspectors are qualified, competent and have up-to-date skills and knowledge. EMSA in 2021 provided different learning services to enhance skills and knowledge, following the identification of training needs in close cooperation with the EU Member States. In addition, a specific online course on "inspection techniques for Flag State Inspectors" was provided, and the development in cooperation with the competent authorities of the Member States of a common core curriculum for flag State inspectors started. This curriculum will enhance the necessary individual competencies for carrying out duties associated with the inspection of ships for compliance with the relevant international and EU-level instruments by flag States, will increase flag State inspectors' knowledge, skills and attitudes required to carry out inspections professionally, efficiently and effectively and will foster the uniform implementation of required standards established by law and benchmarked industry practice. The curriculum is part of the flagship EMSA Academy project and is an evolution of the successful capacity building services delivered by the Agency since its conception.

The ongoing development of the Dynamic Overview of National Administrations (DONA), with its different functionalities such as the Country Profile and the Reporting Gate, will support the Member States in their responsibilities as flag States.

The Agency also supported the Commission in the ongoing work for the revision of the Flag State Directive.

8. Support Maritime Administrations in their PSC role and promote a harmonised approach to PSC globally

Achievements

Support of Port State Control activities in different regions was further enhanced by providing access to a mobile application of RuleCheck. Users can now access up-to-date IMO Conventions, Codes, Resolutions and Circulars, ILO Conventions and Guidelines, and Maritime related EU Regulations and Directives, Paris MoU Manual and Instructions, Med MoU Manuals, as well as all other functionalities of RuleCheck, through their mobile devices. Work also started to provide access to RuleCheck to Vina del Mar Agreement Secretariat. Once the work is completed, eight out of nine regional Port state control regimes in the world will be using the same repository of regulations thus enhancing access to the up-to-date regulations and fostering global harmonization of the implementation of the international conventions.

The Agency provided intensive support to the Commission with the on-going work for the preparation of the Impact Assessment for the revision of the PSC Directive.

The Agency provided support to the EU Member State members of the Paris MoU organising and delivering the PSC Seminars for PSCOs.

The THETIS PSC inspection database continued to be a key tool in support of the PSC Directive (EU) 2009/16/EC and reporting of inspections by EU Member States and the wider region of Paris MoU. The inspection database and supporting mobile application have been further enhanced as a result of the needs identified by the inspection community.

9. Intensify work on ships for which the risk and impact of accidents are potentially higher

Achievements

In 2021, on request of the Commission, EMSA started developing guidelines on the carriage of alternative fuelled vehicles (AFV), e.g. electrical cars on board of ro-ro ships in cooperation with a group of experts from Member States and industry. The guidelines will be finalised in the first quarter of 2022.

The Agency participates in many EU funded projects on this subject e.g. looking into the challenges of large scale evacuation on large cruise vessels.

A contract to develop a study on container ship fire safety (CARGOSAFE) to apply the formal safety assessment methodology to container vessels, was concluded at the end of 2021. It is expected to provide the basis for further discussions in IMO on this topic.

10. Explore further work on safety standards for vessels not covered by relevant international conventions

Achievements

EMSA supported the Commission and Member States in the development and review of the deliverables of the study regarding the further development of the goal-based standards framework for small passenger ships.

On fishing vessel safety, EMSA supported the Commission with the launching of the study to evaluate the implementation of Directive 97/70/EC.

11. Become the technical facilitator in relation to autonomous ships

Achievements

A study on competences for operators in Remote Control Centres was launched, aiming to fill a knowledge gap and focus on the human element aspect of autonomous ships.

The first part of the risk-based assessment tool for MASS (RBAT MASS) was finished and a presentation to Member States and stakeholders was done through a dedicated workshop. The second part of the study started in 2021 and will be finalised in 2022.

12. Enhance role in relation to the human component of shipping

Achievements

EMSA contributed to various training initiatives that had the MLC implementation and enforcement as their focus for EU Member States and ENP Countries.

EMSA contributed to the preparation of the Commission's Study on the Implementation of the Maritime Labour Convention 2006 in ASEAN Countries. Subsequent to the kick-off meeting, EMSA has provided comments on the inception report, which was completed in November 2021. The final report is expected to be finalised by the consultants in early 2022 and will serve as the reference document for the continuation of the ad hoc in-country activities throughout 2022 and 2023, as part of the Enhanced Regional EU-ASEAN Dialogue Instrument.

The Agency also worked alongside the Commission and the Member States in preparing a submission for IMO in support of the future discussions on the revision of the STCW Convention and Code.

Security: Strengthen maritime security in Europe and globally where there is a European interest



13. Support proper implementation of EU and International maritime security legislation

Achievements

Building upon the positive experience of the previous agreement, EMSA was entrusted by the Commission with a new Contribution Agreement for providing from 2021 till 2027 satellite-based services as part of the Copernicus Maritime Surveillance services, one of the three Copernicus Security Services aiming at providing support for monitoring of activities at sea by

the EU and EFTA authorities involved in the implementation of security related legislation. Similar support is also provided to Frontex in the context of another Copernicus Security Service for border control and law enforcement.

The EMSA integrated real-time global maritime picture available to a range of actors in the EU maritime sector performing various functions related to preventing illegal acts was further completed with additional near real time Satellite-AIS data streams.

EMSA delivered in cooperation with the Commission the first version of the Best Practice Guidance document for maritime security inspections.

14. Provide further information services to protect the EU merchant fleet worldwide

Achievements

In terms of support to maritime security activities of Member States, EMSA provided a dedicated Integrated Maritime Service (IMS) to EUNAVFOR Somalia: Operation Atalanta. The IMS is essential tool for EUNAVFOR as it provides extensive vessel position/characteristics data in combination with satellite surveillance services in key hotspot areas for piracy and armed robbery, through the Copernicus Maritime Surveillance Service. The collaboration will continue through the new Cooperation Agreement signed in 2021. This support included delivery of satellite images in quasi real time in support of Member States' navies operating in the Gulf of Guinea, as well as a routine monitoring provided to EUNAVFOR in the Somalian area of operations.

15. Provide the platform to exchange best practices and ensure cross-sectoral cooperation on cybersecurity for the maritime cluster

Achievements

EMSA concluded the mapping exercise and the respective gap analysis on maritime cybersecurity risks.

16. Develop robust solutions to protect its maritime applications and information services

Achievements

Off-site backup to recover data in case of ransomware and very disruptive cyberattacks and Business Continuity Plans to migrate EMSA Maritime Applications to a secondary site (Madrid) in case of disaster were developed and were regularly tested for EMSA Maritime Applications and key business processes.

EMSA delivered in 2021 a new Security Incident Management capability to detect and react to security incidents affecting its digital services, in line with ISO27001, operated on 24x7x365 in cooperation with CERT-EU and a professional security operations centre service provider. During 2021 about 12 Billion security events were processed, about 3000 cases investigated by a security analyst, and 4 major security incidents detected and mitigated.

As regards security governance, the project to define and implement the EMSA Information Security Management System in line with ISO27001 was kicked off and resulted in 2021 in the delivery of a gap analysis and a roadmap for compliance.

17. Enhance involvement as a technical and operational partner in the context of the EU maritime security strategy

Achievements

One of the aims of CISE is to enhance civilian and military cooperation. This goal is going to be addressed by establishing a permanent connection between CISE and MARSUR, and to enable the direct connection of navies to the CISE network through the national nodes. The MARSUR community is working to develop the required actions (technical, operational and legal) to implement a connection between CISE and MARSUR. There are already six EU Member State navies directly connected to CISE via their national node. EMSA also supported EUNAVFOR-Med and Operation Irini, under the EU's Common Security and Defence Policy, with Integrated Maritime Services including Earth Observation products available through the Copernicus Maritime Surveillance Service through a new Cooperation Agreement signed in 2021.

Simplification: Facilitate the simplification of EU shipping by supporting EU-wide digital maritime solutions



18. Support further simplification, harmonisation and rationalisation of reporting formalities

Achievements

EMSA has assisted, in cooperation with the Commission, experts of the Member States and shipping industry associations, in the development of a reference dataset for the European Maritime Single Window environment foreseen by Regulation (EU) 2019/1239. This dataset provides a unique and harmonised definition of the information to be reported by all ships in all ports of the EU therefore covering multiple reporting requirements from e.g. port authorities, border control, security, waste management, health authorities and customs. It ensures that the same data sets can be reported to each Maritime National Single Window of the EU in the same way.

In complement to the harmonised EMSWe dataset, EMSA has elaborated common specifications of MNSWs graphical user interfaces and of reference databases on ships, locations and dangerous goods. Such specifications will contribute to the objective of the EMSWe Regulation to offer comprehensive, user-friendly communication and information flows, in order to improve the functioning of the internal market and to meet the needs of citizens and businesses.

19. Support the transition of the EU maritime sector to a paperless environment including eCertificates

Achievements

A project to establish an EU seafarers' certification platform was launched following discussions with Member States and the Commission within the context of the Agency's Administrative Board, with the support of a Correspondence Group with the participation of the Member States and the Commission. The Correspondence Group is expected to identify the high-level business and technical requirements of the platform by Q1 2022, to kick off next steps and start development.

In addition, EMSA continues the ongoing digitalisation activities to support the eCertificates objectives to facilitate the work of the Member States in their capacity as Flag, Port and coastal States. The Commission is currently preparing the revision of Directive 2009/16/EC on Port State Control and Directive 2009/21/EC on compliance with Flag State requirements. These revisions foresee the inclusion of eCertificates in both directives with the objective of facilitating inspections and EMSA has been supporting the Commission in preparation of the impact assessment.

20. Facilitate the improvement of overall efficiency of shipping in Europe where feasible

Achievements

EMSA has developed with volunteer Member States a technical solution for facilitating ship-shore reporting. This solution, by making available consolidated ship data to coastal stations, facilitates the fulfilment of reporting obligations of ships sailing in EU waters to those coastal stations. It also allows the fulfilment of Mandatory Reporting Systems (MRS) reports by ships in an electronic manner, replacing voice communication and allowing information between reporting systems to be reused.

Surveillance: Strengthen EMSA's role as the core information management hub for maritime surveillance



21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system

Achievements

EMSA has expanded both satellite and RPAS surveillance services. In terms of satellite monitoring, one new European satellite (PAZ1) and several new ground stations were integrated and an additional SAT-AIS data service was added to EMSA's satellite services portfolio to act as a backup solution and to complement the present SAT-AIS data stream.

In terms of RPAS services, a wide range of new capabilities were introduced for emissions monitoring and to support pollution response. Moreover, in terms of long-range capabilities contracted, enhancements to the RPAS portfolio included new radar sensors, phone detection capabilities and a new coastal service that has an autonomy of up to 15 hours along the coast, to support EMSA's regional strategy. In addition, new satellite communication services were provided to maritime authorities in support of RPAS operations and a new RPAS data centre is being developed to further integrate and allow for exploitation of RPAS based data sources.

The new SafeSeaNet version 5 was developed and deployed. This new version of the system supports the legal requirements for registration of persons on board passenger ships, the revised Port Reception Facilities Directive and the exchange of information with the new PRF inspection system (THETIS-EU), improved incident reports and additional security measures. EMSA continues to provide support for the technical developments of the national systems of the Member States to upgrade to version 5.

The process of development of the Integrated Maritime Services (IMS) providing an enriched maritime picture continued during 2021 with the integration of new data, information and functionalities. In 2021 the number of individual users of the IMS increased by 400. IMS were delivered to 26 Member States and Montenegro, over 618 organisations and/or authorities and 5 EU Agencies/Bodies for a total of approximately 5,650 users, covering an ever-wider range of maritime functions. During the 2021 EMSA held two “IMS for Member States” meetings for the consultations with the end users, discussing operational usage of the IMS, and planning and prioritizing further developments.

During 2021, new historical Automated Behaviour Monitoring capabilities were developed using Hybrid Cloud solutions. The first Global Port Call Detection service, allowing users to access all vessels’ arrivals and departures from ports around the world, not just from the EU, was deployed.

Progress was made regarding the development of the central databases. New Central Ships Database was deployed in production combining ship related data from different sources: LRIT, THETIS, Marinfo and SSN enabling quality control of datasets and increasing reliability of data.

EMSA continued to host, operate and maintain the EU LRIT CDC, the LRIT Consumption Tool, and the EU LRIT Ship Database on behalf of EU Member States, Iceland and Norway (EEA), and Georgia, Montenegro and Tunisia (Third Countries). The LRIT IDE was also hosted, operated and maintained by EMSA on behalf of the IMO.

In 2021, the Earth Observation Data Centre was enhanced to support a new data format which allows a more efficient data transmission from the data providers to EMSA and a faster dispatch of alerts in case of oil pollution or other occurrences detected from space.

EMSA continued to play a central role in supporting the development of CISE for the EU maritime domain. A new node version was developed for the network and a Cooperation Agreement was agreed to enable all authorities to join. CISE is made up of seven different maritime sectors namely - safety and security, defence, fisheries, border control, customs, marine environment, law enforcement. The current network has 25 different legacy systems which are already connected and sharing sectorial information (i.e. providing and consuming). The volume and variety of data exchanged in CISE have increased and, as a result the EU maritime traffic picture monitored by each authority connected, has improved significantly.

22. Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission

Achievements

Assessment of radiofrequency technologies from space were initiated with multiple industry providers. Although the level of maturity is still low, these capabilities present a significant potential for the maritime domain, towards enriching the maritime picture. In what concerns new satellite constellations, technical validation and integration of the ICEYE constellation (14 satellites) was achieved in 2021, with the procurement to follow in early 2022.

23. Develop machine learning and artificial intelligence applications in order to improve risk assessment, vessel position predictability, statistics and innovation

Achievements

Initial activities took place concerning the use of artificial intelligence for Earth Observation services. The first phase of the project, relating to the production of training datasets for future developments, was concluded and is ready for the second phase of development activities in 2022. The aim of this project is to use artificial intelligence algorithms to automatically analyse satellite images concerning the detection of vessels, relevant features and potentially oil spills.

The Study on the development of machine learning (ML) and artificial intelligence (AI) for Integrated Maritime Services (IMS) was contracted. The study will help to identify how to build AI and ML solutions across “big-data” analytical techniques in order to support the maritime community in detection and prediction of navigational safety risks, vessel behaviour, innovation and statistics.

24. Capitalise on surveillance expertise to engage further with the broader EU surveillance community to benefit the maritime services and add more value for the EU

Achievements

EMSA gathered user groups linked to its RPAS and satellite monitoring services (CleanSeaNet) in order to show Member States existing EMSA surveillance service capabilities, as well as gather requirements to guide future developments. Surveillance services were also showcased to a broad range of stakeholders through extensive participation in different forums and events. Moreover, active participation in European coast guard cooperation activities enabled further engagement with not only EU Agencies but also with Member State National Administrations involved in the implementation of coast guard functions.

In 2021 EMSA started to develop the information sharing plan to provide services implemented in the Agency legacy systems (i.e. IMS and EODC) in the CISE network. This will contribute to promoting the Agency’s surveillance expertise among several maritime communities (namely safety and security, defence, fisheries, border control, customs, marine environment, law enforcement).

25. Support Search & Rescue efforts of Member States

Achievements

As part of the services developed by the EMSA Academy, work started, with the support of a Correspondence Group composed of Member State experts, for the development of a part-time online course on search and rescue (SAR) related aspects.

In terms of support to emergencies at sea, EMSA provided satellite monitoring to Member States as part of 17 distinct activations. Five of these activations concerned support to SAR activities with short term radar and optical satellite images.

In the context of multipurpose RPAS services, Member States have been able to test, with very promising results, the use of RPAS to detect the exact location of vessels and persons reported in distress at sea and to monitor their situation while waiting for manned assets to reach the area. The capability for further use of RPAS services for SAR operations has been enhanced in the newly contracted RPAS services with improved mobilisation times and additional payloads such as improved infrared cameras, mobile frequency detectors and the possibility to drop a raft for 8 people from the aircraft.

In the context of the European cooperation on coast guard functions, an awareness session on SAR for non-SAR national organisations was organised in cooperation with Frontex and EFCA.

A reporting formality for the registration of persons on board passenger ships is now exchanged electronically through the new SafeSeaNet version 5 as required by the amended Directive 98/41/EC. The objective of this formality is to improve the safety of and the procedures for the search and rescue of passengers and crew travelling by sea in the event of an emergency, as well as in the aftermath of any accident which may occur.

The IMS Correspondence Expert Group on “Drift Modelling” completed the inventory of different tools used for drift modelling for maritime safety purposes including SAR as the first phase of delivering guidelines for developing an operational IMS drift modelling tool to be used for SAR and other maritime safety purposes.

26. Move the EU maritime picture to the cloud and explore the added value of other cloud-based services

Achievements

Based on the EMSA Cloud Strategy adopted in 2021 a strategic plan for moving the maritime picture to the Cloud by the end of 2023 was launched in order to facilitate future accelerated improvements of the maritime domain awareness capabilities of EMSA. The strategic plan includes upgrade of HP-IMS LTS application (already in the cloud) providing full tracks services functionality within 1 year of strategy adoption, transition of the STAR Streaming application, moving the current STAR RTMPS application to the cloud as well as upgrade of SEG and Mobile App applications to use cloud backend services. These projects will enable EMSA in 2024 to capitalize on the maritime picture in the cloud by providing the opportunity to increase vessel position data rates and retention time producing a real time maritime traffic picture experience.

In order to implement the Cloud Strategy across other digital services of the EMSA ICT Portfolio in 2021 the development of a detailed Cloud Roadmap was contracted.

In addition, EMSA has identified the following **roles** through which it intends to continue shaping its interactions with its stakeholders and its profile to support the 5/S strategic priorities and better fulfil its mission:

Service provider

27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation

Achievements

The Agency has established a task force to support the revision of the flag State, port State and accident investigation Directives. The work of the task force entailed data and technical input to the Commission for the work related to the Impact Assessment of the revision of the directives; support and technical input to the Commission for the identification of possible policy options for the revision of the directives; support to the Commission including relevant results and outcomes of the various projects and discussion where EMSA has served as platform, or been involved in relevant discussions supporting the Commission; provision of data, statistics and analysis as requested by the Commission; the preparation of a targeted consultation workshop with relevant stakeholders and support the Commission in the ISSG meetings.

EMSA supported the Commission by drafting two submissions to the 104th session of the IMO Maritime Safety Committee (MSC). The first one proposed the establishment of a new output for regulating remote surveys and audits, highlighting the reasons for it and suggesting a possible way forward, while the second proposed a comprehensive review of the STCW Convention and Code, highlighting the reasons for it and the main areas that need to be addressed. While the first submission was discussed and greenlighted by IMO, the second one was deferred for discussion at the 105th MSC session.

28. Extend and formalize EMSA training schemes

Achievements

The EMSA Academy prepared and delivered different capacity building activities in support of the competent authorities of the Member States exercising Flag, Port and coastal State responsibilities. Focussing on specific job profiles and functions, and combining relevant processes, procedures and working instructions following the relevant ISO standard (29993:2017) with state-of-the-art tools, such as the eLearning platform MakCs 2020 and the Virtual Reality Environment for Ship Inspections (VRESI), the EMSA Academy has developed one common core curriculum for Sulphur Inspectors and has started the work for the common core curriculum for Flag State Inspectors. Together with the common core curriculum for Port State Control Inspectors, for which preparatory work is currently taking place within the framework of the Paris MoU, these curricula will be the backbone of Member States' professional development schemes for different functions, and will increase knowledge, skills and attitudes required to carry out inspections professionally, efficiently and effectively and will foster the uniform implementation of required standards established by law and benchmarked industry practice.

The Agency developed various part-time synchronous and asynchronous online courses on different topics such as “EU Institutions and EU maritime legislation”, “Inspection Techniques for Flag State Inspectors”, and “Assessment, examination and certification of seafarers”.

29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability

Achievements

EMSA is offering traffic density maps through its SafeSeaNet ecosystem graphical user interface. The service allows maritime authorities and EU Agencies to visualise the density of shipping traffic in all EU waters on a map that can be filtered by ship types (e.g. passengers, cargo, fishing, tankers etc.), areas (e.g. Black Sea, Baltic Sea etc.) and period (month, quarter or year). The traffic density maps are also made available to the public through the European Marine Observation and Data Network (EMODnet) portal.

EMSA Maritime Analytics Tool (EMAT) prototype was expanded with new dashboards (sudden heading change, rendezvous at sea) providing capabilities for users to combine and aggregate data from EMSA systems e.g. IMS position reports, ABM alerting, public PSC data, position reports analysis. The tool provides a strategic view supporting the identification of specific shipping patterns.

Reliable partner

30. Engage actively with the European Border and Coast Guard Agency (Frontex) and the European Fisheries Control Agency (EFCA) to enhance European cooperation on coast guard functions

Achievements

EMSA continued providing a range of services through the EMSA-Frontex Service Level Agreement to support Frontex operations to address irregular migration and cross-border crime along European Union maritime borders and in pre-frontier areas, including the implementation of the EUROSUR framework.

Frontex was the second biggest consumer of EMSA’s IMS services in terms of service usage, reinforcing the added value of the Service Level Agreement (SLA) and associated deliverables. The system-to-system interface was operational 24/7, with an annual availability to Frontex of 99.94%, ensuring information and data channelled to and received by Frontex in a harmonised manner in Frontex frontends (EUROSUR and JORA2). EMSA sent more than 12 billion vessel position messages to Frontex with more than 220,000 unique vessels reported daily.

EMSA has a range of vessel monitoring algorithms (ABMs) available, enabling the monitoring of vessel behaviour and alerting users as appropriate. In 2021, more than 773,000 alerts were triggered and shared via system-to-system in the Frontex frontends, indicating a consistent increase in the usage of this service. This service is a solid example of cooperation between the two Agencies avoiding duplication of development efforts.

EMSA continued to be a major provider of Earth Observation (EO) expertise and services to Frontex, delivering SAR and optical imagery. For example, vessel information combined with EO products allows for vessel detection and identification in support of Frontex's activity. In addition to the specific taskings made on behalf of Frontex, EMSA also ensured the sharing of satellite imagery from both EFCA and CleanSeaNet with Frontex. Throughout 2021, EMSA provided periodical reports to Frontex for vessels meeting specified criteria operating in specific Frontex areas of interest (AoI). The Incidental Sightings of Potential Marine Pollution (ISPMP) reporting procedure was in place and fully operational with an overall of 12 incidental sightings reported by Frontex and shared via EMSA with the relevant national competent (CleanSeaNet) authority.

Regarding EFCA, EMSA continued providing a range of services through the EMSA-EFCA Service Level Agreement to support their fisheries monitoring mandate. The EMSA-IMS EFCA service has become the official reference worldwide service for EU Member State fisheries control authorities and has more than 1,100 registered users in DG MARE, EFCA and Member States. The major overhaul of the EMSA-IMS EFCA service continued in 2021. The available vessel monitoring algorithms (ABMs) have become a real operational asset for fisheries control with over 100 ABMs running in parallel specifically for fisheries control authorities. In 2021, some legal proceedings were initiated by the Member States following initial ABM alerts of potential non-compliant fisheries activities. Vessel information combined with EO products, as provided through the Copernicus Maritime Surveillance (CMS) service, was used to support fisheries control operations in the following geographical areas: North East Atlantic, West Africa, Cape Verde, Mediterranean Sea, Black Sea, and Indian Ocean. For most of 2021, EMSA continued providing lightweight Vertical Take-Off and Landing (VTOL) RPAS services and satellite communications (SATCOM) internet services on board the Lundy Sentinel EFCA chartered fisheries patrol vessel. RPAS flights support pre-boarding and boarding phases of fisheries inspections, gather data to improve the maritime situational awareness by observing fishing activities, detecting vessels not transmitting AIS or sailing in fishing restricted areas.

In May 2021, EFCA activated Article 8 of the Service Level Agreement on the provision of an EMSA chartered vessel to perform fisheries monitoring and control campaigns. Both Agencies staff co-operated swiftly and closely to deploy, under EFCA control, the EMSA contracted vessel Aegis in the North Sea and in the Western Waters in the North East Atlantic from September 2021 until March 2022.

31. Engage actively with industry to generate transfer of knowledge and provide non-commercial technical maritime advice

Achievements

Every company is offered the possibility to present their portfolio to EMSA (which happens on a regular basis in the fields of satellite monitoring and capabilities, and for drone technology). By doing so, the Agency remains informed about the latest technological developments and innovations available on the market. Start-up companies or companies with new projects are given the possibility to get more information about the user requirements EMSA has collected in several fields. This will allow them to have a realistic view of what the user needs are and what capabilities will be required to meet them.

The ePortal for Experts and Speakers supporting activities of the EMSA Academy was finalized and deployed in production providing a digital solution for browsing the database of maritime expertise.

32. Seek synergies with complementary EU bodies and communities to add more value for the EU

Achievements

EMSA continued providing Integrated Maritime Services (IMS) to support EUROPOL in the areas of Law Enforcement and Organised Crime activities at sea. In 2021, the number of Europol users increased by 45%. In addition, in May, the EMSA IMS-EUROPOL service was used by a Member State for the first time. EUROPOL was requested by the Surveillance Unit of the Federal Criminal Police of Germany to support them in an operational exercise. The exercise was rated as a success and a significant step into the future of maritime surveillance. From EUROPOL's point of view, this experience confirmed the benefit of the IMS service for Law Enforcement support in the Member State.

Regarding the cooperation with the Maritime Analysis and Operations Centre – Narcotics (MAOC (N)), EMSA continued providing IMS services to this international Agency set up to coordinate anti-drug trafficking actions by six EU Member States (France, Ireland, Italy, Spain, Netherlands, Portugal) and the UK. As stipulated in the renewed Cooperation Agreement signed in December 2020, MAOC (N) has provided the first Annual Report for the EMSA-MAOC (N) service for 2021 with information on how the service was used, the lessons learnt and recommendations on further service improvements.

CISE aims to enhance maritime cross-sectorial and cross-border synergies, avoid duplication of services and enhance their complementarity. During 2021 the CISE catalogue was established where each CISE stakeholder started to clarify what information it is going to make available in the network for other EU bodies and communities.

A new voluntary inspection module was established in THETIS-EU to support the reporting of enforcement actions to livestock vessels in accordance with Regulation (EC) 1/2005 on the protection of animals during transport, so called THETIS-Animal Welfare.

33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards

Achievements

As maritime safety, maritime security and protection of the marine environment are common concerns of the EU 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 IV) and the Black and Caspian Sea (BCSEA). These activities aim to contribute to the approximation of standards in maritime safety, security and increasingly also pollution prevention and response. This is a crucial element in the overall success of the EU's vision for its seas. The working methods and online platforms introduced in 2020 due to the pandemic continued to be applied and ensured the implementation of planned actions.

Within the framework of SafeMed and BCSEA projects, Georgia, Ukraine and Jordan agreed to share AIS information with the Member States participating in MARES (Mediterranean Member States plus Portugal) under the conditions defined by the SSN High Level Steering Group (HLSG). Discussion will be launched in 2022 about further integration of the SafeMed and BCSEA region countries in SafeSeaNet under the conditions to be defined by the HLSG.

THETIS-MED continued to support the Mediterranean MoU on Port State Control and in December 2021 was adopted as the single inspection reporting system in the Med MoU region, resulting in the decommissioning of the former system (MedSis).

International reference

34. Step up technical and operational support where EMSA can add value to relevant EU foreign policies

Achievements

Tools in support of Port State Control are now used in different regions of the world, thus exporting EU solutions and supporting harmonisation of standards and a level playing field.

The revision of EU Maritime Security Strategy started in 2021 and CISE is going to be considered one of the instruments to set-up and improve technical and operational support for EU foreign policies.

Knowledge hub

35. Provide the central EU maritime information hub and access point for open data

Achievements

In 2021 the Agency developed and made available the EU Maritime Profile, a one-stop-shop providing relevant and up-to-date statistics highlighting the details and importance of individual sectors and domains within the maritime transport sector in the EU.

The EMTER represents the first ever compendium on the environmental aspects of maritime transport.

The report "Impact of COVID-19 on the Maritime Sector in the EU" provided an in-depth overview of the impact of the pandemic on shipping in relation to traffic, trade, EU Flags and ownership, shipbuilding, safety and environmental inspections, as well as specific segments such as cruise & passenger.

36. Support innovation and development of new technologies

Achievements

EMSA has become an international reference in the provision of near real time satellite based surveillance services and remotely piloted aircraft services in the civil domain, permanently updating its portfolio of services to the latest technologies and offering the best operational solutions for maritime administrations.

With its framework contract for studies on alternative sources of power for ships, EMSA supports discussions and decision-making processes towards greener shipping.

In cooperation with the European Space Agency (ESA) and Norway, the Agency has developed a technical solution which demonstrates how satellite communication using the VHF Data Exchange System (VDES) may facilitate ship-shore reporting. It allows Mandatory Reporting System (MRS) reports to be submitted electronically on board the ship, transmitted through a satellite with a VDES payload and a VDE-SAT ground station to an information hub operated by EMSA and transferred to the relevant coastal authority in a Member State.

Part I – Achievements of the Year

1. Sustainability and technical assistance

1.1 Sustainability

1.1.1 PREVENTION OF POLLUTION BY SHIPS

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(d), 2.4(h), 2a.2(a) and 2a.2(b)

Planned input		Actual Input
CA	2,516,165	2,055,453
PA	2,117,165	1,677,622
Staff	7.5 AD, 0.5 AST, 1 SNE	7 AD, 0.5 AST

Performance Indicator	Target 2021	Results 2021
Studies	2	2
Workshops	2	2
Environmental Report	1	1
Outputs 2021		Achievements
1. Participate and contribute to any initiative within the framework of the Green Deal for Europe, including Zero Pollution as requested and relevant for the Agency's mandate.		✓
2. Support the Commission in the development and implementation of new or amending EU legislation in the areas of port reception facilities, ship recycling, air pollution (SOx, NOx, PM), alternative emission abatement methods, sustainable alternative fuels and cleaner power technologies, ship energy efficiency, greenhouse gas emissions and implementation of the MRV regulation, ballast water management, leaching from anti fouling paints, sanctions for ship source pollution and the rules on liability and compensation. The support entails technical notes, drafting of implementing or delegated acts, participation in deliberations, providing technical advice, organizing workshops, etc.		✓
3. Support the Commission in the framework of the Regional Sea Conventions and Agreements in areas of pollution prevention.		✓
4. Support the Commission in IMO (mainly MEPC, PPR but also CCC) in areas of pollution prevention and sustainability including new emerging areas like sustainable alternative fuels, marine litter and underwater noise.		✓
5. Support to the European Sustainable Shipping Forum (ESSF) and all its subgroups as technical secretariat.		✓
6. Support the European Ports Forum (EPF), with its sub-group on Sustainable Ports.		✓
7. Support the Commission on the follow-up of the FuelEU Maritime initiative, including organizing workshops as appropriate.		
8. Commissioning studies for alternative fuels, with focus, to start with, on biofuels.		✓
9. Commissioning studies on issues of interest in the environmental domain, and in particular on underwater noise.		✓
10. Identification of business requirements for the development and enhancement of tools supporting the environmental legislation (THETIS-EU / Sulphur module, THETIS-EU / PRF module, THETIS-EU / SR Module, THETIS-MRV).		✓

11. Deliver a European Maritime Transport Environmental Report in cooperation with the European Environmental Agency (EEA) and organise a large-scale event bringing together key actors and stakeholders in the maritime sector for its presentation.	✓
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1.1.2 OPERATIONAL POLLUTION RESPONSE SERVICES

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2(b), 2.3(d) and 2.5

Planned input		Actual Input
CA	15,842,618	14,962,637
PA	18,510,871	17,772,317
Staff	9.5 AD, 1.5 AST, 2 CA, 1 SNE	9.75 AD, 1.5 AST, 2 CA, 1 SNE

Performance Indicator		Target 2021	Results 2021
Stand-by Oil Spill Response Vessel Network	number of fully equipped vessels for mechanical recovery	17	17
	number of fully equipped vessels for dispersant application	6	6
	number of vessels equipped with RPAS	10	10
New vessels pre-fitting	number of newly contracted vessels pre-fitted	3	4
Equipment Assistance Service (EAS)	number of stockpiles	4	4
Vessel/Equipment replacement/adaptation/upgrade	number of projects completed per year	5	6
	number of Vessel drills (acceptance drills and quarterly drills) per year	69	70
Vessel/Equipment drills and exercises	number of operational exercises per year	10	10
	number of Equipment Assistance Service (EAS) drills	24	37
	number of notification exercises per year	12	18
Response to requests for vessel/equipment services	mobilisation time in hours	24	24
Dispersant stockpiles	number of stockpiles	8	8
	minimum quantity of dispersants available at any time	1600 tonnes	1600 tonnes
HNS operational support			
Response to requests for assistance to MAR-ICE	percentage of responses within 2 hrs.	>75	100%
	percentage of responses within 4 hrs.	<25	0%
Developing datasheets	number of datasheets produced/revised	25	25
Cooperation, coordination and information			

Coordination of the CTG MPPR rolling work programme	number of workshops, guidance documents	3	15 ¹
Coordination of the CTG MPPR annual meetings	number of CTG MPPR meetings	1	1
Coordination of the PRS User Group annual meetings	number of meetings	1	1
Coordination of the annual Inter-Secretariat meeting with Regional Agreements	number of meetings	1	1
Outputs 2021			Achievements
1. Manage the current stand-by service contracts, including supervision of vessel and equipment performance as well as crew capability for oil pollution response.			✓
2. Following the expected signature of the Vessel Availability Contracts for the Atlantic South, West and Central Mediterranean in 2020, the vessels will become operational in 2021.			✓
3. Retender two stand-by oil spill response service contracts for the Aegean Sea and Atlantic North to replace the non-renewable contracts ending in 2022.			The contract for the Atlantic North could not be awarded, it will be retendered in 2022.
4. Renewal of the vessel availability contract covering the Southern Black Sea for an additional 4-year period.			✓
5. Manage the existing Equipment Assistance Service (EAS) contracts, monitoring equipment management and level of training of technical support personnel.			✓
6. Following the expected signature of the EAS contract for the Adriatic Sea, the arrangement will become operational in 2021.			✓
7. Launch a tender for the establishment of an EAS in the Black Sea to be operational in 2022.			✓
8. Manage the existing dispersant stockpiles in the Black Sea, Adriatic Sea, East and Central Mediterranean Sea, Canary Islands and Madeira, Southern Atlantic and North Sea.			✓
9. Improve the response capacity of certain Vessels and EAS arrangements through equipment upgrades, including near shore equipment.			✓
10. Enhance the detection capability for oil pollution in a number of suitable oil spill response vessels to be equipped with light RPAS systems.			✓
11. Replace or declassify obsolete equipment, in line with the 'Equipment Policy' of the Agency.			✓
12. Organise the participation of EMSA's pollution response assets in exercises, using the mobilisation procedure of the ERCC (DG ECHO).			✓
13. Support "hands-on" training in the use of EAS equipment for Member States' operators.			✓
14. Mobilise pollution response assets in case of request for assistance by a Requesting Party.			✓
15. Provide expertise to Member States and/or the Commission in case of pollution incidents.			✓
16. Support Member States pollution response operations through the provision of equipment and training for EFCA and FRONTEX multipurpose vessels, within the context of cooperation on coast guard functions.			✓
17. Maintain the network of specialised chemical experts (MAR-ICE Network).			✓
18. Maintain and update database/datasheets of chemical substances for marine pollution response (MAR-CIS).			✓
19. Maintain oil and chemical spills fate and trajectory modelling capabilities.			✓

¹ More meetings than initially planned were held in this sector as they took place on-line.

20. Maintain and update marine pollution preparedness and response related information, studies, tools and reports.	✓
21. Coordinate the annual PRS User Group, Inter-Secretariat and CTG MPPR meetings, workshops, and implement the CTG MPPR Rolling Work Programme.	✓
22. Support as a member of the INTERSPILL Committee the organisation of the tri annual INTERSPILL Conference and Exhibition events.	✓
23. Support the exchange of expertise in the field of chemical spill response through a dedicated stakeholder workshop with Member states and industry.	✓
24. Launch a study in preparation of the software development for a response simulator tool to assist in enhancing the preparedness of Member States to deal with pollution incidents.	✓

1.2 Visits, inspections and human element

1.2.1 CLASSIFICATION SOCIETIES

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2 (b), 2.3(c), 2.4(h) and 3

Planned input		Actual Input	
CA	2,189,835		2,078,000
PA	2,189,835		1,974,614
Staff	8.5 AD, 1.25 AST, 0.25 CA, 1 SNE		8 AD, 1.25 AST, 0.25 CA, 1 SNE

Performance Indicator		Target 2021	Results 2021
Inspections	number of RO inspections per year	13-17	13
Reports	number of reports per year	16-20	11 ²
Draft assessment reports	number of reports per year	5-7	2 ³

Outputs 2021	Achievements
1. 13-17 inspections of Recognised Organisations' (ROs) offices.	✓
2. Upon request of the Commission, initiate inspections of classification societies following any new request for EU recognition.	No requests received
3. Upon request of the Commission, provide technical assistance in the periodic assessment of the Quality Assessment and Certification Entity set up by the ROs in accordance with Article 11 of Regulation (EC) No. 391/2009.	No requests received
4. Provide draft assessment reports to assist the Commission in its preparation of the assessments of ROs and their follow-up.	The assessment programme was disrupted by the impact of the pandemic on the inspection programme of ROs. Fewer assessment reports compared to

² New reporting arrangements have been agreed with the Commission. The reporting has also been affected by the impact of COVID-19 on inspections.

³ Assessment reports are based on the inspection programme which was disrupted by COVID-19.

	the ones initially planned were delivered in 2021
5. Assist the Commission with the follow-up of RO assessments under Articles 5 and 6 of Regulation (EC) No. 391/2009 and Commission Regulation (EU) No 788/2014	✓
6. Support the Commission and the Member States in the implementation of Regulation (EC) No. 391/2009 and Directive 2009/15/EC on common rules and standards for ship inspection and survey organisations and for the relevant activities of maritime administrations, as necessary.	✓
7. Assist the Commission in the implementation of a new working arrangement for the participation of authorising Member States in EMSA inspections and dissemination of inspection results.	✓
8. Organise the annual workshop with the Commission and the Member States on the working arrangements for the monitoring of the ROs.	The presential workshop was deferred to 2022 at the Commission's request due to COVID-19
9. Conduct a desk analysis of the agreements between the Member States and the ROs with the aim to assist the Commission in the implementation of Directive 2009/15/EC, upholding the level playing field.	Cancelled at the request of the Commission

1.2.2 SEAFARER TRAINING AND CERTIFICATION

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2 (b) and 3

Planned input		Actual Input
CA	1,582,777	1,625,311
PA	1,637,407	1,543,125
Staff	5 AD, 1.5 AST, 0.5 CA, 1 SNE	5.75 AD, 1 AST, 0.25 CA, 1 SNE

Performance Indicator		Target 2021	Results 2021
Inspections and visits	number of inspections and visits per year	7-8	4 ⁴
	percentage of visit notifications sent to Member States with at least three months' notice	95%	100%
Reports	number of reports per year	7-9	2 ⁵
	percentage of draft reports submitted to the visited Member State or third country within 90 days from the end of the visit/inspection	95%	100%
Outputs 2021			Achievements
1. 4-5 inspections in third countries.			Inspection programme disrupted by COVID-19

⁴ On-site visits and inspections restarted in September 2021. In addition, the fieldwork element of four visits was completed.

⁵ Fieldwork for Visits restarted in September 2021, so the associated reports will be issued in 2022.

2. 3 visits to Member States.	✓
3. Assistance to the Commission for 4 draft Assessments of third Countries upon request.	✓

1.2.3 VISITS TO MEMBER STATES

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2 (b), and 3

Planned input		Actual Input
CA	1,448,441	1,582,478
PA	1,448,441	1,525,961
Staff	4.5 AD, 1.75 AST, 0.75 CA, 1 SNE	5.25 AD, 1.75 AST, 0.5 CA, 1 SNE

Performance Indicator		Target 2021	Results 2021
Visits	number of visits per year	21-24	16 ⁶
	percentage of visit notifications sent to Member States with at least three months' notice	95%	100%
Reports	number of reports per year	19-24	5 ⁷
	percentage of draft reports submitted to the visited Member State within 90 days from end of visit	95%	100%
Outputs 2021		Achievements	
1. 5 visits to Member States in respect of Directive 2009/16/EC on port State control and related activities, including Directive 2017/2110 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service.		Only 4 visits were carried out due to COVID-19	
2. 3 visits on the implementation of the Sulphur Directive and related Commission Implementing Decisions.		✓	
3. 5-6 visits in respect of Directive 2014/90/EU on marine equipment.		Only 3 visits were carried out due to COVID-19	
4. 4-5 visits in respect of Directive 2001/96/EC on the safe loading and unloading of bulk carriers.		Only 3 visits were carried out due to COVID-19	
5. 4-5 visits in respect of Directives 2009/45/EC, 2003/25/EC and 98/41/EC, as amended, regarding passenger ship safety.		Only 3 visits were carried out due to COVID-19	
6. Upon request of the Commission, assistance to verify the implementation of any other EU legislative acts in the field of maritime safety or ship-sourced pollution.		No requests received	
7. Upon request of the EFTA Surveillance Authority other visits to EFTA Member States to monitor the implementation of relevant legislation.		No requests received	

⁶ On-site visits, including fieldwork after a remote visit, restarted in September 2021.

⁷ Visit fieldwork restarted in September 2021, so the associated reports will be issued in 2022.

1.2.4 HUMAN ELEMENT

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.4(e) and 2.4(h)

Planned input		Actual Input	
CA	458,134	264,138	
PA	358,134	255,480	
Staff	1.25 AD	1.25 AD	

Performance Indicator		Target 2021	Results 2021
Human element	STCW Statistical overview	1	1
	number of meetings attended in support of Commission on the review and/or implementation of STCW, STCW-F and MLC	2	7

Outputs 2021	Achievements
1. Virtual workshop on the Human Element in Shipping.	✓
2. Contribute to submissions related to the review of the STCW Convention.	✓
3. Contribute to submissions on the review of STCW-F.	✓
4. Support the Commission and the Member States in relation to Human Element issues.	✓
5. Commission a Study in support of the development of standards for shore-based personnel responsible for the operation of MASS.	✓
6. Cooperate with the Commission, IMO and ILO to foster the implementation of the MLC Convention.	✓

1.3 Capacity building

1.3.1 ANALYTICS AND RESEARCH

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.4 (a), 2.4 (b), 2.5, 2a.2(d) and 2b

Planned input		Actual Input	
CA	815,047	859,529	
PA	815,047	830,100	
Staff	3.75 AD, 0.5 AST	3.75 AD, 0.25 AST, 0.25 CA	

Performance Indicator		Target 2021	Results 2021
Analyses on the basis of full or part cycles or series of visits and inspections	number of horizontal analyses per year	1 to 2	1
Regular statistics on the EU shipping sector	number of published reports	2	7

Outputs 2021	Achievements
1. Horizontal Analyses, including cost-effectiveness analyses (CEAs) of full or part cycles or series of visits and inspections. For 2021, work is expected to focus on End-of-Cycle Horizontal Analyses of the Sulphur Directive and on the STCW Directive.	✓
2. Support the Commission and the Member States by sharing the results of and knowledge gained from the Horizontal Analyses through workshops and seminars.	✓
3. Support the Member State with regular statistics through the specific functionality in DONA once developed and available to the relevant competent authorities.	✓

4. Analyses of research projects, upon request, to assist the Commission with preparatory work for updating/developing legislation, impact assessments performed by the EC, analyses, services and publications.	✓
5. Produce meaningful statistics with added value for the general public.	✓

1.3.2 CAPACITY BUILDING AND EMSA ACADEMY

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.3(a), 2.3(b), 2.5 and 2b

Planned input		Actual Input
CA	3,759,962	3,690,160
PA	4,009,249	3,631,563
Staff	10.25 AD, 0.5 AST, 0.5 CA, 2 SNE	10.25 AD, 0.25 AST, 0.75 CA, 2 SNE

+ Project Financed activity	EU Funds for Candidate and Potential Candidate Countries	Actual Input
Funding Source	EC, DG NEAR	
Time frame / envelope	ongoing, continuation planned 2020-2022	
Expenditure 2021	None expected	Committed: 179,514 €
STAFF	No extra project-financed staff	Paid: 96, 202 €

Performance Indicator		Target 2021	Results 2021
EMSA Academy	number of trainings on specific topics on EU/International maritime legislation (including PSC Seminars and AI)	Up to 18	27
	number of trainings on EMSA's operational maritime applications and tools	Up to 15	26
	number of professional development and training programs, including the development of common core curricula, instructions, guidance, procedures, syllabi, training materials and contents	Up to 2	1
	number of live broadcast trainings / webinars	2	2
Training for enlargement countries	number of AC training sessions/ activities per year	Up to 6	13 ⁸
	number of AC experts attending per year	50	24 ⁹
Customer satisfaction	level of customer satisfaction	>90%	>90%
MaKCs system operational	percentage per year availability	85%	99.5%
	days maximum continuous downtime	9	0.5
MaKCs Helpdesk Service	percentage of requests closed in less than 9 days	75%	95.03%

⁸ The project changed shape and is now focussing much more on other technical actions rather than training sessions. Moreover, the undergoing development of curricula by the Academy has an impact on this KPI.

⁹ See above.

VRESI	percentage per year availability	85%	100% ¹⁰
Outputs 2021		Achievements	
1. Development, implementation and management of EMSA's professional development and training programs, including the development of common core curricula, instructions, guidance, procedures, syllabi, training materials and contents, assessment methodologies and criteria per functions. Focus on Flag State Inspectors, Integrated Maritime Services and PSCOs. Continue cooperation with the Paris MoU, within the context of task force 34, for the development of the scheme for Port State Control Officer and a potential revision of the Paris MoU training policy.		✓	
2. Start the process for certification in line with the relevant ISO-based management standards normally adopted by learning service providers, thus increasing the effectiveness and efficiency of the Academy through the use of continual processes and tools for its evaluation and improvement and therefore enhancing the credibility of the Academy as a service provider for maritime lifelong learning services. The implementation will cover specific processes related to the development of curricula and will be incorporated in the EMSA QMS currently under development.		✓	
3. Delivery of trainings, either face to face or through live broadcasting, on specific topics on EU/International maritime legislation as part of the new modular approach or for newly adopted legislation.		✓	
4. Delivery of training, either face to face or through live broadcasting, on EMSA's operational maritime applications and tools.		✓	
5. Facilitate and maintain content of eLearning modules in MaKCs 2020 and Virtual Reality Environment for Ship Inspections (VRESI), through also the use on the newly established capability on the eLaboratory.		✓	
6. Further enhancement of the eLearning modules available on MaKCs 2020 as well as development of new modules or webinars to support the new approach to capacity building.		✓	
7. Support to Member States for IMSAS. The support will entail trainings, seminars and mock audits (pre audit period) and contribution to the preparation of the Corrective Action Plan (post audit support).		✓	
8. Contribution to the work on capacity building initiatives within the framework of the cooperation with EFCA and Frontex, including the development of a joint SAR training and the potential revision of the SQF based on the lesson learned while developing the modular approach for FSIs.		✓	
9. Cooperation with the World Maritime University on areas of common interest.		✓	
10. Support to the enlargement countries for the transposition of EU maritime legislation to their national legal system and the implementation of a Quality management System for their maritime Administrations.		✓	

1.3.3 SAFEMED IV

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 2.5

<i>Planned input</i>		<i>Actual Input</i>
Project Financed activity	SAFEMED IV, EuroMed Maritime Safety Project	
Funding Source	EC, DG NEAR	
Time frame / envelope	2017-2021 / 4,000,000 €	
Expenditure 2021	None expected	
Staff	2 CA + 0.5 SNE ¹¹	
		Committed: 1,013,894 €
		Paid: 465,306 €
		1.75 CA, 0.5 SNE

Performance Indicator	Target 2021	Results 2021
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¹⁰ Operational since Q4.

¹¹ Project financed activities 7100 and 7400 (SAFEMED IV and BC Sea) share 1 SNE.

Implementation of SAFEMED IV, EuroMed Maritime Safety Project	number of training sessions per year	Up to 5	21
	number of activities per year	Up to 6	15.25 ¹²
	number of ENP experts attending per year	90	267
	level of customer satisfaction	>85%	>85%
			Achievements
1. Support the building up of the national capacity of the beneficiary countries through technical meetings per year (seminars, workshops, training sessions), activities (studies, technical support, exercises, bilateral activities, etc.) and the services of the EMSA Academy, in accordance with the annual action plan endorsed by the steering committee of the project.			✓
2. Provision of tools (RuleCheck, THETIS-MED and MaKCs) and services (IMS/ CleanSeaNet) for relevant authorities of the beneficiaries as relevant.			✓
3. Enhance the cooperation on AIS matters.			✓
4. Support the beneficiary countries for IMSAS. The support will entail trainings, seminars and mock audits (pre audit period) and contribution to the preparation of the Corrective Action Plan (post audit support).			✓
5. Support the beneficiary countries in the ongoing discussions on the potential submission to IMO to designate the Mediterranean Sea as ECA.			✓
6. Cooperate with regional partners such as the UfM, REMPEC and the Barcelona Convention.			✓
7. Support the transposition of international conventions to national legislation by beneficiary countries.			✓
8. Cooperate with regional partners such as the Barcelona Convention and REMPEC.			✓

1.3.4 BC SEA

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 2.5

Planned input		Actual Input	
Project Financed activity	BC Sea (Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions)		
Funding Source	EC, DG NEAR		
Time frame / envelope	2016-2021 / 4,000,000 €		
Expenditure 2021	None expected	Committed: 969,535 €	
Staff	2 CA + 0.5 SNE ¹³	Paid: 608,257 €	
		2.25 CA, 0.5 SNE	
Performance Indicator		Target 2021	Results 2021
Implementation BC Sea	number of training sessions per year	Up to 5	20
	number of activities per year	Up to 6	10
	number of ENP experts attending per year	70	201
	level of customer satisfaction	>85%	>85%

¹² This KPI covers a number of different activities. Those that are long-lasting are counted as 0.25 per quarter. When one of the activities does not start at in Q1, the annual result for the year will not be a whole number. In 2021 the provision of the MAR-CIS services to SAFEMED beneficiaries started from the Q3.

¹³ Project financed activities 7100 and 7400 (SAFEMED IV and BC Sea) share 1 SNE.

Outputs 2021	Achievements
1. Support the building up of the national capacity of the beneficiary countries through technical meetings per year (seminars, workshops, training sessions), activities (studies, technical support, exercises, bilateral activities, etc.) and the services of the EMSA Academy in accordance with the annual action plan endorsed by the steering committee of the project.	✓
2. Provision of tools (RuleCheck, THETIS-MED and MaKCs) and services (IMS/ CleanSeaNet) for relevant authorities of the beneficiaries as relevant.	✓
3. Enhance the cooperation on AIS matters.	✓
4. Support the beneficiary countries for IMSAS. The support will entail trainings, seminars and mock audits (pre audit period) and contribution to the preparation of the Corrective Action Plan (post audit support).	✓
5. Support the beneficiary countries in the ongoing discussions on the potential designation of the Caspian Sea as an area where the conventions are applicable.	✓
6. Support the beneficiary countries in establishing a robust PSC system in the Caspian Sea.	✓
7. Cooperate with regional partners such as the Black Sea Commission.	✓
8. Support the transposition of international conventions to national legislation by the beneficiary countries	✓

2. Safety, security and surveillance

2.1 Safety & security

2.1.1 MARITIME SAFETY

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2(c), 2.4(d) and 2.4(h); Directive 2009/45/EC; Directive 98/41/EC; Directive 2003/25/EC; Directive 2001/96/EC; Directive 2014/90/EU; Directive 97/70/EC; Regulation 336/2006/EC

Planned input		Actual Input
CA	4,131,472	4,285,900
PA	3,221,355	3,324,105
Staff	12.25 AD, 0.5 AST, 1 SNE	13.5 AD, 0.5 AST, 1 SNE

+ Project Financed activity		Actual input
Funding Source	EQUASIS Equasis Member States	
Time frame / envelope	ongoing	
Expenditure 2021	450,000 €	Committed: 547,446 € Paid: 451,701 €
STAFF	No extra project-financed staff (EMSA financed Equasis staff covered in previous box)	

Performance Indicator	Target 2021	Results 2021
EQUASIS – Availability of the system	percentage per year availability 99.5%	99.92%

EQUASIS – Users	number of users per month	32 000	36 694
EQUASIS Contributors	number of contributing members	9 -10	10
Outputs 2021			Achievements
1.	Provide pro-active technical support to the Commission and the Member States on the work carried out at EU and IMO level in the field of Maritime Safety Standards, including proposing initiatives where safety problems have been identified. Participating and providing technical input into the EU coordination documents related to the IMO committees SDC, SSE, MSC, CCC and III and the associated correspondence groups.		✓
2.	Provide technical support regarding implementation and developments on Maritime Autonomous Surface Ships (MASS), passenger ship safety, fire safety, life-saving appliances, steering and manoeuvrability standards and the ISM code.		✓
3.	Development of a risk-based assessment tool for MASS (RBAT MASS - study) and dissemination of results to relevant stakeholders.		✓
4.	Ensure that the EMSA studies STEERSAFE, FIRESAFE and SAFEMASS have an appropriate follow-up including, where appropriate, dissemination sessions, submissions to IMO and technical input to EU expert groups and IMO committees.		✓
5.	Facilitate and provide technical assistance in the development and implementation of passenger ship safety legislation or guidelines including technical assessment of notified exemptions and derogations, development of the Small Passenger Ship Guide, review of Directive 2003/25/EC, ship carried tenders, passenger sailing ships and implementation of the new Annex to Directive 2009/45/EC.		✓
6.	Analysis and/or study of potential container ship safety issues.		✓
7.	Initial analysis on EU fishing ship safety and pleasure craft. The initial analysis on fishing ship safety will be used to support the Commission with its recently launched activity on fishing ship safety.		✓
8.	Follow-up and coordinate safety issues related to new types of fuel or electricity storage onboard, like hydrogen fuel cells, LPG, onshore power supply (cold ironing) and battery propelled ships.		✓
9.	Coordination of the update to the list of standards for marine equipment which is subject to flag State approval.		✓
10.	Business management of the EMSA MED Database system and propose functionalities upgrades. Management of the technical secretariat of the MarED group of Notified Bodies.		✓
11.	Technical review of safeguard clause cases submitted under the Marine Equipment Directive.		✓
12.	Management of the alert system foreseen by the MRA signed between the EU and the USA and providing the Commission with a revised list of marine equipment and associated legislative, regulatory and administrative provisions that the EU and the USA may determine to be equivalent.		✓
13.	Follow-up to research project relevant for Ship Safety, e.g. AUTOSHIP, LASHFIRE, FLARE, SAFEPASS and PALAEMON.		✓
14.	Participate and provide expertise, including documents and drawing analysis, for the cycles of visits related to Bulk Carrier loading and unloading (Directive 2001/96/EC), Marine Equipment (Directive 2014/90/EC) and Passenger Ship Safety (Directive 2009/45/EC, Directive 98/41/EC and Directive 2003/25/EC).		✓
15.	Assistance to Member States and the Commission on the implementation of Directive 2009/16/EC on PSC and for the PSC provisions of the Directive (EU) 2017/2110 on a system of inspections for the safe operation of ro-ro ferry and high-speed passenger craft in regular service.		✓
16.	Assistance to Member States and the Commission on the implementation of the FS provisions of the Directive (EU) 2017/2110 on a system of inspections for the safe operation of ro-ro ferry and high-speed passenger craft in regular service.		✓
17.	Participation in all technical meetings and working groups of the Paris MoU, and certain related policy meetings, on behalf of the Commission.		✓
18.	Assistance to the Commission in the potential revision of Directive 2009/16/EC on PSC and Flag State Directive 2009/21/EC.		✓

19. The Agency will continue to host the Management Unit of Equasis, thus addressing its operation, liaising with the Technical Unit (hosted by the French Administration), assessing the applications of potential data providers, preparing documentation and relevant meetings of the Editorial Board, monitoring the projects budget and publishing the annual statistical report on the world merchant fleet in Equasis.	✓
20. Explore possibilities to better support Member States with their SAR obligations.	✓
21. If needed, to monitor and provide a follow-up to the guidance document for the resumption of cruise operations in the European Union in view of the COVID-19 pandemic.	✓

2.1.2 ACCIDENT INVESTIGATION

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a) and 2.4(c)

<i>Planned input</i>		<i>Actual Input</i>
CA	792,211	581,103
PA	774,210	562,057
Staff	2.75 AD, 1 SNE	2.75 AD

Performance Indicator		Target 2021	Results 2021
EMCIP meetings	number of meetings per year	2	3
PCF meetings	number of meetings per year	1	1

Outputs 2021	Achievements
1. Support the Member States and the Commission in the implementation of the Accident Investigation Directive.	✓
2. Provide the Secretariat of the Permanent Co-operation Framework, as foreseen by Regulation (EU) No 651/2011 adopting the rules of procedure of the PCF.	✓
3. Prepare and propose business changes and upgrades of the EMCIP system.	✓
4. Take care of the business management of the EMCIP system and all its functionalities, including cooperation with the EMCIP contractor.	✓
5. Coordinate activities related to EMCIP users on AI matters, including training, workshops, user group and governance.	✓
6. Analyse casualty data and reports from safety investigations, produce safety analyses and propose, when relevant, any appropriate Safety Recommendations to the Commission.	✓
7. Publish the annual overview of marine casualties and incidents on the basis of data provided by the Member States. If necessary, publish a preliminary Annual Overview of Marine Casualties and Incidents.	✓
8. Assist the Commission in the potential revision of the Accident Investigation legislation.	✓

2.1.3 MARITIME SECURITY

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2 and 2.2 (b)

<i>Planned input</i>		<i>Actual Input</i>
CA	1,145,770	952,876
PA	1,120,270	894,017
Staff	3 AD, 1.25 AST, 2 SNE	3.25 AD, 1.5 AST

Performance Indicator		Target 2021	Results 2021
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Inspections	number of missions per year	18	15 ¹⁴
	number of reports per year ¹⁵	35	29 ¹⁶
Reports	percentage of inspection reports concluded within the deadline agreed with the Commission	95%	100%

Outputs 2021	Achievements
1. 18 inspection missions to EU Member States, upon request of the Commission, COVID-19 situation permitting.	Results are slightly below the target due to COVID-19 impact on DG MOVE planning
2. 1-2 inspection missions to Norway and Iceland, upon request of the EFTA Surveillance Authority, COVID-19 situation permitting.	✓
3. Upon request of the Commission, contribute to the updating and enhancement of the procedures for performing maritime security inspections.	✓
4. Upon request of the Commission, provide assistance on the follow-up of the deficiencies identified during inspections.	✓
5. Organise a workshop or a table-top exercise on cybersecurity.	The table-top exercise was cancelled in view of the pandemic situation
6. Contribute to European inter-agency co-operation on cybersecurity in the transport sector, particularly through membership of the Transport Resilience and Security Experts Group (TRANSSEC).	✓
7. Support proper implementation of EU and International maritime security legislation.	✓
8. Provide support to Commission and the Member States in the development, identification and exchange of best practices and cross-sectoral cooperation on cybersecurity for the maritime cluster.	✓

2.2 Surveillance

2.2.1 REMOTELY PILOTED AIRCRAFT AND SATELLITE COMMUNICATION SERVICES

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2b, 2.3(a), 2.3 (d), 2.4 (f), 2.4(g) and 2.5

Planned input		Actual Input
CA	18,290,353	20,028,150
PA	17,847,976	20,274,735

¹⁴ Despite the high level of activity in the second part of the year, the target of 18 missions has not been achieved due to the pandemic.

¹⁵ More than one report may be prepared following an inspection mission, e.g. if more than one Member State is inspected.

¹⁶ Despite the high level of activity in the second part of the year, the target of 35 reports has not been reached due to the pandemic.

Staff 8 AD, 1 AST, 1 SNE

8 AD, 1 AST, 1 SNE

Performance Indicator		Target 2021	Results 2021
RPAS for multipurpose surveillance Operations	number of RPAS systems available for deployment for multipurpose operations	6	7
	number of deployment days per year (multipurpose operations)	600	1247
RPAS for environmental surveillance	number of (small) RPAS systems available for environmental protection (marine pollution and emissions)	10	14
	number of deployment days per year (pollution monitoring and emission monitoring)	360	518
SAT-AIS	global data stream availability	99%	99.99%
Outputs 2021			Achievements
1. Provision of Multipurpose Regional RPAS Services for Member States and EU Agencies executing coast guard functions, including improved satellite communications capacities, building up a more permanent capacity for RPAS based surveillance in those coastal areas of interest for more than one Member State.			✓
2. On request, continue providing specific RPAS services in support of EFCA, including support to EFCA's Joint Deployment Plans, and Frontex and their stakeholders' activities in the fishery and border domains, participation in Multipurpose Maritime Operations (MMOs) in cooperation with Frontex, EFCA, and Member State authorities.			No request for RPAS services was received from FRONTEX
3. The procurement of additional RPAS capability for long range and long endurance services will be completed in 2021 leading to additional and more robust services to offer to the maritime authorities.			✓
4. Provide on request, specific RPAS based services to coastal States, for the monitoring of emissions by vessels and detection of illegal discharges and polluting vessels.			✓
5. In the framework of EMSA's emergency contingency plan, provide assistance to coastal States and the Commission in case of accidental spills and, if operationally feasible, by further equipping EMSA Oil Pollution Response Vessels (EMSA-OPRV) with lightweight RPAS (quadcopters).			✓
6. Following procurement in 2020, EMSA will put in place a new RPAS capacity for Emission Monitoring.			✓
7. Seeking to finalise the efforts to conclude a cooperation arrangement with EASA in view of ensuring development of standard procedures and predefined risk assessments, and safe integration of the RPAS flights in Member States' airspace for maritime surveillance in particular in view of regional cross border operations.			In progress: Memorandum of Cooperation expected to be signed in Q1/Q2 2022
8. Hosting and management of the EMSA RPAS User Group by meeting at least once per year.			✓
9. The maritime surveillance operations, and in particular the RPAS services, will be supported by satellite communication allowing for real-time maritime information transmission from assets at sea to shore. The procurement of new SATCOM services will also be completed to accompany and support the RPAS services.			✓
10. Global SAT-AIS feeds will continue to be contracted by the Agency to support the monitoring of vessels worldwide and allow for identification of vessels reporting and, in combination with the Earth observation service identify dark vessels to be more closely monitor by surveillance authorities.			✓

2.2.2 SATELLITE BASED SERVICES AND INNOVATION

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.3(a), 2.3 (d), 2.4 (f), 2.4(g) and 2.5

Planned input

CA 7,654,915

Actual Input

6,689,422

PA	8,309,495	6,461,928
Staff	11 AD, 1.5 AST	11.25 AD, 1.5 AST

2.2.2.a EARTH OBSERVATION SERVICES

Performance Indicator		Target 2021	Results 2021
CleanSeaNet service earth observation (EO) image delivery	percentage per year EO image delivery ratio	90%	97%
Assistance for accidental spills	percentage response rate to assistance requests	100%	100%
Participation in oil spill response exercises	percentage response rate to requests for participation in oil spill response exercises.	80%	100%
Outputs 2021			Achievements
1. Delivering and improving the CleanSeaNet service, which is based on satellite images and alerts to coastal States, for the monitoring of seas and detection of illegal discharges and polluting vessels, including providing training on the practical use of CleanSeaNet, as part of EMSA's capacity building services.			✓
2. Providing assistance to coastal States and the Commission in case of accidental spills if operationally feasible.			✓
3. Participating in oil spill response exercises organized by Member States.			✓
4. Organising a meeting of the EMSA CleanSeaNet User Group.			✓
5. Developing activities with enforcement authorities to promote an effective follow-up to CleanSeaNet detections.			✓
6. Providing satellite-based observation services to support border control activities in the context of the interagency SLA with Frontex.			✓
7. Providing Satellite Based observation services to SAFEMED, IPA and Black and Caspian Sea beneficiary countries.			✓
8. Make available upon request satellite imagery supporting maritime administrations with any maritime safety or security emergency which may occur, offering service continuity for the most urgent cases.			✓

2.2.2.b INNOVATIVE SATELLITE BASED SERVICES AND COMMUNICATION TECHNOLOGIES

Performance Indicator		Target 2021	Results 2021
Integrating new satellite sources	Integrating new information sources from satellites in the field of earth observation and frequency detection counted per satellite or satellite constellation	2	1 ¹⁷
Outputs 2021			Achievements

¹⁷ PAZ1 satellite successfully integrated in 2021 Q1. ICEYE technical integration completed in 2021, procurement to be launched at the end of January 2022.

1.	In cooperation with ESA analysing new sensors, which have already a heritage in satellites, to be operated on RPAS (e.g. mobile frequency detection, trace gas measurements, etc).	✓
2.	Additional platforms and new remote sensing technologies to be further explored such as new mobile detection sensors and platforms such as HAPS (High Altitude Pseudo Satellites).	In progress. A proof of Concept for Mobile detection has been delayed on the stakeholder side due to the COVID-19 pandemic
3.	Assessment and Proof of Concept of machine learning algorithms for RPAS data products in order to provide in house developed value-added products to the users in Member States.	This activity was postponed to 2022 due to high workload linked with operational activities
4.	RPAS operations require a stable communication infrastructure. EMSA is therefore supporting together with other EU Agencies, ESA and industry, in the definition process of a new governmental satellite communication service (GovSATCOM).	✓
5.	Assess how satellite-based information can be used to monitor marine debris, with particularly emphasis on plastic.	Initial assessment (in terms of needs) was provided in the scope of the ESA BASS project. Participation of EMSA in the project was cancelled
6.	Assess how optical satellite data from medium resolution sensors (e.g. Sentinel-2) can be systematically used to detect, characterize and quantify the volume of oil spills.	✓
7.	Implement proofs of concept for new earth observation sensors (e.g. ICEYE, Capella, etc.) and organize the transition of these new capabilities to operations in order to enrich the existing portfolio, subject to the upgrade of the data centre at EMSA able to ingest new data types.	✓
8.	Closely work with ESA in the operational assessment and review of operational use of the existing Sentinel satellites and associated technical elements (e.g. ground segments, EDRS) used in the provision and evolution of earth observation activities.	✓
9.	Assess the maturity and operationally impact of new radiofrequency detections satellites (i.e. UnseenLabs, Hawkeye 360, Amber) in the context of maritime surveillance activities, particularly in support to Maritime Safety, Maritime Security, Law enforcement and Fisheries control.	Preliminary assessment was concluded but with limited data from the providers. If additional data is available more thorough evaluation to be performed in 2022
10.	Assessment and Proof of Concept of machine learning algorithms for EO data products in order to provide additional value-added products to the users in Member States. A procurement will be launched for that purpose to get external support for the technical development of these machine learning algorithms. In phase 1 of these activities these include vessel detection and feature detection (both SAR and Optical) in order to improve performance, reliability and quality of the delivered products.	✓
11.	Continue the dialogue with EU national administrations with a Satellite-AIS programme or interest in the development of a Satellite-AIS capacity or the VHF Data Exchange System (VDES) capability for non-commercial purposes and explore if new streams of national satellite AIS and VDES data can be channelled to EMSA users.	✓
12.	Hosting and Chairing of the EU SAT-AIS Collaborative Forum at least once per year.	✓

2.2.3 COPERNICUS MARITIME SURVEILLANCE

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.4 (a), 2.4 (b) and 2a.2(c); Regulation (EU) N° 377/2014 of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010 and new EU Space regulation (when approved – currently Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL establishing the space programme of the Union and the European Union Agency for the Space Programme COM/2018/447 final.

Planned input		Actual Input
Project Financed activity	COPERNICUS	
Funding Source	EC, DG DEFIS	
Time frame / envelope	2021-2027 (Agreement signed 28/09/2021) / 73,000,000 €	
Expenditure 2021		Committed: 12,646,040 €
		Paid: 6,233,620 €
Staff	7 CA	3 CA

Performance Indicator		Target 2021	Results 2021
Copernicus Maritime Surveillance service earth observation (EO) image delivery	percentage per year EO image delivery ratio	90%	92%
Number of user organisations registered	number of Member States National Administrations, EU institutions and international organisations using the service	50	58
Outputs 2021		Achievements	
<p>Copernicus Maritime Surveillance (CMS) baseline objectives (coming from the previous delegation agreement) should be maintained and include:</p> <p>1. Provision of CMS services to the six functions areas as defined in the Annual Implementation Plan (as agreed with DG DEFIS, as required by the agreement in place).</p> <p>1..1. 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.</p> <p>1..2. Maritime safety and security: tracking objects at sea; monitoring incidents and accidents; vessel locating and identifying.</p> <p>1..3. 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.</p> <p>1..4. 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.</p> <p>1..5. Marine environment 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.</p> <p>1..6. Support to international organisations: 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. Example of this cooperation is the close cooperation with the United Nations Office on Drugs and Crime (UNODC) Global Maritime Crime Programme.</p>		✓	
2. Increase in the number of organisations served by CMS.		✓	
3. Organising the CMS annual user group meeting.		Annual user group meeting was not organized due to delays in the signature of the Contribution Agreement and	

	associated budget for second semester 2021
4. Delivery of planned training, communication and user uptake activities. <i>New outputs and tasks are dependent on the conditions of the new Contribution Agreement.</i>	✓

2.2.4 CISE TRANSITIONAL PHASE

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.3, 2.2(d)

Planned input		Actual Input
Project Financed activity	CISE Transitional phase	
Funding Source	EC, DG MARE	
Time frame / envelope	2019-2022 / 3,500,000 € (1 st grant agreement) 2020-2023 / 3,400,000 € (2 nd grant agreement)	
Expenditure 2021	2,000,000 € 1 st GA and 1,400,000 € 2 nd GA.	Committed: 2,017,694 € Paid: 1,196,510 €
Staff	6 CA and 1 SNE (based on 1st and 2 nd grant agreement)	6 CA, 1 SNE

Performance Indicator		Target 2021	Results 2021
CSG meetings	number of CISE Stakeholder Group (CSG) meetings per year	3 per year	3
Training and Best Practice workshops	overall number of Training and Best Practice Workshop per year	2 per year	2
Network's node	number of CISE's nodes deployed in the network	11	n/a ¹⁸
Outputs 2021			Achievements
1.	Organize and coordinate the CISE stakeholder group meetings.		✓
2.	Develop the CISE node version 2.0 and the CISE infrastructure in order to enable the operational stage: <ul style="list-style-type: none"> a. Develop the new version of the CISE node (version 2.0); b. Provide the Technical and Operational support to the nodes connected to the network; c. Define the requirements to address the CISE network for exchanging EU classified information. 		✓ (2.c. on-going)
3.	Increase in the number of nodes by Member States/EU Agencies connected to the CISE network: <ul style="list-style-type: none"> a. Design, develop, deploy and maintain the EMSA CISE adaptor; b. Deploy "processing services" capabilities in the CISE network ("thematic node"). c. Support the process to add new EU Member State authorities' nodes. 		✓ (3.b. and 3.c. on-going)
4.	Promote CISE as a framework for exchanging surveillance information: <ul style="list-style-type: none"> a. Develop the training catalogue for CISE stakeholders; b. Organize the best practices workshops; c. Promote CISE to new stakeholders; d. Standardize the CISE data model and services in order to be adopted in surveillance systems; 		✓ (4.d. and 4.e. on-going)

¹⁸ Due to the failure in the transfer of the Intellectual Property Rights (IPR) this process was delayed. EMSA developed a new node, which is being rolled out to Member States in 2022.

e.	Further elaborate the responsibility to share principle in order to foster the sharing of information;	
f.	Start to collect the signatures for the Cooperation Agreement by the CISE's stakeholders.	

3. Digital services & simplification

3.1 Maritime digital services

3.1.1 MARITIME DIGITAL SERVICES

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.4 (a), 2.4 (b), 2.5, 2a.2(d) and 2b

Planned input		Actual Input
CA	15,105,214	16,849,362
PA	14,114,414	14,416,088
Staff	25.75 AD, 9.25 AST, 0.25 CA	24.25 AD, 10.25 AST, 0.5 CA

INTEGRATED MARITIME SERVICES

Performance Indicator		Target 2021	Results 2021
Integrated Maritime Services Availability	percentage per year availability of IMS for Member States, including ABMs	99%	99.55%
	percentage per year availability of IMS to EU bodies (EUNAVFOR: Somalia: Operation Atalanta, EUNAVFOR-Med, EUROPOL, MAOC (N))	99%	99.75%
	percentage per year availability of the AIS Maritime Picture service to legitimate users (shipowners, agents, masters, shippers and others) authorised by the NCA.	95% ¹⁹	99.75%
	percentage per year availability of IMS Mobile App service	99%	99.75%
Outputs 2021		Achievements	
1. Continue the operation, delivery and development of Integrated Maritime Services and ABM tools in line with user requirements from EU Member States authorities executing functions in the maritime domain, EU bodies or other EU stakeholders with maritime related tasks / functions, including the European Union Agency for Law Enforcement Cooperation (Europol), EU Naval Forces (EUNAVFOR operations) and the Maritime Analysis and Operations Centre – Narcotics (MAOC-N), and/or third countries, including provision of operational support such as training, as part of EMSA's capacity building services, and helpdesk activities.		✓	
2. Provision of the AIS Maritime Picture service to legitimate users (shipowners, agents, masters, shippers and others) authorised by the National Competent Authority (NCA) pending the approval of the High Level Steering Group (HLSG).		✓	
3. Further advance the collaboration with the IMS Member State and EU bodies within the context of the "Automated Behaviour Monitoring and Advanced Analytics" Working Group and development of historical and combined Automated Behaviour Monitoring (ABMs) products and services. Support and input will be provided to the ad hoc expert sub-group on autonomous ships /MASS created under the HLSG of the Commission. Further collaboration will also take place with ESA on space-based applications related to MASS.		✓	

¹⁹ Pending green light from the HLSG.

4.	Development of products and services based on advanced data analytics and artificial intelligence as well as machine learning to support improvement of maritime domain awareness for coast guard functions.	✓
5.	Exploring new technologies for setting up new added value services for Member States in cooperation with the European Space Agency and Member States by focusing on the latest AIS technological advancements based on the VHF Data Exchange System (VDES).	✓
6.	Extend the Earth Observation Data Centre (EODC) capabilities to support the needs of integrated maritime services.	✓

THETIS (EMSA Budget) AND THETIS-EU (project-financed)

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.3(a) and 2.2(b); Directive (EU) 2017/2110, Art.10; Directive 2009/16/EC as amended; Directive (EU) 2016/802; Directive (EU) 2019/883; Regulation (EU) No 1257/2013; Regulation (EC) No 725/2004

Planned input

Project Financed activity	THETIS – EU
Funding Source	EC, DG ENV
Time frame / envelope	2018-2021 / 200,000 €
Expenditure 2021	63,933 €
Staff	No extra staff

Actual Input

Committed: 130,031 €
Paid: 86,785 €

Performance Indicator		Target 2021	Results 2021
System operational	availability in percentage	96%	99.55%
	hours maximum continuous downtime	max 6	2h39m 49s
Helpdesk Service	percentage of requests closed in less than 5 days	75%	93.75%
Outputs 2021		Achievements	
1. Information System THETIS: operational, maintained, interfaced with SafeSeaNet and under continuous enhancement to meet new requirements. Enhanced to support the requirements set by the user communities (Paris MoU, EU Member States for ROPAX/PSC).		✓	
2. Assist in the development related to eCertificates. EMSA will provide the necessary support to the Commission to present a proposal for the revision of the Flag and Port State Directive and the associated EU RO Regulation in summer 2021.		✓	
3. Information System THETIS-EU: operational, maintained, and under continuous enhancement to meet new requirements. Enhanced to support the requirements set by the user communities (Ship Recycling, MARSEC, and EU Member States for ROPAX /FS) as well as for as long as and Directive (EU) 2019/883 on Port Reception Facilities which will enter into force in June 2021 including the foreseen Union risk based targeting mechanism for the selection of ships to be inspected.		✓ PRF enhancement to be finalized pending implementing acts	
4. THETIS-MED operational and maintained (see also Project: SAFEMED IV). Cooperation with the Med MoU for the operation and further enhancement of THETIS-MED to support the MeD MoU.		✓	

5. Assist in the monitoring of air emissions from individual ships through the RPAS based service for SOx monitoring. Calculations can then be made of the sulphur content in the fuel used on board the ships and this data is then made available and integrated in the THETIS-EU system.	✓
6. Assistance to Member States and the Commission in implementing the PSC provisions not falling within the context of Directive 2009/16/EC, such as the provisions of Directive (EU) 2016/802 (Sulphur), the Directive (EU) 2019/883 (port reception facilities) Regulation (EU) No 1257/2013 (Ship Recycling).	✓

THETIS-MRV

Legal Basis: Regulation (EU) 2015/757 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC

Planned input

Project Financed activity	THETIS – MRV
Funding Source	<i>EC, DG CLIMA</i>
Time frame / envelope	<i>2018-2022 / 700,000 €</i>
Expenditure 2021	<i>200,000 €</i>
Staff	<i>No extra staff</i>

Actual Input


Committed: 268,391 €
Paid: 126,236 €

Performance Indicator		Target 2021	Results 2021
THETIS-MRV	system availability	95%	100%
	max. continuous downtime (hours)	12	0d0h0m0s
			Achievements
1. Implementation of the tasks defined in the relevant cooperation agreement with the Commission, including the publication of annual figures and contributing to the annual report.			✓
2. Organisation of awareness and technical workshops for stakeholders (industry, MRV shipping verifiers) and competent authorities of Member States as relevant.			✓
3. Enhancing the tool in order to ensure alignment between the International obligations and the EU legislation, if the relevant Regulation will be adopted by the co-legislators.			✓

OTHER DIGITAL SERVICES

Performance Indicator		Target 2021	Results 2021
RuleCheck system operational	percentage per year availability	95%	100%
	days maximum continuous downtime	3d	0d0h0m0s
RuleCheck Helpdesk Service	percentage of requests closed in less than 9 days	95%	99.95%
STCW Information System	percentage per year availability	96%	99.88%

MED DB	percentage per year availability of MED data base	95%	99.87%
RPAS DC availability	RPAS DC availability ²⁰	95%	99%
Earth Observation Data Centre operational availability	EODC availability (interface or alert reports distribution) for scheduled acquisitions of the CleanSeaNet Service	97.5%	99%
EMCIP	percentage per year availability	98%	99.7%
MARINFO	percentage per year availability	95%	99.34%
Outputs 2021		Achievements	
1. A new FWC is expected to be signed ensuring that the content in RuleCheck (web based and mobile App) is always up to date in relation to applicable EU and international legislation as well as introducing required enhancements to make the system more robust including its expansion as an intelligent search engine for maritime legislation as well as its interaction with both operational tools (THETIS) and capacity building tools (MaKCs 2020).		✓	
2. Maintain the STCW Information System; minimising down-time, ensuring a high level of availability and providing system support to users. The feasibility of offering a platform to Member States for issuing seafarers e-certificates will be explored.		✓	
3. Maintenance of the RPAS DC service to support the needs of integrated maritime services including RPAS operations. Based on the 2020 procurement a new RPAS Data Centre called SurvSeaNet will be developed, integrating further the operational view of the RPAS service with the integrated maritime data in EMSA.		✓ SurvSeaNet in development	
4. Maintain the new European Marine Casualty Information Platform (EMCIP) released in 2018.		✓	
5. Business management of the EMCIP system and all its functionalities, including cooperation with EMCIP contractor.		✓	
6. Improve Marinfo system, including system-to-system data exchange capability.		✓	
7. Initiate the development of the Dynamic Overview of National Authorities (DONA) with its three distinguished functionalities (country profile, regular statistics and a reporting gate) to support Member States in their different functions while on the same time reducing their administrative burden.		✓	
8. Investigate and design a cost-effective solution to integrate the data sets handled by the Agency's maritime applications and expand information services, statistics and data analytics (e.g. data publication, pre-set statistical products, ad hoc statistical products).		✓ Report on investigation completed	

9. Elaborate a comprehensive study on ICT security and interoperability solutions for the overall information services of the Agency.	 ICT Security assessment completed, the study ongoing
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3.2 Digital infrastructure

3.2.1 MARITIME SUPPORT SERVICES

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2

<i>Planned input</i>		<i>Actual Input</i>
CA	1,433,184	1,391,109
PA	1,448,184	1,101,238
Staff	1 AD, 4 CA, 5 SNE	1 AD, 4.25 CA, 3 SNE

Performance Indicator		Target 2021	Results 2021
Maritime Support Services available 24/7	average time in hours for feedback or resolution of issues relating to emergencies, incidents in maritime applications or urgent helpdesk requests	<2 hours	8.2 minutes
	average time in hours for feedback or resolution of issues relating to non-urgent helpdesk requests or scheduled interventions	<8 hours	11.5 minutes
MSS Data Quality Reports	reporting on the SafeSeaNet /LRIT implementation and data quality (overall and per Member State)	20 reports	25 reports
Outputs 2021		Achievements	
1. 24/7 User support and helpdesk as per SLAs, including provision of maritime information in the context of maritime emergencies.		✓	
2. Incidents and problems are managed under ITIL procedures, reporting on the process efficiency in place.		✓	
3. Requests for support of SAR and Pollution Response activities are processed efficiently under defined Contingency plan; Satellite images and other services are provided in the least possible time possible to support operational response on site.		✓	
4. Exercises and trainings are provided to ensure efficient communication and provision of services during emergencies.		✓	
5. Feedback on the toolbox is regularly provided to business and development units, potential improvements are registered and managed.		✓	
6. Issue at least 20 SSN/LRIT data quality reports per year.		✓	

3.2.2 ICT Operations

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. Art. 5, 6, 13.7, 15, 18 and 19

Planned HR input		Actual HR Input	
Staff	4.75 AD, 12.5 AST, 2 CA	5.25 AD, 12.5 AST, 2.5 CA	
Performance Indicator		Target 2021	Results 2021
Service desk	percentage of timely response to users' ICT requests	95%	89,8% ²¹
Availability	infrastructure availability per year	99.5%	100%
Outputs 2021		Achievements	
1.	Maintain 24/7 ICT Operations for hosting of maritime applications including Business Continuity Facility and Maritime Applications availability SLAs.		✓
2.	Test and validate new releases of Maritime applications.		✓
3.	Maintain EMSA Corporate Services platforms and associated Business Continuity Platforms and Services in accordance with the relevant SLAs.		✓
4.	Proceed and complete major upgrade of DB.		✓
5.	Continue tasks related to the automation of the infrastructure monitoring and operational tasks.		✓
6.	Define the strategy for adoption of cloud service at EMSA and the implementation plan.		✓
7.	Maintain ICT security operation of the EMSA digital services (maritime and corporate).		✓

3.3 Simplification

3.3.1 SAFESEANET

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2. (c), 2.3(a), 2.3(b), 2.4(a), 2.4(b), 2.4(h) and 2.4(i)

Planned input		Actual Input	
CA	1,556,927	2,194,545	
PA	1,344,000	2,022,848	
Staff	3 AD, 2.5 AST, 0.25 CA	3.75 AD, 2.75 AST, 0.25 CA	
Performance Indicator		Target 2021	Results 2021
SafeSeaNet system: Service Operation	percentage per year availability of central SafeSeaNet system	99%	99.81%
	hours maximum continuous downtime of central SafeSeaNet system	max 12	4h:25 min
	percentage of notifications processed in time in accordance with SafeSeaNet IFCD requirements	99%	100%

²¹ The SLA level has been difficult to reach due to the remote working conditions which hinders the quick reaction to tickets.

SafeSeaNet system: Reporting Performance	percentage of responses to Member States' requests delivered in accordance with SafeSeaNet IFCD (time) requirements	99%	100%
Outputs 2021		Achievements	
1. SafeSeaNet is operational on a 24/7 basis to support Member States to undertake activities related to maritime monitoring.		✓	
2. Host and manage the "SSN User Group meetings" and sub-working groups established under the High-Level Steering Group for Governance of the Digital Maritime System and Services (HLSG).		✓	
3. Provide support to Member States regarding compatibility of national systems with SafeSeaNet and potential improvements on data quality and provide training on SafeSeaNet as part of EMSA's capacity building services.		✓	
4. The SafeSeaNet Ecosystem Central Databases will be operational and available to use in national systems. Improve data quality on related national databases.		✓	
5. Develop SafeSeaNet version 5 based on the agreed schedule by the HLSG. Additional security measures will be implemented for the exchange of personal data at both central and national levels in compliance with Regulation (EU) 2016/679 (GDPR) and Regulation (EU) 2018/1725 (EU DPR).		✓	
6. Deliver, and upgrade as needed, the Traffic Density Map service.		✓	
7. Prepare for the development of SafeSeaNet to support the EMSWe Regulation (EU) 2019/1239.		✓	
8. Contribute to the development of Air Emissions Maps.		✓	
9. Support the eCertificates objectives to facilitate the work of the Member States in their capacity as Flag and Port States.		✓ No additional requests from Member States in 2021	

3.3.2 EUROPEAN MARITIME SINGLE WINDOW ENVIRONMENT

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.3, 2.2(a), 2.2(d), 2.4(i) and 2a.3(a)

Planned input		Actual Input
CA	1,044,797	435,815
PA	785,552	400,466
Staff	1.5 AD, 1 AST, 0.25 CA, 1 SNE	1.5 AD, 0.25 CA

Performance Indicator		Achievements
SafeSeaNet system data exchange in support of the Reporting Formalities Directive (2010/65/EU)	The information exchange requirements of the Reporting Formalities Directive are integrated in the SafeSeaNet services, and therefore covered by the SafeSeaNet indicators.	
1. Assist the Commission in the implementation of the EMSWe Regulation (EU) 2019/1239, including helping in defining the content of delegated and implementing acts laying down the specifications of e.g. the EMSWe data set, the reporting interface module, common functionalities of the graphical user interfaces, templates of harmonised digital spreadsheets, data to be exchanged via SafeSeaNet and the common ship, location and hazmat databases.		✓

2. Assist Member States and the Commission in the implementation of Directive (EU) 2017/2109 on registration of persons on board, including organisation of workshops and provision of technical assistance on the request of the Member States.	✓
3. Work on measures which will facilitate the overall effectiveness and efficiency for ships in relation to reporting obligations, including the contribution to the maintenance and expansion of the IMO compendium on facilitation and electronic business.	✓
4. Deliver SafeSeaNet services to exchange information between National Single Windows as required by Directive 2010/65/EU and make such information available to relevant authorities, provide data analysis services.	✓

3.3.3 LONG RANGE IDENTIFICATION AND TRACKING (LRIT)

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.3, 2.2(a), 2.2(d), 2.4(i) and 2a.3(a)

Planned input		Actual Input
CA	3,178,259	2,354,399
PA	2,894,476	2,294,444
Staff	2.75 AD, 2 AST, 0.25 CA	1.5 AD, 1.5 AST, 0.25 CA

Performance Indicator		Target 2021	Results 2021
EU LRIT DATA CENTRE			
System operational	percentage per month availability	99%	99.86%
	hours maximum continuous downtime	max 4	0h39min
EU CDC reporting performance	percentage position reports delivered in accordance with IMO requirements (per. Reports: 15 min; polls:30 min)	99%	99.6%
Web user interface	percentage per year availability to users through UWI	99.9%	99.94%
LRIT-IDE			
LRIT-IDE System operational ²²	percentage per year availability of LRIT IDE in accordance with IMO requirements	99.9%	99.91%
	hours maximum continuous downtime of LRIT IDE	max 4	2.5 hours
Outputs 2021		Achievements	
1. Continued operations and ongoing maintenance of the LRIT IDE and the LRIT CDC.		✓	

²² Discussions on the hosting of the LRIT-IDE are on hold. The service is listed nevertheless, pending their outcome. As long as the service is running at EMSA the output indicators continue to apply, with respective annual targets of 99.9% availability and maximum downtime of 4h according with IMO performance standards. After the completion of the hand-over process these indicators will be deleted.

2. Perform necessary upgrading of the EU LRIT CDC, as requested by EU LRIT CDC Participating Countries or IMO.	✓
3. Perform necessary upgrading of the LRIT IDE, as requested by IMO.	✓
4. Support EU LRIT CDC Participating Countries for use of the EU LRIT CDC.	✓
5. Quality of the services maintained.	✓

3.3.4 INTEROPERABILITY PROJECT

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.3, 2.2(a), 2.2(d), 2.4(i) and 2a.3(a)

Planned input

Project Financed activity *Interoperability project*

Funding Source *EC, DG MARE*

Time frame / envelope *2018-2021 / 3,000,000 €*

Expenditure 2021 *None expected*

Staff *No extra staff*

Actual Input

Committed: 1,981,163 €

Paid: 825,282 €

Performance Indicator		Target 2021	Results 2021
Interoperability project	number of pilot projects and studies reports (see Outputs section below)	4	4
Outputs 2021		Achievements	
1. Use of SSN statistics and vessel movement patterns services: This activity will assess the use of the EMSW environment and the SSN Ecosystem platform to offer services to the users for purposes such as statistics and vessel movement patterns.		✓	
2. Use of common databases for the EMSWe: This activity will assess and develop solutions to provide Member States' NSW systems with common database services on ships identifications information and particulars, location and port facilities codes, and dangerous goods reference information.		Following an amendment of the project's grant agreement, the output will be delivered in 2022	
3. EMSWe message formats: This activity will develop message formats corresponding to the EMSWe dataset and processes (project outputs from 2019 and 2020) in collaboration with the experts from the relevant international standard organisations and from the Commission.		Following an amendment of the project's grant agreement, the output will be delivered in 2022	
4. VDE Capability project: This activity will identify, design and test interoperability solutions related to ship-to-shore reporting using VDE-SAT communications. This activity will build over the project's output of 2020 related to MRS and VTS reporting facilitation.		Following an amendment of the project's grant agreement, the output will be delivered in 2022	
Additional 2021 output following the amendment of the project's grant agreement: Use of reference databases to support the Member State authorities and EU agencies: The central database on geographical areas will be further improved to support the Member State authorities and EU agencies for the execution of their tasks.		✓	
Additional 2021 output following the amendment of the project's grant agreement: Trace calls of ships in ports for SSN data quality checks: This activity will develop a service which will use SSN's ship position tracking services to automatically detect port calls. The project will assess whether this service could be used to automatize the data quality checks regarding port call data and offer port call-based services to the user communities.		✓	

Additional 2021 output following the amendment of the project's grant agreement: Data computation solutions for Member States: Solutions for automatized computation of SSN data for Member States' authorities' users will be assessed. These solutions will include statistics on the impact of the current COVID-19 crisis on maritime shipping and on the Member State authorities' activities.	✓
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3.3.5 EFCA SLA

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 2b

Planned input		Actual Input
Project Financed activity	EFCA SLA	
Funding Source	EFCA	
Time frame / envelope	Automatic renewal since 2015	
Expenditure 2021	Approximately 100,000 € expected	Committed: 532,077 € Paid: 167,067 €
Staff	No extra staff	

Performance Indicator		Target 2021	Results 2021
Integrated Maritime Services	percentage per year availability to EFCA	99%	99.72%
Outputs 2021			Achievements
1. Provision of integrated maritime services to support fisheries monitoring and control operations under the existing EFCA-EMSA SLA framework.			✓
2. Further improvement of integrated maritime services to support fisheries monitoring and control operations.			✓
3. Provision of Copernicus Maritime Services to support fisheries monitoring and control operations in particular operations coordinated by EFCA.			✓
4. EMSA RPAS services will be provided to EFCA upon request.			✓
5. Sharing of operational capacities.			✓

3.3.6 FRONTEX SLA

Legal Basis: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.4 (a), 2.4 (b); Regulation (EU) N° 2019/1986 Art. 69. (Frontex and EUROSUR)

Planned input		Actual Input
Project Financed activity	FRONTEX SLA	
Funding Source	Frontex	
Time frame / envelope	Annual perspective with regards to the indefinite duration of the SLA	
Expenditure 2021	Approximately 10,000,000 € expected	Committed: 11,016,182 € Paid: 7,193,935 €
Staff	9 CA	9 CA

Performance Indicator		Target 2021	Results 2021
Frontex Service platform	percentage per year availability to Frontex	99%	99.94%
	hours maximum continuous downtime of Frontex service platform	<12h	3h11m
Frontex operational exercises	minimum number of exercises EMSA participates in	2	0 ²³
Outputs 2021			Achievements
1.	Continue implementing the Service Level Agreement signed between EMSA and Frontex based on the SLA Annual Programme and associated Specific Agreement signed with Frontex.		✓
2.	Further develop Integrated Maritime Services to Frontex and their end users, including tools for maritime risk assessment.		✓
3.	Continue implementing the Incidental Sightings of Potential Marine Pollution procedure established between Frontex and EMSA sharing incidents with MS through CleanSeaNet.		✓
4.	Provide operational and training support to users under the existing Frontex-EMSA SLA framework.		✓
5.	EMSA Earth Observation services and RPAS services will continue to be provided to Frontex upon request.		✓

²³ Due to COVID-19 situation, EMSA was not requested to participate in any Frontex operational exercises during 2021.

4. Horizontal activities

4.1 EUROPEAN COOPERATION ON COAST GUARD FUNCTIONS

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 2b

Performance Indicator	Target 2021	Results 2021
Implementation of EMSA tasks under the Annual Strategic Plan	Full implementation	Full implementation

Horizontal:	
To further promote European cooperation with national authorities on coast guard functions at EU level.	
Objectives	Outcomes
To hold the annual joint European Coast Guard event under the coordination of EFCA (as chair of the TWA) in line with the experience gained at the previous annual events, while enhancing interaction between participants.	The annual European Coast Guard Event took place on the 29 June 2021, hosted by EFCA. Due to the COVID-19 pandemic restrictions, it was organized with a virtual format. The theme of the event was the “Use of digital age technologies in Coast Guard functions”. EMSA and Frontex were actively involved in the event. As in previous years, the event served as a platform to present the outcomes and achievement of the year as well as to provide an information session to overview the available digital age technologies and discuss their relevance to enhance the support to the European Union Member States authorities. Particular focus was placed in the implementation of the different EU Coast Guard functions in the context of the post-pandemic era.
To ensure the joint participation of the agencies in European and international maritime events with coast guard relevance.	The European Maritime Day 2021 was planned to take place in Den Helder, the Netherlands, 20-21 May 2021. However, due to the pandemic, it was held virtually. Under EFCA’s coordination, the agencies organized a joint WS on “EU cooperation on coast guard functions in practice” providing practical examples of the cooperation.
To produce a set of communication tools (brochures, videos etc.) promoting EU inter-agency Cooperation.	In December 2021, the agencies adopted a TWA Communication Plan for 2022 to further promote the EU interagency cooperation on coast guard functions with a structured approach. The Communication plan shall be updated yearly.
To coordinate the cooperation with regional Coast Guard Functions Fora.	The agencies actively participated to the works of the relevant Coast Guard Functions Fora. Following the local restrictions imposed due to the COVID-19 pandemic, some events were hosted or attended virtually. In the framework of the European Coast Guard Functions Forum, three workshops were co-organised by the agencies and the running Chairmanship, with the following themes: - “Training, capacity building and operational cooperation” (11-12 February 2021, ECGFF-EFCA)

	<ul style="list-style-type: none"> - “European cooperation to combat illicit activities at sea through the example of the fight against drug trafficking: opportunities and challenges of the legal framework and its practical implementation” (11-12 May 2021, ECGFF-Frontex); - “Modern Technologies in the Fisheries Control System” (24-25 November 2021, ECGFF-EFCA) <p>Additionally, the agencies participated as observers to the works of the North Atlantic Coast Guard Forum.</p> <p>Finally, the agencies were actively involved in the works of the Coast Guard Global Summit (CGGS), which is an initiative launched at a global level by the Japan Coast Guard (JPG) to join in a non-binding, voluntary, independent and non-political forum Coast Guards and agencies of the world to foster dialogue and cooperation among them. EFCA, EMSA and Frontex took part in the activities of the Fora, including their Pilot Program on Coast Guard Global Human Resource Development. The agencies contributed with lecturers and keynote speakers to both the events.</p>
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Information sharing	
<p>Project: A</p> <p>Maintain and update Maritime Data Catalogue</p> <p>To ensure the relevance of the Catalogue and associated datasheets by maintaining its quality and incorporating updates and additions as appropriate.</p>	
Objectives	Outcomes
<p>Increase the awareness of the datatypes available via the three agencies by:</p> <ol style="list-style-type: none"> 1. Publishing the Catalogue on each of the agencies' websites as well as links from ECGFF website. 2. Exploring the inclusion of the Catalogue in Handbook on EU Cooperation on Coast Guard Functions. 	<p>The Maritime Data Catalogue has been reviewed and updated during 2021 including feedback from MS authorities as appropriate.</p> <p>Version 1 has been finalised and is ready to be published with access open to all Member States authorities associated with the three agencies. The Maritime Data Catalogue addresses 10 data types and more than 60 datasets for which an individual datasheet has been produced. Each datasheet describes a range of aspects associated with the data including the data elements available, associated legal basis, technical information about the interfaces available for the end users and status of implementation as well as possible plans for making the data available.</p> <p>All Member State authorities associated with the three agencies were invited by their counterpart Agency to an Information Session.</p>

	Version 2, to be prepared in 2022, will incorporate further MS feedback.
Project: B	
Foster the sharing of different datatypes across Coast Guard Function / User Communities	
Objectives	Outcomes
<p>Increase the cross-Coast Guard Function availability of data for both operational and assessment scenarios. Using the Catalogue and associated mapping of data sharing “gaps”, the following will be undertaken:</p> <ol style="list-style-type: none"> 1. Foster awareness of the different datasets available via the different agencies by holding a dedicated session at the (Inter- Agency) Annual Coast Guard Event with MS. 2. Foster “hands on” understanding of the operational usage of different information sources through interagency participation with Member States within the framework of the annual ECGFF exercise (either table top or at sea). 	<p>The Agenda of the Annual Coast Guard Event with MS did not include any session on the Maritime Data Catalogue due to its reduced agenda online format in light of the COVID-19 pandemic.</p> <p>Due to the COVID-19 pandemic, no ECGFF exercise was held during 2021.</p>

Surveillance and communication services	
Project: C	
Enhance synergies with respect to the current and future provision of earth observation services in support to Coast Guard Functions in MS	
Objectives	Outcomes
<p>Assess the existing portfolio and its exploitation to identify new requirements, synergies and redundancies:</p> <ol style="list-style-type: none"> 1. Questionnaire to MS on their current experience and potential improvements expectations. 2. Dedicated brainstorming session with MS experts to map their expectations regarding longer term 	<p>All Member State national authorities associated with the three agencies were invited to participate in an online questionnaire by their counterpart agency. A virtual session with MS authorities was held to present and discuss the questionnaire results. The results have been compiled in a report, which will be published with access limited to MS.</p> <p>A dedicated session was held virtually and the outcomes as well as result of a questionnaire sent beforehand the session were inserted in a dedicated report.</p>

surveillance scenarios. For efficiency considerations, the session could be held in the margins of the Annual Coast Guard Event or ECGFF meetings	
Project: D	
Strengthen sharing of data from surveillance assets between EFCA, FRONTEX and EMSA.	
Objectives	Outcomes
<p>Assess the existing surveillance data portfolio and its exploitation to identify new requirements, synergies and redundancies related to:</p> <ol style="list-style-type: none"> 1. Sharing manned aircraft/RPAS and other video streams/data centre capabilities among agencies and with MS aerial operations. 2. Integrating AIS collected during all agency airborne and vessel-based surveillance missions into EMSA systems for consumption by end users of the 3 Agencies' services. 	<p>This is a two-year project expected to be completed in 2022. In 2021 initial discussions were undertaken between the agencies to increase familiarity with the issues and the scope and of the project from the different perspectives.</p>

Capacity building	
Project: E	
Handbook on European Cooperation on Coast Guard Functions	
To further develop and update the Handbook on European Cooperation on Coast Guard Functions.	
Objectives	Outcomes
<p>Tasks:</p> <ol style="list-style-type: none"> 1. Continue developing as needed the content of the 	<p>The three agencies established a working group to develop the Practical Handbook on European Cooperation on Coast Guard Functions in close collaboration with the Member States as requested by the European Commission. The handbook was finally adopted²⁴ by the Commission in July 2021.</p>

²⁴ Commission Recommendation (EU) 2021/1222 of 20.7.2021 establishing a 'Practical Handbook' on European cooperation on coast guard functions.

[Link: Handbook on European cooperation on coast guard functions \(europa.eu\)](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32021R1222)

<p>Handbook, in coordination with the Commission.</p> <p>2. Facilitate Member States in the regular update of the individual country factsheets.</p> <p>3. Making accessible to Member States an electronic version of the Handbook.</p>	<p>As per the Commission Recommendation, practical information of the handbook is to be kept up to date by the three agencies, with input coming from the national authorities as regards the 'country factsheets'. Information will also be displayed with an online platform operated by EFCA in close cooperation with the other two agencies and the Commission.</p>
<p>Project: F</p> <p>Cross-sector training and capacity building</p> <p>To offer joint cross-sectoral training to Member State national authorities</p>	
<p>Objectives</p>	<p>Outcomes</p>
<p>Task:</p> <p>To develop or implement as adequate joint cross-sector training for items such as:</p> <p>1. Maritime safety related:</p> <ul style="list-style-type: none"> • Search and Rescue (MRCC), • Fisheries Monitoring Centre (FMC) and Integrated Maritime Services (IMS), • Fishing vessels safety/fisheries control rules, <p>2. Maritime Surveillance related.</p>	<p>The three agencies considered that an important added value is to join the communities of the three agencies in a common session in person. The agencies have worked to adjust training events to the video conference format due to the travel restrictions in 2021.</p> <p>A survey was conducted on the Search and Rescue (SAR) topic to understand the needs of Member States authorities. Based on the survey outcome, a pilot awareness session on SAR for the non-SAR community was held in December 2021 with 45 participants from 16 different Member States and staff from the agencies.</p> <p>The maritime safety and fisheries control joint training course has been considered for May/June 2022, should it be possible to deliver it in presence, due to the importance of a field and practical visit to a port and fishing vessel.</p> <p>The cross-sector maritime surveillance and related fisheries monitoring center and integrated maritime services has also been postponed. The terms of reference and content of this training has been under development.</p>
<p>To foster a coast guard exchange programme and to promote the Coast Guard Sectoral Qualifications Framework (SQF).</p> <p>Tasks:</p> <p>1. To prepare, after feasibility analysis, a staff exchange programme for Member States authorities on cross- sectoral training activities including training and on the job exchanges.</p> <p>2. To raise awareness and promote the exchange of experience on the implementation of the voluntary Coast Guard SQF at national and at EU level.</p>	<p>Exchange programme development and dissemination of the Sectoral Qualifications Framework (SQF) were hampered by the coronavirus pandemic restrictions. On the Sectoral Qualifications Framework (SQF), EFCA and EMSA started to align their own training material with the SQF framework. Frontex has already an SQF in place.</p> <p>The Commission prepared in 2021 a project to finance EFCA for the development and follow up of the European Coast Guard Functions Academy Network (ECGFA-Net) project, in cooperation with EMSA and Frontex. This project will cover the development of a portal with sections relating to the SQF and the Exchange Programme.</p>
<p>To update the mapping of Training activities in Third Countries offered by each Agency</p>	<p>The three agencies exchanged information regarding activities held with third countries.</p>

Risk analysis	
Project: G Cross-sector risk analysis To support Member States authorities carrying out coast guard functions on cross-sector risk analysis needs	
Objectives	Outcomes
Task: 1. To assess and address the Member States needs raised through a consultation or a dedicated survey. 2. Following point the previous point, to combine cross- sectoral risk analysis product(s) and develop related methodologies, and deliver a common report for specific areas and/or sea basins starting in the Mediterranean Sea (e.g. Straits of Sicily) or in other sea basins.	<p>An online survey was circulated to consult Member States national authorities and risk experts (identified from the communities of the three agencies) on cooperation between EFCA, EMSA and Frontex in the Risk Assessment area.. The replies covered three different areas of possible future activities: 1) Sharing of data and information regarding risk and threats, 2) Development of methodologies on information/risk assessment products, and 3) Training, Capacity Building and Awareness sessions on risk assessments.</p> <p>On combining the outputs of the different risk analysis/assessments exercises performed by the three agencies, progress has been made in developing a joint information/risk assessment product and report. A first draft was produced and is under finalisation. The three agencies have in place their own risk analysis/assessment frameworks or their information framework to support risk analysis. Therefore, the three agencies continued to exchange information about the types of data, methodologies (steps, levels and objective of risk assessment) and analytical products that each agency is currently using within their frameworks in order to further enhance cooperation and inter-agency coast guard functions in support of Member States.</p>

Capacity sharing	
Project: H Multipurpose Maritime Operations	
Objectives	Outcomes
To develop guidelines for multipurpose maritime operations (MMO) implemented by the EU agencies based	The development of MMO Guidelines (Generic Modalities) have been achieved taking into consideration the definition

<p>on the common understanding of MMO concept and the related existing regimes including relevant legal frameworks (taking benefit of current operational outcomes).</p>	<p>of the MMO concept agreed as an outcome of the ASP2020, best practises available at EFCA, EMSA and Frontex, the current operational outcomes and the relevant legal frameworks.</p> <p>Following presentation during the 4th Annual European Coast Guard Event 2021, the <i>Generic Modalities (guidelines) for Multipurpose Maritime Operations organised in the context of European cooperation on coast guard functions v1.0</i> were endorsed by the TWA Steering Committee in July.</p>
<p>To identify areas (period of interest) for testing the implementation of such MMO taking benefit of the cross-sector risk analysis performed under the TSC2 project, taking into consideration the availability of multipurpose capacities of the three agencies, in those areas in such period and asking for MSs needs through a dedicated consultation</p>	<p>Following initial steps taken in 2020 in supporting Bulgarian and Romanian authorities carrying out Coast Guard Functions, the territorial sea and the EEZ of those countries has been identified as relevant areas to further test the implementation of an MMO.</p>
<p>To implement MMO in the European sea basin, upon MS' request.</p>	<p>Multipurpose Maritime Operation in the Black Sea (MMO Black Sea 2021) was implemented from 31 March to 06 October 2021. It was hosted by Bulgaria and Romania and 6 national authorities responsible for Coast Guard Functions were involved including EFCA, EMSA and Frontex communities. A dedicated Terms of Reference for this purpose has been agreed by the TWA Steering Committee in order to provide relevant specific guidelines for this operation and to detail support provided by each agency.</p>

4.2 COMMUNICATION

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 4 and 7

Planned input		Actual Input
CA	1,193,804	1,218,910
PA	1,193,804	1,174,490
Staff	3 AD, 2.25 AST, 1 CA	3 AD, 2.25 AST, 1 CA

Performance Indicator		Target 2021	Results 2021
Publications	number of publications/leaflets/brochures produced per year	18	25
Outputs 2021			Achievements
1. Implement the new communication strategy for 2020-2025 with a view to building up effective communication practices and applying these in a cost-effective way.			✓
2. Increase visibility of the Agency, ensuring that EMSA's mission and activities are well known among targeted audiences and information multipliers.			✓
3. Support the promotion of the 5-year strategy in each of the different priority areas and roles.			✓

4.3 MISSIONS AND EVENTS SUPPORT

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 4 and 7

Planned input		Actual Input
CA	1,039,130	697,914
PA	1,039,130	660,891
Staff	1.75 AST, 5 CA	2 AST, 3.25 CA

Performance Indicator		Target 2021	Results 2021
Events support	total number of meetings/workshops organised by EMSA per year	80	65 ²⁵
	total number of participants at EMSA meetings/workshops per year	2000	2873
Outputs 2021			Achievements
1. Support the organisation of events/meetings (presential, online and hybrid) in the Agency.			✓
2. Ensure timely organisation and reimbursement of missions & participants to EMSA's events.			✓

²⁵ Due to the COVID-19 during 2021 the number of events was lower than the anticipated target, however, thanks to video conferencing, the total number of participants has significantly increased and was above the anticipated target.

4.4 EXECUTIVE AND CORPORATE SERVICES

Legal basis: Regulation (EC) N° 1406/2002 as amended, Art. 5, 6, 13.7, 15, 18 and 19

Planned HR input		Actual HR input
Management, quality and greening	13.25 AD, 7 AST, 1 CA	11.25 AD, 6.75 AST, 1.25 CA
Human resources, implementation of the Seat Agreement and Document management	4 AD, 5 AST, 8 CA	4 AD, 4 AST, 6.25 CA
Legal and Finance	4.50 AD, 5 AST, 2 CA	4.5 AD, 6 AST, 2.25 CA
Facilities and logistics	1.25 AD, 2 CA	1.25 AD, 2 CA

Performance Indicator		Target 2021	Results 2021
Planning	implementation of the Work Programme	as close as possible to full implementation	assessed through the CAAR 2021
Budget	execution rate commitment appropriations	as close as possible to 100% and in any case above 95%	99.67%
	execution rate payment appropriations	as close as possible to 100% and in any case above 95%	97.32%
Audits	ECA recommendations implemented in time	100%	100%
	IAS recommendations implemented in time	100%	100%
Quality	QMS certification maintained	valid QMS certificate	Yes
Greening	number of greening projects implemented	2	8
Establishment plan	execution rate establishment plan	as close as possible to 100% and in any case above 95%	99.06% ²⁶
Verification time	time for processing files	max. 2.5 working days	1.63 working days
Outputs 2021		Achievements	
Management, quality & greening			
1. Preparation and implementation of a multi-annual strategy.			✓
2. Establishment and implementation of the budget of the Agency.			✓
3. Preparation of the meetings of the Administrative Board, decisions, minutes.			✓
4. Planning and reporting on activities and budget including preparation of the Single Programming Document, the Consolidated Activity Report and the Financial Statement.			✓
5. Regular monitoring of ongoing projects, budget execution and implementation of the annual work programme.			✓
6. Providing budget follow-up including execution of transfers.			✓
7. Providing and further developing budget planning and management tools.			✓
8. Implementing an Internal Control Framework.			✓
9. Implementing EMSA Quality Management System.			✓
10. Planning and implementing measures for improvement of the environmental aspects of all the Agency's activities.			✓
11. Registration/maintenance of EMSA registration within EU Eco-Management and Audit Scheme (EMAS).			✓

²⁶ This figure includes five offers letters sent and accepted in 2021.

Human Resources, implementation of the Seat Agreement & document management	
1. Implementation of the Staff Regulations and the conditions of employment of other servants.	✓
2. Development and Implementation of Implementing rules giving effect to the Staff Regulations.	✓
3. Personnel Management & Administration, including payroll management, rights & allowances, working time patterns, etc.	✓
4. Recruitment and Internal Mobility.	✓
5. Implementation of the EMSA policy for Learning & Development.	✓
6. Career management: appraisal and reclassification of staff.	✓
7. Maintenance and development of the e-HR applications.	✓
8. Implementation of the Seat Agreement with the Portuguese Authorities.	✓
Legal & finance	
1. Providing legal, financial and budgetary advice to the Executive Director and the different EMSA entities.	✓
2. Legal and financial verification of procurement procedures, legal and financial files.	✓
3. Further updates, development and integration of EMSA e-procurement, contract management, finance, budgetary and monitoring tools.	✓
4. Drafting and implementing internal rules, guidelines, templates and procedures.	✓
5. Implementation of Regulation (EC) No 1049/2001 of the European Parliament and of the Council of 30 May 2001 regarding public access to European Parliament, Council and Commission documents.	✓
Facilities & logistics	
1. Maintaining and operating EMSA's premises and infrastructure including safety, security and providing numerous support services.	✓

Part II – Management

2.1 Administrative Board

Meetings

EMSA's Administrative Board held three ordinary meetings in 2021. The March and June Board meeting were held online while the November meeting took place for the first time in a hybrid form with a successful outcome. Each meeting was preceded by a meeting of the Administrative and Finance Committee where technical, financial and administrative matters were reviewed in detail. Recommendations and opinions to the Administrative Board in accordance with the mandate of the Administrative and Finance Committee were provided, allowing the Administrative Board to focus on strategic orientations for the Agency's activities and discussions on substance.

2nd year of implementation of the EMSA 5-year Strategy

The EMSA 5-year Strategy 2020-2024 on which the Single Programming Document 2021-2023 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.

The main achievements against the Strategic Objectives are provided in the beginning of this document and operational achievements in each work area in 2021 are provided in Part I – Operational activities.

New Deputy-Chairmanship of the EMSA Administrative Board

In November 2021, the Administrative Board elected by acclamation the new Deputy Chairman of the Administrative Board Mr Wojciech Zdanowicz.

In line with the provisions of the Rules of Procedure, the term of office of the newly elected Deputy Chairperson will be valid for the remainder of the predecessor's term of office, expiring latest in December 2023, subject to remaining a member of the Administrative Board.

The election of the new Deputy Chairman was necessary due to the departure of Vice Admiral Nicola Carlone, former Deputy Chairman of the EMSA Administrative Board who was appointed General Commander of the Italian Coast Guard in July 2021.

Steering and monitoring the work of the Agency

The Administrative Board continued to play its essential role in steering the work of the Agency through the consideration and adoption of the major programming and reporting documents of the Agency.

The new Anti-Fraud Strategy developed by the Internal Control Coordinator and based upon the methodology and guidance for anti-fraud strategy provided by OLAF as well as the Anti-Fraud Strategy of DG MOVE/SRD was adopted.

Furthermore, the EMSA Strategy for cooperation with third countries and/or international organisations was adopted by the Administrative Board within the context of the Single Programming Document 2021-2023. The Strategy foresees for the Agency different modalities of cooperation, whilst respecting the principles of compatibility with EU policies, added value for the EU, resources and coordination with relevant EU institutions and EU bodies.

Administrative Agreements

In 2021, the Administrative Board considered and approved the following draft administrative arrangements, amendments to service level agreements, as foreseen by Article 10(2)(cc) of the Agency's Founding Regulation:

- draft Tripartite Working Arrangement for the Interagency Cooperation on coast guard functions;
- draft amendment Nr.1 to the Service Level Agreement between the Norwegian Coastal Administration (NCA) and EMSA for the hosting, maintenance and operation of the North Sea/North Atlantic and the HELCOM regional AIS servers and their connection with SSN;

- draft amendment Nr.1 to the Service Level Agreement between the Italian Coast Guard (ICG) and EMSA for the hosting, maintenance and operation of the Mediterranean regional AIS server (MAREΣ) and its connection with SSN;
- draft Service Level Agreement between the European Commission Directorate-General for Health and Food Safety (DG SANTE) and EMSA for the support of the implementation of Council Regulation (EC) 1/2005 of 22 December 2004 on the protection of animals during transport and related operations;
- draft Cooperation Agreement between EMSA and EUNAVFOR;
- draft Cooperation Agreement between EMSA and EUNAVFOR-Med;
- draft Contribution agreement with the European Commission (DG-DEFIS) on the implementation of the COPERNICUS maritime surveillance service.

The Administrative Board also took note of the main changes to come with the new SAFEMED V and Black and Caspian Sea II Projects, planned to be submitted for consideration by the Administrative Board in the beginning of 2022.

Written procedures

As in previous years, in 2021 the Administrative Board continued to use written procedures as an efficient means of consultation and decision making during the course of the year in relation to Administrative Arrangements, budget and programming document endorsement.

Written procedures are only used upon a thorough assessment, on a case-by-case basis and when possible operational or administrative time constraints are not synchronised with the actual convening of Administrative Board meetings.

2.2 Major events

New budget structure from 2022

In order to clarify and further strengthen the relationship between the financial resources and the Agency's output, from 2022 onwards the Agency has aligned its budget structure with the strategic framework. As a result, the Agency's operational expenditure funded by the EU subsidy now reflects both the Commission political and the Agency's strategic priorities, making them visible and easy to report on.

The operational share of the Agency's budget (Title 3 - Operational Expenditure) is divided into 6 chapters: Sustainability, Surveillance, Safety & Security, Digitalisation & Simplification, Technical & Operational Assistance, and Strategic Support.

The administrative share of the budget (Title 1 - Staff Expenditure - and Title 2 – Infrastructure & Operating Expenditure) remained unchanged. Likewise, project financed activities are, as before, grouped under a separate budget title (Title 4 - Project financed activities).

While the new budget structure will be in force as from 2022, planning for 2022 and beyond has been adapted throughout 2021.

The impact of COVID-19

With the outbreak of the COVID-19 pandemic in 2020 and its evolution in 2021, the Agency developed new services to support the analysis and mitigation of the impact of the pandemic on the maritime sector.

The pandemic fast-tracked the integration of a series of tools and methods to enable work to continue remotely, from live broadcasting to virtual reality technology to remote auditing techniques. The Agency continued to explore and capitalize on the potential of these innovative and hybrid approaches to both add value for Member States and the Commission and increase efficiency within the Agency.

ISO Certification

Thanks to the efforts of the entire Agency throughout 2021, EMSA received the ISO 9001:2015 certification following the successful implementation of the ISO **quality management system** covering all its main activities. Additionally, advanced preparatory work was done aiming for the ISO 14001:2015 certification (Environmental Management Systems (EMS)) and the EU Eco-Management and Audit Scheme (EMAS) registration.

Preparation of the 20 years of EMSA

In 2021, the Agency started the preparations for a celebratory year 2022, with a series of activities dedicated not only to commemorating previous years but also looking forward to the future 20 years, with, as a centrepiece, the 20-year anniversary high level conference to be held in Lisbon.

2.3 Budgetary and financial management

Regarding the EU subsidy, the Agency executed 84,797,211 EUR in Commitment Appropriations (CA)²⁷, representing 99.67% of the total budget of the year, and 82,798,089 EUR in Payment Appropriations (PA)²⁸, amounting to 97.32% of the total budget when only counting C1 Funds²⁹ (appropriations voted in the current budget).

After considering automatic carry-overs of PA (C8 funds: appropriations carried over automatically), 1.48% of payment appropriation were cancelled. Consequently, both targets set by the Commission (DG BUDG) for the year, namely more than 95% execution for CA and less than 5% cancellation for PA, were met.

The budgetary structure of the Agency was presented in titles: Titles 1 and 2 cover Administrative Expenditure and Title 3 is for Operational Expenditure, covering the cost of implementation of the operational projects and activities funded by the EMSA subsidy and outlined in the Agency's annual Work programme. Actions in Title 3 can have a multi-annual dimension, extending over more than one financial year. Within Title 3, Anti-Pollution Measures with its multiannual funding for the action of EMSA in the field of response to pollution caused by ships and marine pollution caused by oil and gas installations represented 42% of total commitment and 48% of total payment appropriations, respectively; 99% of commitment appropriations were committed³⁰ and 97% of payment appropriations were paid. The Cooperation on coast guard functions represented 35% of total commitment appropriations and 34% of payment appropriations, respectively; 99% of commitment appropriations and payment appropriations were consumed. The multi-Annual Schedule of Payments and specific follow-up on Anti-Pollution Measures and Cooperation on coast guard functions were regularly reported to the Administrative Board and the Commission.

Planning and monitoring tools and processes are in place to ensure a continuous and close follow-up of the activities and projects and related budget. This provided for aligning activities with objectives, streamlining costs and improving business practices, as well as consistent follow-up of the implementation of the objectives defined in the work programme.

Effective and efficient internal controls are also in place to support sound financial management across the Agency. Each operation is subject to at least one ex-ante verification.

As regards the payments, following earlier comments of the Court of Auditors, the Agency took measures to reduce the number of late payments³¹. During the course of the year there were no cases where a supplier of EMSA charged the Agency a payment for late interest fees.

Throughout the year, 51 procurement procedures were initiated (25 open, 3 special negotiated, 4 competitive with NEG and 19 very low and low value negotiated procedures) and a total of 65 contracts were signed.

There were seven normal budget transfers in total, which were managed in line with the relevant rules (Articles 26 and 27 of the EMSA Financial Regulation). All Agency transfers were below 10% of the appropriations for the financial year of the budget line from which the transfer was made in the case of transfers from one title to another, and therefore below the threshold above which Administrative Board approval is required.

²⁷ Commitment appropriations cover the total cost of the legal commitments entered into during the current financial year - even if such a legal obligation extends over more than one year.

²⁸ Payment appropriations cover expenditure arising from commitments of the current year and/or earlier years, which are due for payment in the current year.

²⁹ These figures contain revenues from fees and charges amounting to 292,425€.

³⁰ A budgetary commitment is money reserved for payments to be executed at a future date.

³¹ For the year 2021, the number of late payments equals 0.56% (12 late payments on a total of 2170 payment requests).

45,137,159 EUR of budgetary commitments associated with the EU subsidy were carried forward as C8 Funds. The overwhelming majority of these credits related to the multi-annual operations of the Agency. 47% were paid (consumed), 50% remained as “open amount” (amount due, not yet paid) and 3% of the total has been de-committed (cancelled).

The Administrative Board adopted an amending budget (Article 34 of EMSA Financial Regulation) in order to record extra income generated or refunds during the course of the financial year. There was extra income for CISE, FRONTEX SLA, EFCA SLA, COPERNICUS, EQUASIS, THETIS MRV, THESIS EU, THESIS EU AP and miscellaneous revenue as well as a minor negative adjustment to record the difference between anticipated versus actually cashed LRIT fees. These funds could only be loaded once cash payment was received by the Agency in the bank account.³²

Some of the extra income concerned internal assigned revenue (C4 funds) relating to refunds, of which the Agency executed 264,900 EUR in CA, representing 55% of the total C4 funds of the year and consumed no payments. Furthermore, the Agency consumed C4 appropriations carried over from the previous year (C5 funds in the current year). Regarding C5 funds the Agency executed 39,419 EUR in CA, representing 96% of the total C5 funds of the year, and 40,185 EUR in PA, amounting to 98% of the total C5 funds. Most of the extra income was external assigned revenue (R0 funds) relating to Project Financed Actions, which does not follow the principle of annuality and cover activities beyond 2021. Of the 37,267,512 EUR of R0 appropriations available for consumption, 46% were cashed before 2021 and 54% in 2021; the Agency executed 31,307,642 EUR in CA, representing 84% of available appropriations, and 17,456,394 EUR in PA, amounting to 47% of appropriations available for consumption.

2.4 Delegation of the powers of budget implementation to agency's Staff

Pursuant to Article 41 of the Agency's Financial Regulation the Executive Director delegated powers to members of the management team to sign legal acts and make commitments and payments for all budget lines. Sub-delegation of powers and responsibilities occurs only by virtue of the organisational hierarchy and the use of these powers.

Each authorising officer by delegation signed the “Charter of tasks and responsibilities of authorising officers by delegation”. This Charter, which has been drawn up in accordance with the provisions of the Staff Regulations, the Conditions of Employment of Other Servants and the EMSA Financial regulation, identifies the tasks entrusted to authorising officers by delegation, their rights and duties and the responsibilities they assume in their capacity as authorising officers by delegation. The Charter provides authorising officers by delegation with a framework within which they are empowered to develop reliable and effective management controls while upholding the principle of zero tolerance of fraud as well as to comply with EMSA system of controls as defined by the Executive Director. The Charter aims to ensure that authorising officers by delegation are able to provide a reasonable assurance concerning sound financial management and the legality and regularity of operations for which they are responsible (the “Declaration of Assurance”).

In principle, Heads of Unit delegated as authorising officers on dedicated budget lines are limited to use the budget appropriations up to a maximum amount of 60,000 EUR. All Heads of Department delegated as authorising officers shall use the budget appropriation up to a maximum of 200,000 EUR and only for budget appropriations designated to their own Department and files under the responsibility of their own Department. In case of absences, Heads of Department are authorised and may carry out operations with unlimited amount on all budget appropriations in accordance with Article 4.7 the “Charter of tasks and responsibilities of authorising officers by delegation”.

A cascade of annual declarations, in reverse order to the delegation of powers and to hierarchical “sub-delegation” by virtue of organisational hierarchy, was established in accordance with the “Charter of tasks and responsibilities of authorising officers by delegation” and with the “Procedure for drawing up the CAAR of EMSA”. Each authorising officer by

³² Refunds were recorded for FRONTEX, but on the balance cash receipts exceeded reimbursements.

delegation reported to the authorising officer who delegated the powers on the implementation of programmes, operations or actions in respect of which powers have been delegated to her/him by means of the annual Declaration of Assurance.

The materiality criteria for formal reservations to the annual declarations of assurance are defined in the “Procedure for drawing up the CAAR of EMSA”.

Qualitative criteria are linked to failure in achieving annual objectives, risks to EMSA’s reputation, significant deficiencies in the internal control systems and repetitive errors. These involve use of resources, sound financial management and legality and regularity of transactions. Their significance is judged on the basis of:

- the nature and scope of the weakness;
- the duration of the weakness;
- the existence of compensatory measures (mitigating controls which reduce the impact of the weakness);
- the existence of corrective actions to correct the weakness (action plans and financial corrections) which have had a measurable impact.

In quantitative terms, a deficiency is considered material if the financial impact or risk of loss is greater than 2% of EMSA’s authorised payments of the reporting year for the ABB activity concerned. In addition, the weakness must imply a significant reputational risk.

2.5 Human Resources management

During 2021 the workload related to recruitment was high with interviews and written tests being held remotely. Written tests were organised through an external contractor. At the end of the year EMSA achieved a 99% of occupancy rate in its establishment plan³³. In line with EMSA’s mentorship programme, newcomers were guided by a dedicated EMSA mentor. The mentor’s mission is not only to help new EMSA staff to better integrate by sharing knowledge and experience of working at EMSA or living in Portugal but also to provide guidance, encourage, and help the newcomers to adapt to the new working environment as quickly and efficiently as possible.

The recruitment of Seconded National Experts (SNE) turned out to be very challenging: given the difficulty to attract experts from the Member States to join the Agency under the SNE scheme, the Agency was confronted with some unsuccessful calls.

The traineeship program continued to be successful and EMSA was able to accommodate 16 trainees allowing recent graduates to start a career in the maritime sector. The statistics of 2021 show that young female graduates filled 69% of our traineeship positions.

The training and development actions continued remotely during 2021 focussing on EMSA’s strategic priorities and on individual needs of staff. In addition, dedicated training sessions were organised to all staff in view of assisting them when drafting their self-assessment which is an important part of the career development reports. The objective of this training was to enhance the overall quality of the annual appraisal exercise and to allow for an objective and harmonized evaluation system across the Agency.

³³ This figure includes 5 offer letters sent and accepted in 2021 but for which the positions are not yet taken up.

During 2021 a Call for Applications was launched with the aim of increasing the number of active EMSA Confidential Counsellors and potentially establishing a reserve list. In the context of this selection a 6 day training course/evaluation was organised which will take place early 2022. The selection procedure is expected to be finalised in February 2022.

One implementing rule on the general implementing provisions for Articles 11 and 12 of Annex VIII to the Staff Regulations on the transfer of pension rights was adopted by analogy³⁴. In addition, the Agency undertook preparatory work related to two upcoming decisions: one regarding administrative enquiries and disciplinary procedures and one related to working time and hybrid working, both expected to be adopted in 2022. Furthermore, in line with the Commission, the Agency adopted guidelines for the implementation of aid for persons with a disability.

During this second year of the COVID-19 pandemic crisis, the HR Unit was confronted with an additional workload due to the development and implementation of the different COVID Protocols. The additional workload consisted mostly of providing support to staff and their families, in close cooperation with the relevant Portuguese Authorities, to ensure they could be included in the vaccination campaigns of our host country. In addition, the processing of sensitive health data during the pandemic resulted in additional workload in the area of data protection (i.e. vaccination data, tracing of contacts, reporting of the illness, request of telework because of compulsory quarantines, etc.). Several colleagues had to take up duties or leave the service at a moment during which travelling restrictions and/or quarantine measures were in force. To this end, additional HR support was required. The HR team also was involved in the organisation of the working arrangements (telework vs. work at the office), in line with the measures taken by the Portuguese Authorities.

EMSA continued its strong commitment to improving the current gender balance in the maritime sector by taking initiatives to attract more females in maritime careers. To this end, EMSA put in place an internal “EMSA women in transport network” that meets regularly to develop ideas for actions to improve gender balance and to help put these actions in place. As an example, in 2021 EMSA launched the Speed Network initiative to offer women interested in a position at EMSA or a career in the maritime sector in general, the opportunity for a short informal conversation with female staff members about their careers in EMSA or experience in the maritime sector. The initiative was a success and will be repeated in 2022.

The pillars of a new HR Strategy were developed and are expected to be adopted during 2022 in consultation with management and staff.

As regards Personal Data Protection, during the course of the year the Data Protection Coordination Team continued its activities. The team held 7 meetings in 2021. Other examples of activities included the delivery of an internal training to EMSA staff regarding the Regulation 2018/1725, the integration of Data Protection awareness in the EMSA newcomers training and the creation of a Data Protection Helpdesk, accessible to all EMSA staff. This Helpdesk processed 27 enquiries in 2021. In addition, one of the Data Protection Coordinators was appointed as Deputy Data Protection Officer.

During the course of 2021, EMSA was subject to three audits/information requests performed by the European Data Protection Supervisor (EDPS).

1. **Case 2020-0611 (EMSA):** Remote audit on subscriptions. During this audit, the EDPS was reviewing the information provided to data subjects when they sign up to European Union institutions’ (EUI) newsletters and other subscriptions. Following the audit, the EDPS issued one preliminary finding which was rectified immediately.

Subsequently, no findings or resulting recommendations were identified in the final report of the audit, published on 28 April 2021 and the EDPS has decided to close case 2020-0611 vis-à-vis the EMSA.

³⁴ Commission Decision C(2020)4818 of 20 July 2020 amending Commission Decision C(2011)1278 of 3 March 2011 on the general implementing provisions for Articles 11 and 12 of Annex VIII to the Staff Regulations on the transfer of pension rights

2. Survey on data processing operations in COVID times: EMSA was requested to provide information to the EDPS on the processing of personal data, which lists new processing activities to help prevent the spread of COVID-19.

With this survey, the EDPS aimed to map the processing activities and tools used by EUIs to ensure business continuity in times of COVID-19 and to gather information as to how EUIs comply with the data protection requirements, identify new topics for future guidelines and conduct targeted audits and investigations.

The task was accomplished in due course and the Agency submitted its consolidated input to the EDPS.

3. Remote audit of the follow-up given to EDPS recommendations on Internal Rules regarding restrictions under Article 25 of the Regulation 2018/1725: EMSA was notified of the audit in subject and was requested to provide information on the implementation of the Internal rules concerning restrictions of certain rights of data subjects in relation to processing of personal data in the framework of the functioning of the European Maritime Safety Agency ('The Rules').

The requested information concerned the status of the Rules and the instances of their application (if any).

EMSA supplied the requested information and some additional clarifications to the EDPS.

The case vis-à-vis EMSA was closed, and no official recommendation was issued. However the EDPS suggested EMSA to improve the phrasing in some paragraphs of its internal rules.

A considerable number of new Records of Processing activities were created in the Agency during 2021 (25 in 2021) and a number of questions related to Notifications were answered. The number of Data Protection Impact assessments (DPIA) carried out in 2021 is 4 (compared to 5 in 2020).

2.6 Strategy for efficiency gains

Regarding the efficiency gains, the Agency aims and works continuously to improve its procedures to enhance its efficiency and effectiveness and achieve the best possible use of its human and financial resources.

In particular, during the course of 2021 the following actions took place.

- Efficiency gains in overhead/horizontal functions:

Efforts to increase efficiency in overhead/horizontal functions by centralising and/or automatizing administrative and support functions are continuous. The Agency's organisational structure in place from 1 January 2020, also aimed to increase efficiency in overhead/horizontal functions.

- Introduction or enhancement of supporting electronic tools in the field of HR, procurement and budget monitoring:

The automatization of procedures intends to further reduce the administrative workload of certain staff members and allow them to concentrate on other tasks in related areas with more added value. In 2021 EMSA's internal financial tool was enhanced, a new type of procedure in the E-procurement suite was added and further work aiming to interlink internal applications were pursued. The Agency also implemented pilot projects for the Qualified E-signature.

- Creation of task forces to carry out specific projects:

The Agency strives to use the expertise available in-house to the greatest extent possible, through the creation of task forces involving relevant staff members to carry out specific projects. As an example, the implementation of tasks under the European cooperation on coast guard functions is coordinated by a task force which brings together staff and expertise from different parts of the Agency. Also, the Agency has established a task force to support the revision of the flag State, port State and accident investigation Directives and one for the preparation of EMSAFE report.

- Screening and benchmarking:

The Framework Financial Regulation establishes the obligation for the Agencies to carry out a benchmarking exercise with the aim of being able to justify administrative expenditure in a more structured way. At this stage, the implementation of the relevant provisions of the Framework Financial Regulation consists of a job screening exercise which is an essential element of the wider benchmarking exercise.

The 2021 annual job screening exercise was carried out at EMSA. Ultimately the purpose of this screening is to reduce staffing levels in administrative support and coordination and thus reallocate resources from 'overheads' to 'frontline' operational activities. The screening also improves transparency by providing information on how jobs are assigned. This facilitates to make better informed strategic decisions on resource allocation.

- Cooperation with other EU Agencies:

Efficiency gains and synergies are one of the action areas of the Network of EU decentralised Agencies. In this context, Agencies have already set up specific cooperation agreements in order to better coordinate their activities, avoid overlaps and achieve better use of their resources.

In the framework of the new mandate for European cooperation on coast guard functions EMSA shares information, expertise, procedures, training material and tools in particular with Frontex and EFCA (see also Interagency cooperation with Frontex and EFCA on coast guard functions).

EMSA and the EMCDDA continued to work closely with a view to increasing effectiveness, efficiency and save costs given the geographical proximity of the agencies. One example in this field concerns the mutual back-up arrangement in place for the Accounting function in both Agencies.

- Internal redeployment of staff dealing with functions related to the COVID-19 Outbreak:

Staff dealing with functions directly affected by the COVID-19 travel restrictions (i.e. expert reimbursements, mission reimbursements) was temporarily assigned to perform other duties and to cover for absences of staff.

2.7 Assessment of audit results during the reporting year

EMSA's internal audit function is ensured by the Commission's Internal Audit Service (IAS), which remains the official internal auditor of the Agency, in accordance with the EMSA Financial Regulation. Moreover, financial audits are performed annually by the European Court of Auditors. On average the Agency is audited every year by these auditing bodies and their audits cover all identified audit risks. Finally, a number of specific programmes or activities were audited by external audit firms.

During the reporting year the Agency's auditing bodies - 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.

All recommendations and observations stemming from various audits from years before 2021 were addressed and there were no pending actions that could have a negative influence on the risks linked to the Agency's activities in 2021. In particular, all action plans stemming from past audits were implemented within the agreed time frame: by 31 December 2021 all action plans, due by year-end, were fully implemented by the Agency.

In line with EMSA's Founding Regulation and following a decision of the Administrative Board extending the mandate of the Administrative and Finance Committee to provide assistance to the Administrative Board to "monitor the findings and the recommendations stemming from various audit reports and evaluations, whether internal or external, and the EMSA follow up", the outcome of the different audits as well as the state-of-play of the implementation of the different action plans to address detected shortcomings were reported on a regular basis throughout the year to EMSA's Administrative Board.

2.7.1 IAS

In line with the relevant international professional auditing standards, the IAS established a multiannual audit plan (Strategic Internal Audit Plan 2020-2022). This audit plan which is based on the results of an in-depth risk assessment includes the following list of prospective audit topics for the years 2020-2022.

Prospective IAS audit topics (2020-2022)	
Audit	<ul style="list-style-type: none"> ▪ IT governance and portfolio management (performed in 2021) ▪ Operational oil pollution response services (planned for 2022) ▪ CleanSeaNet and illegal discharges
Follow-up	<ul style="list-style-type: none"> ▪ Continuous desk review of the recommendations reported as implemented ▪ On-the-spot follow up as required

Following this Audit plan, and as agreed by the Agency, the audit on the “IT governance and IT portfolio management”, originally scheduled to be carried out in 2020 was rescheduled to 2021. Due to the ongoing public health risks and COVID-19 related work and travel restrictions the audit was carried out remotely.

The objective of this audit was to assess the adequacy of the design and the efficiency and effectiveness of the management and control systems put in place by EMSA for its IT governance and portfolio management processes. This involved an assessment of whether effective controls have been defined and implemented in the areas of IT governance framework, value delivery, IT risk optimisation and performance, resource and portfolio management.

The IAS concluded that due to the restructuring of ICT into one department, EMSA has overall designed and implemented efficient and effective management and control systems for its information technology governance arrangements.

While the audit did not result in the identification of any critical or very important issues, the Internal Audit Service identified a number of areas for improvement and issued six recommendations :

Recommendation 1 regarding the IT governance framework:

- In order to ensure that the ICT governance set-up effectively supports the achievement of the objectives of the organisation, EMSA should ensure the representation of the business as permanent members of the ICT Steering Group (SG).
- EMSA should apply consistently the mandate that Department 3 received to hold responsibility for all ICT matters related to maritime applications as well as Corporate ICT and non-maritime applications. The management of the IT component of CISE should be handed over to Department 3 after the transition phase and a transition plan drafted accordingly.
- EMSA should ensure that changes which are the result of a project to create a new application should follow the same change and evaluation management (CEM) process as other changes.
- Furthermore, EMSA should amend its internal procedure in order to ensure early detection of the change impact on the portfolio of services and establish guidelines or criteria to determine which requests for change need to be assessed by the Change Advisory Board and which not.

Recommendation 2 regarding the ICT strategic planning:

- EMSA should update its ICT strategy. This updated strategy should bring together all actions/projects in all areas covered by ICT (Maritime Digital Services, Digital Infrastructure, Simplification, Corporate ICT and internal functioning), integrated with the cloud strategy and containing a roadmap which covers the same 5-year period as the EMSA 5-year strategy. Concretely, EMSA should:
 - Align the ICT security policy with the ICT strategy;

- Clarify how the cloud strategy will impact the other elements of its ICT strategy (services, actions and projects) and, if needed, update the actions of the ICT strategy accordingly;
- Establish a 5-year roadmap that is aligned with the EMSA 5-year strategy and that clarifies how this ICT strategy will be implemented.

Recommendation 3 regarding the project and service management framework:

- As regards the Service management framework EMSA should update the service management procedures in order to align them with the new service management framework (more specifically, with the new roles and responsibilities). The Agency should distinguish the roles within service management from the roles within project management and document the full spectrum of tasks and responsibilities for each role within the project and service management framework to ensure clarity. EMSA should include corporate services in the service catalogue for internal use.
- Concerning the Project management framework EMSA should make it mandatory to provide a rough estimate of the project cost in the Project Brief template, with instructions on how to do so and should draft an addendum to the generic project management framework specifying the management of ICT projects, clarifying roles and responsibilities by use of a RASCI matrix for each project phase.

Recommendation 4 regarding the ICT Security Framework according to the standard family ISO2700X:

- As regards the ICT security framework EMSA should develop and implement an Information Security Management System across the organisation instead of only covering IT security in individual applications. The ISMS should contain an updated ICT Security policy (see also recommendation no. 2) as well as a complete set of low-level security policies based on the standard ISO27001 and in line with the upcoming regulation on information security in the EU institutions, bodies and agencies.
- Concerning the Data classification scheme and definition of baselines, whilst the IAS understands that EMSA is not fully independent in establishing a data classification scheme for all maritime data and acknowledges that data classifications and security baselines differ between maritime applications, as a minimum, the Agency should define a data classification scheme for corporate data based on the ISO27001 standard. Furthermore, EMSA should ensure that the classification scheme is consistent and binding for all corporate applications across the organisation and in line with Article 33 of the GDPR.

Recommendation 5 regarding the ICT Security Governance:

- As regards the Roles and responsibilities, EMSA should define the roles and responsibilities in a consistent manner across the organisation. As regards ICT security roles, the Agency may define these in the process leading to the certification according to standard ISO27000.
- With regard to the Reporting on ICT security, the Information Assurance Officer should report directly on all security issues (EUCI and non-EUCI) to the Executive Director. Moreover, during the CISE transitional phase, the security expert should report directly to the Executive Director and keep the Information Assurance Officer updated regularly.

Recommendation 6 regarding the continual improvement of the ICT security process:

- EMSA should establish a dedicated ICT risk management approach. The planned certification according to standard ISO27000 may help achieving this. The ICT risk management results should trigger the process of continual improvement. Moreover, EMSA should implement an adequate metric on ICT security activities to measure the progress on this field.

The Agency accepted all six recommendations and issued an action plan to address all above findings. This Action plan was approved by IAS.

As regards the previous audits, no remaining open action points remained. As a result, all audit recommendations stemming from IAS audits other than the points mentioned above, are formally closed.

2.7.2 ECA

Following its audit of the financial accounts for 2020 the European Court of Auditors issued the opinion that “the accounts of the Agency for the year ended 31 December 2020 present fairly, in all material respects, the financial position of the Agency at 31 December 2020, the results of its operations, its cash flows, and the changes in net assets for the year then ended, in accordance with its Financial Regulation and with accounting rules adopted by the Commission’s accounting officer.”

Moreover, the Court concluded that the transactions underlying the annual accounts were legal and regular in all material aspects.

As a result of this audit, the ECA issued following three observations, none of which called the Court’s opinion into question:

1. “The EU Financial Regulation states that payments shall be made within a prescribed timeframe of 30 days. In 2020, EMSA frequently failed to do so, paying late in 11 % of cases. We observed similar or higher levels of delays in 2019, 2018, 2017 and 2016. For all the years mentioned, most late payments concerned the reimbursement of travel costs for participants in workshops. Some effort has been made to reduce the delays, but this recurrent weakness exposes EMSA to financial and reputational risk.”

The final figure for 2020 on late payments already showed a decrease of the number of payments out of the prescribed timeframes compared to the previous year : 11 % compared to 18 % in 2019. This figure of 11% includes the backlog of late payments carried over from 2019. Without this backlog the total number of late payments for 2020 would have been 3%. For the year 2021, the number of late payments has dropped even further and equals 0.56% (12 late payments on a total of 2170 payment requests).

2. “In 2020, EMSA paid installation and daily subsistence allowances to all staff members who were recruited as temporary agents immediately after their secondment to the Agency. Allowances of this kind are intended to cover the expenses and inconvenience caused by the requirement for staff members to change their residence in order to reside permanently at their place of employment. EMSA did not take sufficient steps to verify entitlements to these allowances. For example, it did not analyse its staff members prior living arrangements in order to determine whether they had actually changed their residence. This represents an internal control weakness.”

EMSA reinforced its procedure to verify entitlements for Temporary Agents/Contract Agents that were formerly Seconded National Experts at the Agency. Following this updated procedure checks to determine that a change in habitual residence has taken place at the time of becoming a statutory agent are now formally performed and documented. It should be noted that no irregular allowances were paid.

3. “Five staff members with management positions at EMSA possess delegations which give them the exact same powers as those of the Executive Director for all budget items. This in itself constitutes a risk and is not conducive to a clear hierarchy of authority, responsibility and accountability at EMSA. EMSA’s Executive Director also signed a decision appointing acting Executive Directors and acting appointing authorities by delegation during the Executive Director’s annual leave, delegating those two roles completely during that period. This decision exceeded the powers assigned to the Executive Director in Article 15 of EMSA’s founding regulation.”

The delegations given by the Executive Director (ED) fully comply with the EMSA Financial Regulation (FR) and Founding Regulation (FoR). The way delegations have been defined by the ED was to ensure business continuity. The assignment of delegations is combined with several mitigating measures that are put in place to prevent and avoid any potential risk which might affect the legality and regularity of EMSA’s operations. As from June 2021, a new procedure has been put in place whereby all controls (e.g. pre-approval by the ED of all decisions taken by the delegated Head of Department (HoD), report of the HoD on what they have signed) are kept in a central register and properly documented.

The full Report on the annual accounts of the European Maritime Safety Agency (EMSA) for the financial year 2020, together with the Agency's reply can be consulted on the ECA's website.³⁵

In accordance with Article 104 of the Agency's Financial Regulation, the audit on the Agency's financial accounts 2021 was partially performed by an external audit firm, Mazars. To this end, the Agency launched, early 2020, a tender procedure covering the audits for the Annual Accounts 2020 and 2021. The costs for the audit performed by the external audit firm are borne by the Agency.

2.7.3 QMS and other Audits

In 2021, the scope of the EMSA Quality Management System covering the visits and inspection activities was extended to all activities of the Agency. The implementation was completed successfully in June 2021 with an internal audit showing effective implementation and no critical findings. The external certification audit was performed in December 2021 by TUV Rheinland Portugal and for the first time the quality of Agency's performance is now certified against the ISO 9001:2015 Standard. Moreover, the first part of the external certification audit for the EMAS registration (and ISO 14001:2015) was performed in November 2021.

During the course of April 2021 the external audit firm, Baker Tilly Belgium conducted two audits³⁶ related to the reported costs with regards to the:

- Earth observation services provided in 2020 by EMSA to Frontex in the framework of the Copernicus Border Control Delegation agreement (and in accordance with the EMSA/Frontex SLA);
- EMSA Copernicus Maritime Surveillance Annual Implementation for 2020 in the framework of the delegation agreement between the European Union (DG-DEFIS) and EMSA on the implementation of the maritime surveillance component of the Copernicus security service.

In both cases the auditors concluded that the financial and implementation reports gave a true and fair view, that the control systems put in place are strong and function properly and that the underlying transactions were legal and regular. The audits did not lead to any recommendations.

2.8a Follow up of audits plans, audits and recommendations

The Agency has developed its own follow-up tool where relevant recommendations issued by the IAS and the European Court of Auditors (ECA) as well as the corresponding actions to address the detected weaknesses are recorded.

The Agency considers the follow-up on the progress of the action plan on audit recommendations as an important element of its Internal Control System. A quarterly indicator is discussed by senior management and reported to the Commission.

Equally, a detailed overview of the progress of the implementation of the action plans following the different audits is presented to the Administrative and Finance Committee of the Administrative Board, in accordance with the mandate of the Committee, at each meeting. Subsequently, this information is provided to the Administrative Board.

³⁵ https://www.eca.europa.eu/Lists/ECADocuments/AGENCIES_2020/AGENCIES_2020_EN.pdf

³⁶ Due to the COVID-19 related travel restrictions the audit was conducted remotely.

At the end of 2021, all audit recommendations with an action implementation date of 31/12/2021 and earlier had been implemented.

2.8b Follow up of recommendations issued following investigations by the European Anti-Fraud Office (OLAF)

During the course of 2021 there was one recommendation related to an OLAF investigation that is in the course of being followed-up.

2.9 Follow up of observations from the Discharge authority

In reply to observations and comments made by the European Parliament in its discharge of 2019³⁷, the Agency provided further information on actions taken to address previously identified areas for improvement and highlighted some actions taken that are of the interest of the European Parliament.

As regards late payments, the Agency informed the Parliament of all the measures taken to address this issue.

It should be noted that the number of late payments in the past did - in the majority of cases - not lead to the payment of late interest. The Agency informed the European Parliament about the structural measures that have been taken to reduce the number of payments outside the prescribed time limits. Additional staff was added to process payments and the 2019 backlog was fully cleared during the course of 2020. The Agency has also decided to explore the possibility to outsource the reimbursements for experts and participants to workshops to the Commission's Paymaster Office (PMO) as the majority of late payments were related to this area³⁸. The Agency underlined that the delays for 2019, mostly related to the reimbursement of travel costs for participants to workshops, were of an exceptional nature and caused by a temporary lack of staff available for processing such reimbursements combined with an exceptional increase of workshops during the 1st and 3rd quarters of that year.

The final figure on late payments for 2020 showed an improvement of 7% : 11% late payments compared to 18% in 2019. It should be noted that this figure still includes the backlog of late payments that was "carried over" from 2019. Without this backlog the number of payments outside the legal time limits and related to 2020 activities equals 3%. The final figure of late payments for the year 2021 show a total of 0.56% late payments.

As regards the concerns of the European Parliament that, in 2019, the agency's administrative board was composed only of 21% of women (43 men and 14 women) while gender balance has been achieved within the (senior) management (8 men and 5 women), the Agency reiterated its commitment to promoting gender balance and therefore adopted in June 2018 an Action Plan for Gender Balance.

The Agency forwarded the concerns of the European Parliament regarding the gender balance in the Agency's Administrative Board to the Member States and the Commission.

As regards the senior management (situation 2021), gender balance has been achieved as follows:

- Executive Director: Female

³⁷ The European Parliament decision of 28 April 2021 on discharge in respect of the implementation of the budget of the European Maritime Safety Agency for the financial year 2019 (2020/2160(DEC)) and the European Parliament resolution of 29 April 2021 with observations forming an integral part of the decision on discharge in respect of the implementation of the budget of the European Maritime Safety Agency for the financial year 2019 (2020/2160(DEC)).

³⁸ After careful consideration this option is no longer considered feasible due to the high costs of the services.

- Heads of Department: 2 Male, 2 Female

Concerning the Agency's framework contract with a temporary-work agency to provide temporary workers and in particular that the remuneration of interim workers in the Agency was lower than the lowest possible remuneration that would have been due to a contract agent directly employed by the Agency for performing the same task, the European Parliament already took note of the previous reply of the Agency stating that the contract with the temporary-work agency was terminated and a new framework contract was signed in May 2020. Consequently the Agency informed the Parliament that it had signed a new framework contract for interim services in May 2020. Following consultation with an expert in Portuguese labour law, it was confirmed that the new framework contract is fully in line with the national law transposing the aforementioned Directive.

EMSA is actively following development of the case pending before the Court of Justice with another Agency (EIGE) on the implementation of Directive 2008/104/EC in Lithuania. EMSA currently has no further news on the outcome of this pending case.

Concerning management of conflicts of interest in recruitment procedures in the Agency and the fact that selection committee members did not always declare personal interests, potentially calling into question their independence with regard to all candidates, the Agency informed the Parliament that it has reviewed its procedure and guidelines related to the identification and management of conflicts of interest of selection committee members. The new procedure, implemented as from early 2020, ensures a proper reporting and management of potential conflicts of interest and a fair and transparent recruitment process.

Finally, EMSA informed the European Parliament about the continuous progress on the implementation of the EMSA greening scheme. In February 2020, the decision was made to aim for registration under the EU's EMAS scheme. Consequently, a network of environmental envoys (EMSA's "Greeners") was set up across the Agency.

2.10 Environment management

The "Greening EMSA" project that aims to introduce environmental management and the EMAS registration was officially launched in 2019 following the adoption of EMSA's Environmental Policy and principles on greening. In 2020 EMSA completed its first environmental review. EMSA's environmental management system has been adopted, including strategic pillars and objectives for the following years. In 2021 EMSA proceeded with implementing its environmental management, and prepared and adopted its first Environmental Statement.

EMSA continued updating its environmental statement and program 2021-2022, for the same all-embracing scope as well as the implementation of its Environmental Management System (EMS) in day-to-day business. The internal audit regarding the registration under EMSA took place in June 2021. The final step, the external verification audit took place on 13-14 January 2022 which EMSA passed. EMSA has submitted the result to the registering authority to receive the EMAS label and have its environmental statement published.

In 2021, the following greening activities and projects were carried out:

- EMSA changed its contract with its energy provider and as from January 2021 only consumes 100% renewable green energy;
- Photovoltaic solar panels were installed on the roof of the EMSA building;
- Further reduction of paper by digitalization: The Agency has moved to 'paperless office' and has implemented a pilot project for Qualified E-signature that would permit EMSA to fully operate in a paperless environment;
- The Agency undertook measures to further reduce the energy consumption of its ICT Data Centre by performing some technological and equipment upgrades (chillers and UPS);
- The Agency continued implementing a policy of purchasing green stationary materials as well as green EMSA corporate gifts, eliminating plastic and single-use items as much as possible;
- EMSA promoted and supplied its own glass/ceramic cups and ecological spoons to all staff for serving coffee/tea and drinks. This further reduces the waste of paper cups and plastic;

- To minimise further the consumption of water the Agency installed sensor-controlled water taps;
- The Agency installed a weighing device at its premises to measure, record and monitor waste weights;
- CO₂: The Agency adopted the CO₂ footprint calculation method for EMSA;
- LEDs: following the replacement of bulbs in its parking lot and common areas, EMSA has started to replace other lighting with LEDs. This will further reduce electricity consumption;
- Promoting alternative transport: Annual preventive and corrective maintenance of EMSA bicycles has been carried out. EMSA also installed a bike patient station where small bike repairs can easily be done for EMSA staff.

2.11 Assessment by management

The Agency's operational and administrative activities in 2021 were carried out in accordance with the work programme for the corresponding year, with the necessary guidance and support of the Administrative Board.

Regular consultations through the Administrative Board meetings and the written procedure mechanism allowed for transparent and constructive exchange of information between the Agency and its governing body.

The outbreak of the Coronavirus continued to influence the life of billions of people around the world including in the EU and our institutions and authorities have experienced and are still experiencing an unprecedented situation which has changed the way people live, interact and work. As in the previous year, at the time of the outbreak of the pandemic, EMSA continued to adjust to the consequences of the pandemic by assessing and adapting its working methods. By doing so, the Agency was once again able to continue providing its stakeholders with the range and quality of services they are used to.

Also during the course of 2021, mitigating measures were put or remained in place to address the effect of the COVID-19 pandemic and to reflect on the impact, in the short and medium term, of the pandemic on the Agency's activities and related financial resources. The Agency has continuously assessed the situation in order to minimise the impact on the budget and, at the same time, ensure the most efficient budget execution.

The budget was implemented in accordance with the principles of sound financial management. In particular, on the basis of the cascade of declarations provided in accordance with Annex 1 of the "Procedure for drawing up the CAAR of EMSA" and of the underlying controls and control procedures performed by the staff of the Agency; and supported by the assessment of the effectiveness of the internal control framework presented under Part III, the management has reasonable assurance of the achievement of the five internal control objectives listed under Article 30.2 of the EMSA Financial Regulation:

- (a) effectiveness, efficiency and economy of operations;
- (b) reliability of reporting;
- (c) safeguarding of assets and information;
- (d) prevention, detection, correction and follow-up of fraud and irregularities;
- (e) adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programmes as well as the nature of the payments concerned.

Part II (b) External Evaluations

The last evaluation from May 2017 concluded that by operating at EU level, EMSA is providing significant added value in all its areas of activities and for all its stakeholders. EMSA has become an important and respected player in the maritime community, offering world-class services that made the EU maritime sector safer and more secure. The Agency's efficiency has increased, demonstrated by a lower share of overhead expenditure, the accomplished new tasks without additional resources and also due to the performance management system used by the Agency, which sets multiannual objectives and quarterly KPI indicators as one element in the periodic monitoring of the implementation of the annual work programmes. The cost effectiveness of the Agency's activities is assessed positively: A number of activities provide high

value for money compared to alternative models of provision at the national or regional level. EMSA's activities also contribute to reducing the administrative burden for Member States and to improving Member States' efficiency in implementing their legal obligations. None of EMSA's activities have been assessed as redundant, and EMSA's work is generally assessed as being complementary to that of the Member States. As a result, the evaluation concludes that EMSA's services and products are cost-effective and that EMSA provides value for money within the context of the EU maritime sector and within all areas of work. The full evaluation report is available on the agency's website:

<http://emsa.europa.eu/who-are-we/admin-board/evaluation-activities.html>

Following the Administrative Board recommendations issued in November 2017, in March 2018 the EMSA Administrative Board welcomed the EMSA Action Plan on which the Administrative Board was being regularly updated.

The outcome of the EMSA external evaluation and the Administrative Board recommendations were taken into account in the EMSA 5-year Strategy 2020-2024.

Part III Assessment of the effectiveness of the internal control systems

3.1 Risk Management

Since 2012 EMSA implemented a Risk Management Framework which aims to provide clear guidance on how to analyse and evaluate risks (i.e. identify and assess risks), decide on actions and controls to terminate or mitigate these risks, assign ownership and finally to implement these actions and controls and, finally, monitor and review the risk management process.

The Agency has developed a rigorous approach to risk management. This includes a risk register, which covers all identified internal and external risks related to all EMSA's activities and action plans to reduce the potential consequence of each identified risk to an acceptable level.

It should be noted that the EMSA Risk Management Framework is fully aligned and integrated with the Agency's Quality Management System. As part of the audit of this Quality Management System (see 2.7.3), the Risk Process was fully audited (December 2021), and no non-conformities were found.

In accordance with the new Risk Management Framework the risk register was fully updated and fine-tuned in 2021. During this exercise special attention was given to the identification of potential fraud-related risks and overall opportunities. Following the outbreak of the COVID-19 pandemic a number of new identified risks and opportunities related to this major health crisis were identified and included in the updated risk registers.

The update of the Agency's risk register did not result in any critical risks that could lead to a formal reservation to the Authorising Officer's annual declaration of assurance.

During 2021 none of the previously identified risks materialised.

3.2 Fraud Prevention and Detection

As regards the prevention, detection, correction and follow-up of fraud and irregularities, since 2015, the Agency has developed its Fraud Prevention and Detection Strategy.

In preparation for the 2021-2027 MFF, the Commission updated its own Anti-Fraud Strategy ("the 2019 CAFS"). Following this update, all Agencies were requested to adapt their existing Fraud Prevention and Detection Strategies to the new Commission document. As a result, the Agency, in close cooperation with OLAF and DG MOVE/SRD, updated its Fraud Prevention and Detection Strategy. This new strategy, now called Anti-Fraud Strategy, was adopted by the Administrative Board in March 2021.

EMSA's Anti-Fraud Strategy is based on the methodology and guidance presented by OLAF as well as on the Anti-Fraud Strategy of DG MOVE/SRD of the Commission. It provides an updated framework addressing the issues of prevention, detection and conditions for investigations of fraud at Agency level. This methodology consists of the following steps:

- Fraud risk assessment (updated annually) as part of the Risk Management;
- Setting the Agency's objectives regarding the prevention and detection of fraud;
- Establishing an Action plan implementing the anti-fraud strategy;
- Evaluating the impact of the strategy and updating the strategy or action plan.

During the course of 2021, overall the residual risks related to fraud decreased and no new risks related to fraud were identified.

In line with the above, the Agency implemented a number of actions to (1) Promote the highest level of integrity of EMSA staff, (2) Support effective prevention and detection of fraud risk and (3) Establish appropriate internal procedures for reporting and handling potential fraud cases and their outcomes.

Examples of such measures include the obligatory training for all staff on Ethics and Integrity, the guidelines on whistleblowing and the continuous update of the mechanisms and procedures to avoid or manage conflict of interest.

3.3 Compliance and effectiveness of Internal Control Standards

Since the start of its activities, and in pace with the growth of the Agency, EMSA has progressively developed and implemented a series of internal measures to ensure that its activities are subject to control and to provide reasonable assurance to management of the achievement of the Agency's objectives.

These internal control measures help to ensure that EMSA's operational activities are effective and efficient while also certifying that all legal and regulatory requirements are met, that financial and management reporting is reliable, and that assets and information are safeguarded.

Examples of measures in place are: implementation of organisational structures and making sure they are continuously adapted to the changing environment; development and updates of several staff policies and operational procedures; setting of clear objectives and monitoring them through well-developed management reporting and monitoring tools including Key Performance Indicators, risk management and business continuity planning. When implementing new measures, where possible, the Agency takes into account the costs and benefits of such controls.

Taken together, these measures constitute the internal control framework (ICF) of the Agency.

The Agency's ICF is designed to provide reasonable assurance regarding the achievement of five objectives set in Article 30 of the Financial Regulation of the Agency:

- effectiveness, efficiency and economy of operations;
- reliability of reporting;
- safeguarding of assets and information;
- prevention, detection, correction and follow-up of fraud and irregularities, and
- adequate management of the risks relating to the legality and regularity of the underlying transactions, taking into account the multiannual character of programmes as well as the nature of the payments concerned.

The framework supplements the Financial Regulation and other applicable rules and regulations.

EMSA's ICF is based on the framework adopted by the Commission and consists of five internal control components. EMSA's framework also includes the principles that are included in the Commission's framework, each of them complemented by several characteristics. EMSA's updated ICF is fully in line with the Commission's framework but has been adjusted to reflect the organisational set-up and characteristics of the Agency (e.g. the existence of Departments and Units, the role of its Administrative Board etc).

The effectiveness of the Agency's Internal Control Framework is continuously measured. This assessment covers all principles and internal control components.

The controls in place are designed to optimise their effectiveness and efficiency, by striking the right balance between the benefits of the controls regarding especially the legality and regularity of the underlying transactions, and the effectiveness and efficiency of the control taking into consideration the risks involved. Regarding the effectiveness of the controls, no indications were found that the controls in place were not effective.

Regarding the efficiency and economy of the controls, no anomalies were reported to indicate that the efficiency and economy were under question. However, in order to better measure the efficiency and economy of the controls, EMSA is working on introducing an improved control strategy and some more detailed indicators.

The estimated cost of controls for EMSA in 2021 is 1,297,619 EUR. The calculation method has been based on the approach used in the Commission and includes the estimated salary costs (including social charges) of the staff involved in the key control systems such as the legal and financial verification as well as in other internal, budgetary and accounting controls. The estimation does not take into account the costs paid by the Agency for external audits nor does it include any direct or indirect information technology costs (E.g. licence fees for ABAC), any staff costs for general control related activities (e.g. planning, quality management) or any other overhead costs (e.g. costs for office space).

Another key element of EMSA's internal control framework is the control and registration of exceptions to established regulations, policies, rules and procedures. An exception is any transaction, financial or operational, which requires an approach that deviates from EMSA's regulations, policies, rules and procedures.

A total of 7 of such exceptions were registered in 2021 (vs. 18 in 2020), of which 5 ex-ante (approval for a future foreseeable deviation) and 2 ex-post (approval after the deviation had occurred) exceptions. There was one financial related exception for an amount of 1,166.00 EUR.

None of the exceptions were material and of a nature that could lead to a formal reservation to the Authorising Officer's annual declaration of assurance. Where necessary, corrective actions were carried out or clarifications were given to avoid similar situations occurring in the future.

Overall, the continuous assessment carried out by Agency's Internal Control Coordinator concluded that all internal control principles and the five internal control components are adequately implemented and effective overall with some minor improvements needed. No significant control weaknesses were reported.

Part IV Management assurance

4.1 Review of the elements supporting assurance

On the basis of elements of the internal control systems and the assurance they provide – the building blocks of assurance – the Executive Director was in a position to sign the Declaration of Assurance of the Authorising Officer which accompanies this Consolidated Annual Activity Report. The building blocks of assurance that are normally in place and were available to the Executive Director in 2021 are outlined below.

Monitoring and reporting – budget implementation

The monthly report on budget, procurement and financial management provides information on budget execution per budget line for all fund sources, as well as per unit and budget line; financial and accounting information including transfers, commitments a-posteriori, open invoices, guarantees and recovery orders; and procurement information including progress of planned procurement and contracts, negotiated procedures, comparison with other procedures and expiring contracts.

The annual report on budget, procurement and financial management builds on these monthly reports to provide an overview of the performance of the agency in all the above-mentioned areas.

Monitoring and reporting – programme implementation

Regular unit, department, management and senior management meetings provided ongoing monitoring of the implementation of the work programme throughout the year, drawing on a series of data and exercises including: monthly report on budget, procurement and financial management; quarterly scoreboard - Key Performance Indicators; monthly horizontal indicators; various progress reporting exercises at unit and department level; and monthly reporting at Agency-level on planned activities and deliverables. A consolidated exercise to assess the overall level of implementation of the Work Programme, as well as signal potential risks and workload issues throughout the activities was conducted twice during the year, in April and in November.

Annual reporting occurs at various organisational levels, and the present Consolidated Annual Activity Report was produced in line with the “Procedure for drawing up the CAAR of EMSA”.

Delegation of powers and declarations of assurance

The Executive Director delegated powers to members of the management team to sign legal acts and make commitments and payments, and the delegated staff members' in turn reported on the use of those powers as reported in section 2.4 of this report.

In addition, sub-delegation of other powers and responsibilities occurs by virtue of the organisational hierarchy, and the use of these powers, were also reported on.

A cascade of annual declarations, in reverse order to the delegation of powers and to hierarchical “sub-delegation” by virtue of organisational hierarchy, was established in accordance with the “Charter of tasks and responsibilities of authorising officers by delegation” and with Annex 1 of the “Procedure for drawing up the CAAR of EMSA”.

The materiality criteria for formal reservations to the annual declarations of assurance are defined in the “Procedure for drawing up the CAAR of EMSA”.

Certification of the Agency's year-end accounts by the Accounting Officer

The Accounting Officer's certification of the provisional accounts have been provided by 1 March 2021 (Art. 101 and 102, EMSA Financial Regulation) and should provide reasonable assurance to the Executive Director that the accounts present a true and fair view of the financial situation of the Agency.

Other internal control tools

A series of other internal control tools contributed to the Executive Director's reasonable assurance including the assessment of audit results, follow-up and of audit plans, and the follow-up of observations from the discharge authority (as reported under 2.7, 2.8 and 2.9 respectively), reporting on risks and risk management and on the effectiveness and efficiency of the internal control systems, including the registration of exceptions and the annual review of the status of implementation of the Internal Control Framework (as reported Part III.).

The work of the Internal Audit Service and the European Court of Auditors concerning the Agency in 2021 and the follow-up by the Agency is reported in section 2.7.

The Internal Control Coordinator ensures and assesses, on a continuous basis, the effectiveness of the Agency's Internal Control Framework. As part of the CAAR, the Internal Control Coordinator signs a statement to the best of his/her knowledge, on the accuracy and exhaustiveness of the information on management and internal control systems (Part V).

Use of ISO³⁹ Standards for better management assurance

The Agency is also using ISO Standards as a mean to achieve assurance that best management practices are used for the relevant activities. Specifically, EMSA uses the ISO 9001:2015 for Quality Management System (QMS) as the framework.

In 2021, the scope of the EMSA Quality Management System covering the visits and inspection activities was extended to all activities of the Agency.

The external certification audit was performed in December 2021 by TUV Rheinland Portugal and for the first time the quality of the Agency's performance is now certified against the ISO 9001:2015 Standard.

4.2 Reservations

There were no reservations.

4.3 Overall conclusion on assurance

The Executive Director was in a position to sign the Declaration of Assurance of the Authorising Officer which accompanies this Consolidated Annual Activity Report.

³⁹ ISO – International Organization for Standardization - <https://www.iso.org/home.html>

Part V Declarations of assurance

Internal Control Coordinator

Declaration of assurance

Statement of the EMSA Internal Control Coordinator

I, the undersigned,

In my capacity as Internal Control Coordinator in charge of risk management and internal control, I declare that in accordance with EMSA's Internal Control Framework, I have reported my advice and recommendations on the overall state of internal control in the Agency to the Executive Director.

I hereby certify that the information provided in the present Consolidated Annual Activity Report and in its annexes is, to the best of my knowledge, accurate, reliable and complete.

Lisbon, 1 February 2022



Tom Van Hees,
Internal Control Coordinator

Declaration of assurance

Declaration of the Executive Director

I, the undersigned, Executive Director of the European Maritime Safety Agency (EMSA), in my capacity as authorising officer,

Declare that the information contained in this report gives a true and fair view.

State that I have reasonable assurance that the resources assigned to the activities described in this report have been used for their intended purpose and in accordance with the principles of sound financial management, and that the control procedures put in place give the necessary guarantees concerning the legality and regularity of the underlying transactions.

This reasonable assurance is based on my own judgement and on the information at my disposal, such as the results of the self-assessment, ex-post controls, the work of the Internal Audit Service and the lessons learnt from the reports of the Court of Auditors for years prior to the year of this declaration.

Confirm that I am not aware of anything not reported here which could harm the interests of the Agency.

Lisbon, 15 February 2022



Maja Markovčić Kostelac
Executive Director

Annexes

Annex I. Core business statistics

EMSA Performance Indicators 2021⁴⁰

ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
4600 PREVENTION OF POLLUTION BY SHIPS				
PREVENTION OF POLLUTION BY SHIPS	1	pollution prevention studies	2	2
	2	pollution prevention workshops	2	2
	3	environmental report	1	1
51000 OPERATIONAL POLLUTION RESPONSE SERVICES				
STAND-BY OIL SPILL RESPONSE VESSEL NETWORK	4	number of fully equipped vessels for mechanical recovery	17	17
	5	number of fully equipped vessels for dispersant application	6	6
	6	number of vessels equipped with RPAS	10	10
NEW VESSELS PRE-FITTING	7	number of newly contracted vessels pre-fitted	3	4
EAS	8	number of EAS stockpiles	4	4
VESSEL/EQUIPMENT/REPLACEMENT/ADAPTATION/UPGRADE)	9	number of projects completed per year (vessel/equip replac/adapt/upgrade)	5	6
VESSEL/EQUIPMENT DRILLS AND EXERCISES	10	number of Vessel drills (acceptance drills and quarterly drills) per year	69	70
	11	number of operational exercises per year	10	10
	12	number of Equipment Assistance Service (EAS) drills	24	37
	13	number of notification exercises per year	12	18
RESPONSE TO REQUESTS FOR VESSEL/ EQUIPMENT/SERVICES	14	mobilisation time in hours (Response to requests for vessel/equipment services)	24	24
DISPERSANT STOCKPILES	15	number of dispersant stockpiles	8	8
	16	minimum quantity of dispersants available at any time	1600 tonnes	1600 tonnes

⁴⁰ For most of the KPIs, source of the data is internal. When this is not the case, the information is provided in footnote.

ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
RESPONSE TO REQUESTS FOR ASSISTANCE TO MAR-ICE	17	percentage of responses within 2 hrs.	>75%	100%
	18	percentage of responses within 4 hrs.	<25%	0%
DEVELOPING DATASHEETS	19	number of datasheets produced/revise	25	25
COORDINATION OF THE CTG MPPR ROLLING WORK PROGRAMME	20	number of pollution response meetings, workshops, guidance documents, studies	3	15 ⁴¹
COORDINATION OF THE CTG MPPR ANNUAL MEETINGS	21	number of CTG MPPR annual meetings	1	1
COORDINATION OF THE PRS USER GROUP ANNUAL MEETINGS	22	number of PRS-User Group annual meetings	1	1
	23	number of annual Inter-Secretariat meetings with Regional Agreements	1	1
31000 CLASSIFICATION SOCIETIES				
INSPECTIONS	24	number of RO inspections per year	13-17	13
REPORTS	25	number of reports per year	16-20	11 ⁴²
DRAFT ASSESSMENT REPORTS	26	number of reports per year	5 to 7	2 ⁴³
32000 SEAFARER TRAINING AND CERTIFICATION				
INSPECTIONS AND VISITS	27	number of inspections and visits per year	7-8	4 ⁴⁴
	28	percentage of visit notifications sent to Member States with at least three months' notice	95%	100%

⁴¹ More meetings than initially planned were held in this sector as they took place on-line.

⁴² New reporting arrangements have been agreed with the Commission. The reporting has also been affected by the impact of COVID-19 on inspections.

⁴³ Assessment reports are based on the inspection programme which was disrupted by COVID-19.

⁴⁴ On-site visits and inspections restarted in September 2021. In addition, the fieldwork element of four visits was completed.

REPORTS	29	number of reports per year	7 to 9	2 ⁴⁵
	30	percentage of draft reports submitted to the visited Member State or third country within 90 days from the end of the visit/inspection	95%	100%

ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
33000 VISITS TO MEMBER STATES				
VISITS	31	number of visits per year	21-24	16 ⁴⁶
	32	percentage of visit notifications sent to Member States with at least three months' notice	95%	100%
REPORTS	33	number of reports per year	19-24	5 ⁴⁷
	34	percentage of draft reports submitted to the visited Member State within 90 days from end of visit	95%	100%
36000 HUMAN ELEMENT				
HUMAN ELEMENT	35	STCW Statistical overview	1	1
	36	number of meetings attended in support of Commission on the review and/or implementation of STCW, STCW-F and MLC	2	7
35000 ANALYTICS AND RESEARCH				
HORIZONTAL ANALYSIS	37	number of horizontal analyses per year	1 to 2	1
ANALYTICS	38	number of published reports (statistics on EU shipping sector)	2	7
43000 CAPACITY BUILDING AND EMSA ACADEMY				
EMSA ACADEMY	39	number of trainings on specific topics on EU/International maritime legislation (including PSC Seminars and AI)	up to 18	27
	40	number of trainings on EMSA's operational maritime applications and tools	up to 15	26
	41	number of professional dev. and training programs, including the dev. of common core curricula, instructions, guidance, procedures, syllabi, training materials and contents	up to 2	1

⁴⁵ Visit fieldwork restarted in September 2021, so the associated reports will be issued in 2022.

⁴⁶ On-site visits, including fieldwork after a remote visit, restarted in September 2021.

⁴⁷ Visit fieldwork restarted in September 2021, so the associated reports will be issued in 2022.

	42	number of live broadcast trainings / webinars	up to 2	2
TRAINING FOR ENLARGEMENT COUNTRIES	43	number of AC training sessions/ activities per year	6	13 ⁴⁸
	44	number of AC experts attending per year	50	24 ⁴⁹
CUSTOMER SATISFACTION	45	level of customer satisfaction	>90%	>90%
MAKCS SYSTEM OPERATIONAL	46	percentage per year availability (MaKCs)	85%	99.5%
ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
MAKCS HELPDESK SERVICE	47	days maximum continuous downtime (MaKCs)	9 days	0.5 days
	48	percentage of requests closed in less than 9 days (MaKCs)	75%	95.03%
VRESI	49	percentage per year availability (VRESI)	85%	100% ⁵⁰
71000 SAFEMED IV				
IMPLEMENTATION OF SAFEMED IV, EUROMED MARITIME SAFETY PROJECT	50	number of training sessions per year	up to 5	21
	51	number of activities per year	up to 6	15.25 ⁵¹
	52	number of ENP experts attending per year	90	267
	53	level of customer satisfaction	>85%	>85%
74000 BLACK AND CASPIAN SEA				
IMPLEMENTATION BC SEA (Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions)	54	number of training sessions per year	up to 5	20
	55	number of activities per year	up to 6	10
	56	number of ENP experts attending per year	70	201
	57	level of customer satisfaction	>85%	>85%
44000 EQUASIS ⁵²				

⁴⁸ The project changed shape and it is now focussing much more on other technical actions rather than training sessions. Moreover, the undergoing development of curricula by the Academy has an impact on this KPI.

⁴⁹ See above.

⁵⁰ Operational since Q4.

⁵¹ This KPI covers a number of different activities. Those that are long-lasting are counted as 0.25 per quarter. When one of the activities does not start at in Q1, the annual result for the year will not be a whole number. In 2021 the provision of the MAR-CIS services to SAFEMED beneficiaries started from the Q3.

⁵² Source of data for KPIs 58 and 59: Equasis TU.

EQAUSIS – AVAILABILITY OF THE SYSTEM	58	percentage per year availability	99.5%	99.92%
EQAUSIS – USERS	59	number of users per month	32000	36694
EQAUSIS – CONTRIBUTORS	60	number of contributing members	9 to 10	10
42000 ACCIDENT INVESTIGATION				
EMCIP MEETINGS	61	number of EMCIP meetings per year	2	3
PCF MEETINGS	62	number of PCF meetings per year	1	1
34000 MARITIME SECURITY				
INSPECTIONS	63	number of missions per year	18	15 ⁵³

ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
REPORTS	64	number of reports per year	35	29 ⁵⁴
REPORTS	65	percentage of inspection reports concluded within the deadline agreed with the Commission	95%	100%
21020 REMOTELY PILOTED AIRCRAFT AND SATELLITE COMMUNICATION SERVICES⁵⁵				
RPAS FOR MULTIPURPOSE SURVEILLANCE OPERATIONS	66	number of RPAS systems available for deployment for multipurpose operations	6	7
	67	number of deployment days per year (multipurpose operations)	600	1247
RPAS FOR ENVIRONMENTAL SURVEILLANCE	68	number of (small) RPAS systems available for environmental protection (marine pollution and emissions)	10	14
	69	number of deployment days per year (pollution monitoring and emission monitoring)	360	518
SAT-AIS⁵⁶	70	global data stream availability	99%	99.99%
52000 SATELLITE BASED SERVICES & INNOVATION				

⁵³ Despite the high level of activity in the second part of the year, the target of 18 missions has not been achieved due to the pandemic.

⁵⁴ Despite the high level of activity in the second part of the year, the target of 35 reports has not been reached due to the pandemic.

⁵⁵ Source of data for KPIs 66, 67, 68 and 69: Providers contracts.

⁵⁶ Source of data: SAT-AIS data acquired from commercial service providers and from Member States with national SAT-AIS capability.

CLEANSEANET SERVICE EARTH OBSERVATION (EO) IMAGE DELIVERY ⁵⁷	71	percentage per year EO image delivery ratio	90%	97%
ASSISTANCE FOR ACCIDENTAL SPILLS	72	percentage response rate to assistance requests	100%	100%
PARTICIPATION IN OIL SPILL RESPONSE EXERCISES	73	percentage response rate to requests for participation in oil spill response exercises.	80%	100%
INTEGRATING NEW SATELLITE SOURCES	74	Integrating new information sources from satellites in the field of earth observation and frequency detection counted per satellite or satellite constellation	2	1 ⁵⁸
75000 COPERNICUS				
COPERNICUS MARITIME SURVEILLANCE SERVICE EARTH OBSERVATION (EO) IMAGE DELIVERY ⁵⁹	75	percentage per year EO image delivery ratio	90%	92%

ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
NUMBER OF USER ORGANISATIONS REGISTERED	76	number of Member States National Administrations, EU institutions and international organisations using the service ⁶⁰	50	58
79020 CISE TRANSITIONAL PHASE				
CSG MEETINGS	77	number of CISE Stakeholder Group (CSG) meetings per year	3 per year	3
TRAINING AND BEST PRACTICE WORKSHOPS	78	overall number of Training and Best Practice Workshop per year	2 per year	2
NETWORK'S NODE	79	number of CISE's nodes deployed in the network	11	n/a ⁶¹

⁵⁷ Source of data: EODC Database.

⁵⁸ ICEYE technical integration completed in 2021, procurement to be launched at the end of January 2022.

⁵⁹ Source of data: EODC Database.

⁶⁰ Source of data: Copernicus Registered Organization Forms.

⁶¹ Due to the failure in the transfer of the Intellectual Property Rights (IPR) this process was delayed. EMSA developed a new node, which is being rolled out to Member States in 2022.

45000 MARITIME DIGITAL SERVICES ⁶²				
ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
INTEGRATED MARITIME SERVICES AVAILABILITY	80	percentage per year availability of IMS for Member States, including ABMs	99%	99.55%
	81	percentage per year availability of IMS to EU bodies (EUNAVFOR: Somalia: Operation Atalanta, EUNAVFOR-Med, EUROPOL, MAOC-N)	99%	99.75%
	82	percentage per year availability of the AIS Maritime Picture service to legitimate users (shipowners, agents, masters, shippers and others) authorised by the NCA.	95% (pending green light from HLSG)	99.75%
	83	percentage per year availability of IMS Mobile App service	99%	99.75%
THETIS SYSTEM OPERATIONAL	84	availability in percentage	96%	99.55%
	85	hours maximum continuous downtime	max 6h	2h39m49s
THETIS HELPDESK SERVICE	86	percentage of requests closed in less than 5 days ⁶³	75%	93.75%
THETIS - MRV	87	system availability	95%	100%
	88	max continuous downtime (hours)	max 12h	0d0h0m0s
RULECHECK SYSTEM OPERATIONAL	89	percentage per year availability	95%	100%
	90	days maximum continuous downtime	max 3 days	0d0h0m0s
RULECHECK HELPDESK SERVICE	91	percentage of requests closed in less than 9 days	95%	95.95%
STCW INFORMATION SYSTEM	92	percentage per year availability	96%	99.88%
MED DB	93	percentage per year availability of MED data base	95%	99.87%
RPAS DC AVAILABILITY ⁶⁴	94	RPAS DC availability	95%	99%
EARTH OBSERVATION DATA CENTRE OPERATIONAL AVAILABILITY ⁶⁵	95	EODC availability (interface or alert reports distribution) for scheduled acquisitions of the CleanSeaNet Service	97.5%	99%
EMCIP ⁶⁶	96	percentage per year availability	98%	99.70%

⁶² Source of data for KPIs 80, 81, 82, 83, 84, 85, 87, 88, 89 and 90: Nagios IT infrastructure monitoring system.

⁶³ Source of data for KPIs 86 and 91: JIRA ticketing tool.

⁶⁴ Source of data: Information provided by Contractor (RPAS is hosted outside of EMSA).

⁶⁵ Source of data: EODC Database.

⁶⁶ Source of data: Nagios IT infrastructure monitoring system.

MARINFO ⁶⁷	97	percentage per year availability	95%	99.34%
24000 MARITIME SUPPORT SERVICES⁶⁸				
MARITIME SUPPORT SERVICES AVAILABLE 24/7	98	average time in hours for feedback or resolution of issues relating to emergencies, incidents in maritime applications or urgent helpdesk requests	<2h	8.2 minutes
	99	average time in hours for feedback or resolution of issues relating to non-urgent helpdesk requests or scheduled interventions	<8h	11.5 minutes
MSS DATA QUALITY REPORTS ⁶⁹	100	reporting on the SafeSeaNet /LRIT implementation and data quality (overall and per Member State)	20 Reports	25
21230 ICT OPERATIONS				
SERVICE DESK	101	percentage of timely response to users' ICT requests ⁷⁰	95%	89.8% ⁷¹
AVAILABILITY	102	infrastructure availability per year ⁷²	99.5%	100%
21030 SAFESEANET⁷³				
SAFESEANET SYSTEM: SERVICE OPERATION	103	percentage per year availability of central SafeSeaNet system	99%	99.81%
	104	hours maximum continuous downtime of central SafeSeaNet system	max 12h	4h25min

ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
SAFESEANET SYSTEM: REPORTING PERFORMANCE	105	percentage of notifications processed in time in accordance with SafeSeaNet IFCD requirements	99%	100%
	106	percentage of responses to Member States' requests delivered in accordance with SafeSeaNet IFCD (time) requirements	99%	100%
22000 LONG RANGE IDENTIFICATION AND TRACKING (LRIT)				

⁶⁷ Source of data: Windows Azure performance metrics Monthly report.

⁶⁸ Source of data for KPIs 98 and 99: JIRA ticketing tool.

⁶⁹ Source of data: ARES document management system.

⁷⁰ Source of data: JIRA ticketing tool.

⁷¹ The SLA level has been difficult to reach due to the permanent remote working conditions (COVID-19) which hindered the quick reaction to the tickets.

⁷² Source of data: Nagios IT infrastructure monitoring system.

⁷³ Source of data for KPIs 103, 104, 105 and 106: SSN-EIS.

EU LRIT DATA CENTRE ⁷⁴				
SYSTEM OPERATIONAL	107	percentage per month availability	99%	99.86%
	108	hours maximum continuous downtime	max 4h	0h39m
EU CDC REPORTING PERFORMANCE	109	percentage position reports delivered in accordance with IMO requirements (per. Reports: 15 min; polls:30 min)	99%	99.60%
WEB USER INTERFACE	110	percentage per year availability to users through UWI ⁷⁵	99.9%	99.94%
LRIT – IDE ⁷⁶				
LRIT-IDE SYSTEM OPERATIONAL	111	percentage per year availability of LRIT IDE in accordance with IMO requirements	99.9%	99.91%
	112	hours maximum continuous downtime of LRIT IDE	max 4h	2.5h
79010 INTEROPERABILITY PROJECT				
INTEROPERABILITY PROJECT	113	number of pilot projects and studies reports	4	4
72100 EFCA SLA ⁷⁷				
INTEGRATED MARITIME SERVICES	114	percentage per year availability to EFCA	99%	99.72%
72000 FRONTEX SLA ⁷⁸				
FRONTEX SERVICE PLATFORM	115	percentage per year availability to Frontex	99%	99.94%
	116	hours maximum continuous downtime of Frontex service platform	<12h	3h11m

ACTIVITY NAME	N°	PERFORMANCE INDICATOR	TARGET	RESULT
FRONTEX OPERATIONAL EXERCISES	117	minimum number of exercises EMSA participates in ⁷⁹	2	0 ⁸⁰

⁷⁴ Source of data for KPIs 107, 108 and 109: LRIT-CDC.

⁷⁵ Source of data: Nagios IT infrastructure monitoring system.

⁷⁶ Source of data: LRIT-IDE.

⁷⁷ Source of data: Nagios IT infrastructure monitoring system.

⁷⁸ Source of data for KPIs 115 and 116: Nagios IT infrastructure monitoring system.

⁷⁹ Source of data: EMSA-Frontex SLA Monthly Report.

⁸⁰ Due to COVID-19 situation, EMSA was not requested to participate in any Frontex operational exercises during 2021.

EUROPEAN COOPERATION ON COASTGUARD FUNCTIONS				
EU COOP CG FUNCTIONS	118	implementation of EMSA tasks under the Annual Strategic Plan	Full implementation	Full implementation
60000 COMMUNICATION				
PUBLICATIONS	119	number of publications/leaflets/brochures produced per year	18	25
65000 MISSIONS AND EVENTS				
EVENTS SUPPORT	120	total number of meetings/workshops organised by EMSA per year	80	65 ⁸¹
	121	total number of participants at EMSA meetings/workshops per year	2000	2873
61000 MANAGEMENT, QUALITY AND GREENING				
PLANNING	122	implementation of the Work Programme	as close as possible to full implementation	Assessed through the CAAR 2021
BUDGET	123	execution rate commitment appropriations	as close as possible to 100% and in any case above 95%	99.67%
	124	execution rate payment appropriations	as close as possible to 100% and in any case above 95%	97.32%
AUDITS	125	ECA recommendations implemented in time	100%	100%
	126	IAS recommendations implemented in time	100%	100%
QMS	127	QMS certification maintained	Valid QMS Certificate	yes
GREENING	128	number of greening projects implemented	2	8
62000 HUMAN RESOURCES, PROTOCOL & DOCUMENT MANAGEMENT				
ESTABLISHMENT PLAN	129	execution rate establishment plan	as close as possible to 100% and in any case above 95%	99.06% ⁸²
66000 LEGAL & FINANCE				
VERIFICATION TIME	130	time for processing files	2.5 working days	1.63 working days

⁸¹ The related measures adopted due to the COVID-19 during 2021 did not allow to accomplish the year calendar of events.

⁸² Includes 5 offers letters sent and accepted in 2021.

Implementation and Operational Administrative Agreements active in 2021

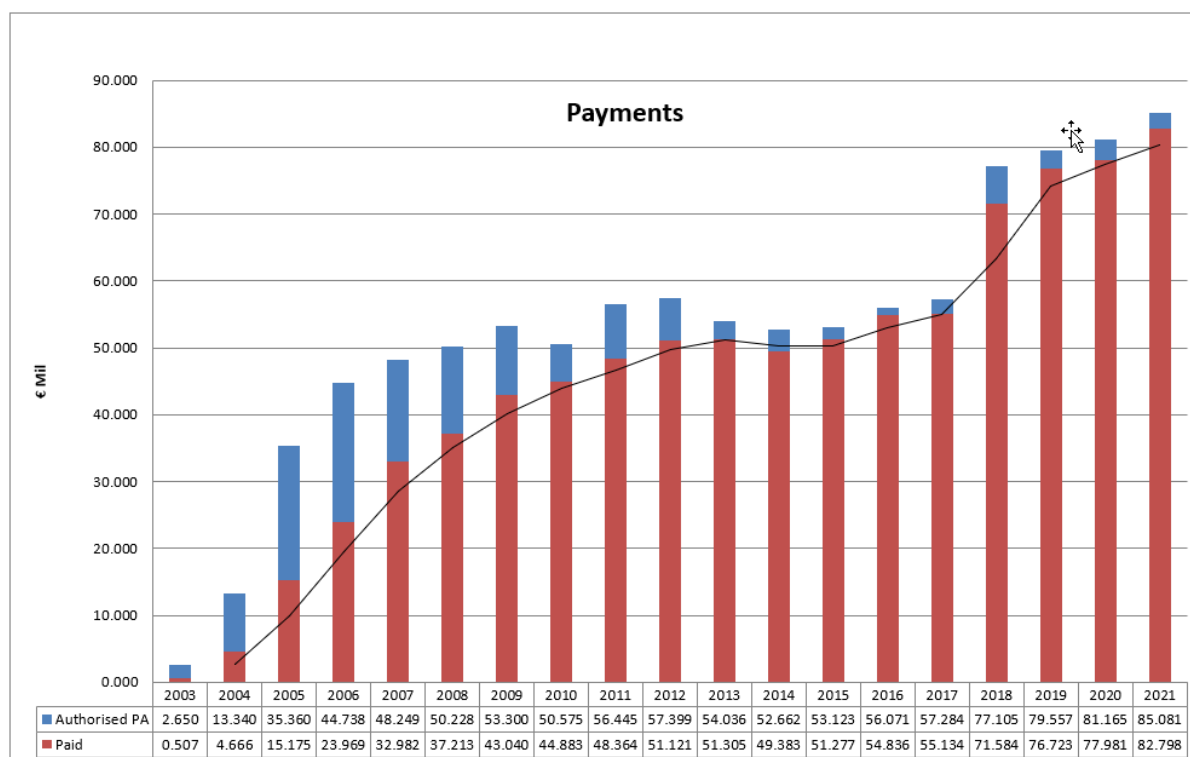
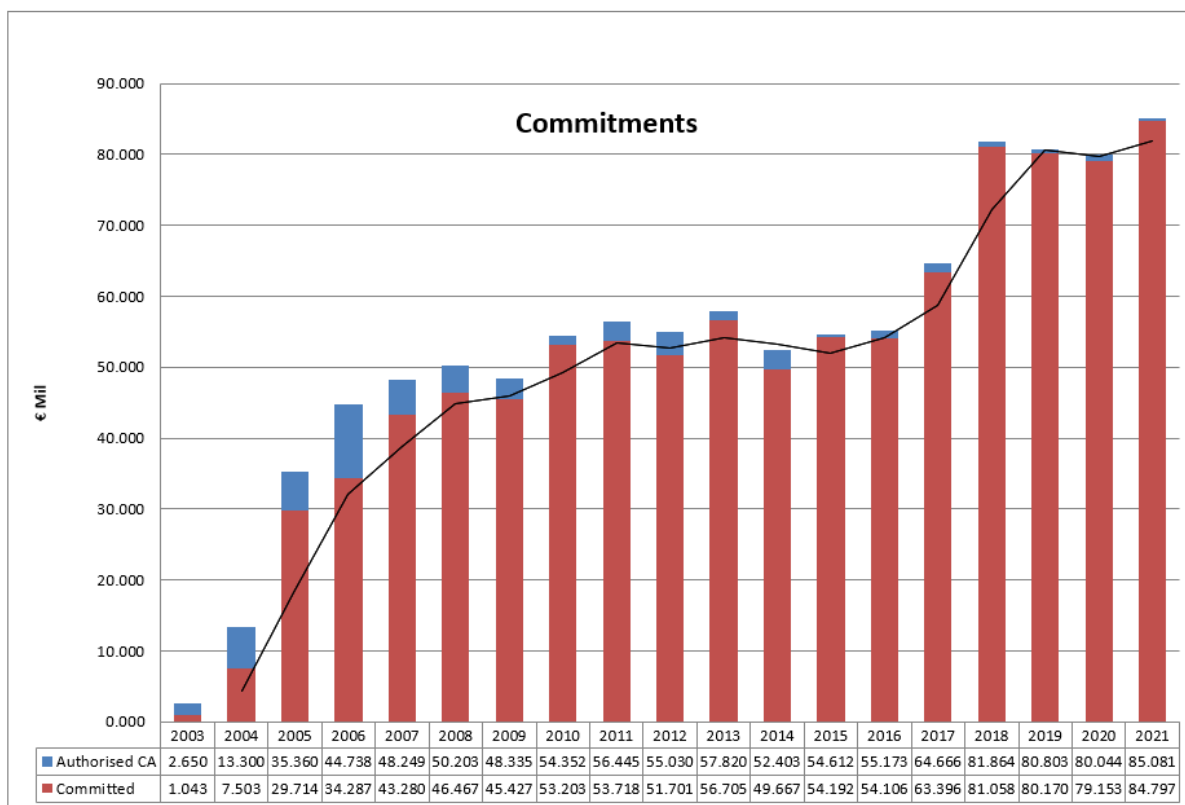
Contractor	Contract Short Name	Start Date	End Date	Automatic Renewal
DG CLIMA	Thetis MRV	30/03/2016	29/03/2022	No
DG ECHO	2014 Working Arrangement DG ECHO & EMSA	13/11/2014	No End Date	No
DG ENV	THETIS EU - SULPHUR	08/03/2018	07/03/2022	No
DG GROW	Copernicus Contribution agreement (2021-2033)	28/09/2021	31/12/2033	No
DG GROW	Copernicus Delegation agreement (2015-2026)	03/12/2015	31/12/2026	No
DG MARE	CISE I - Operations	17/04/2019	16/12/2023	No
DG MARE	CISE II - Transition	08/12/2020	07/12/2023	No
DG MARE	Interoperability between industry and competent authorities in the EMSW environment under the CISE Process	19/09/2018	18/05/2022	Yes
DG MOVE	Provision by EMSA of technical assistance for maritime security 1	29/10/2013	No End Date	No
DG NEAR	Black and Caspian Sea Project	01/11/2016	31/03/2022	No
DG NEAR	IPA 2020-2023	01/05/2020	28/02/2023	No
DG NEAR	SAFEMED IV, EuroMed Maritime Safety Project	01/01/2017	31/03/2022	No
DG SANTE	SLA DG SANTE/EMSA THETIS AP	28/04/2021	27/04/2024	No
EFCA - European Fisheries Control Agency	SLA between EFCA and EMSA	26/06/2015	25/06/2021	Yes
EQUASIS members	MOU on the establishment of the Equasis information system	17/05/2000	No End Date	No

ESA - European Space Agency	2010/SLA EMSA-ESA	02/07/2010	01/07/2025	No
ESA - European Space Agency	LICENCE AGREEMENT ESA-EMSA	18/02/2015	No End Date	No
EUNAVFOR - Athena Atalanta	EUNAVFOR TCA	06/04/2011	No End Date	Yes
EUNAVFOR Mediterranean – Operation Iriini	CA EUNAVFOR MED - OPERATION IRINI	25/11/2021	No End Date	Yes
EUNAVFOR Somalia – Operation Atalanta	CA EUNAVFOR SOMALIA - OPERATION ATALANTA	25/11/2021	No End Date	Yes
EUROCONTROL	EUROCONTROL EMSA RPAS	13/12/2016	No End Date	No
European Free Trade Association Surveillance Authority	MoU on the release of classified information in the framework of the technical cooperation in maritime security	05/02/2014	No End Date	No
European Free Trade Association Surveillance Authority	Provision by EMSA of technical assistance for maritime security 2	05/02/2014	No End Date	No
EUROPOL	EUROPOL	18/12/2018	No End Date	No
FRONTEX	FRONTEX SLA (2016)	01/05/2016	No End Date	No
Frontex and EFCA	Tripartite Working Arrangement	18/03/2021	No End Date	No
IALA	IALA MEMBERSHIP 2021	01/01/2021	31/12/2021	No
International Mobile Satellite Organization (IMSO)	ANNUAL AUDIT IDE	20/03/2012	No End Date	Yes
International Mobile Satellite Organization (IMSO)	ANNUAL AUDIT LRIT DC	27/05/2009	No End Date	No
International Mobile Satellite Organization (IMSO)	SLA IMSO-EMSA.EU LRIT DC.AUDIT 2021	01/04/2021	31/12/2021	No
International Mobile Satellite Organization (IMSO)	SLA IMSO-EMSA.LRIT IDE.AUDIT 2020	26/10/2020	31/12/2021	No

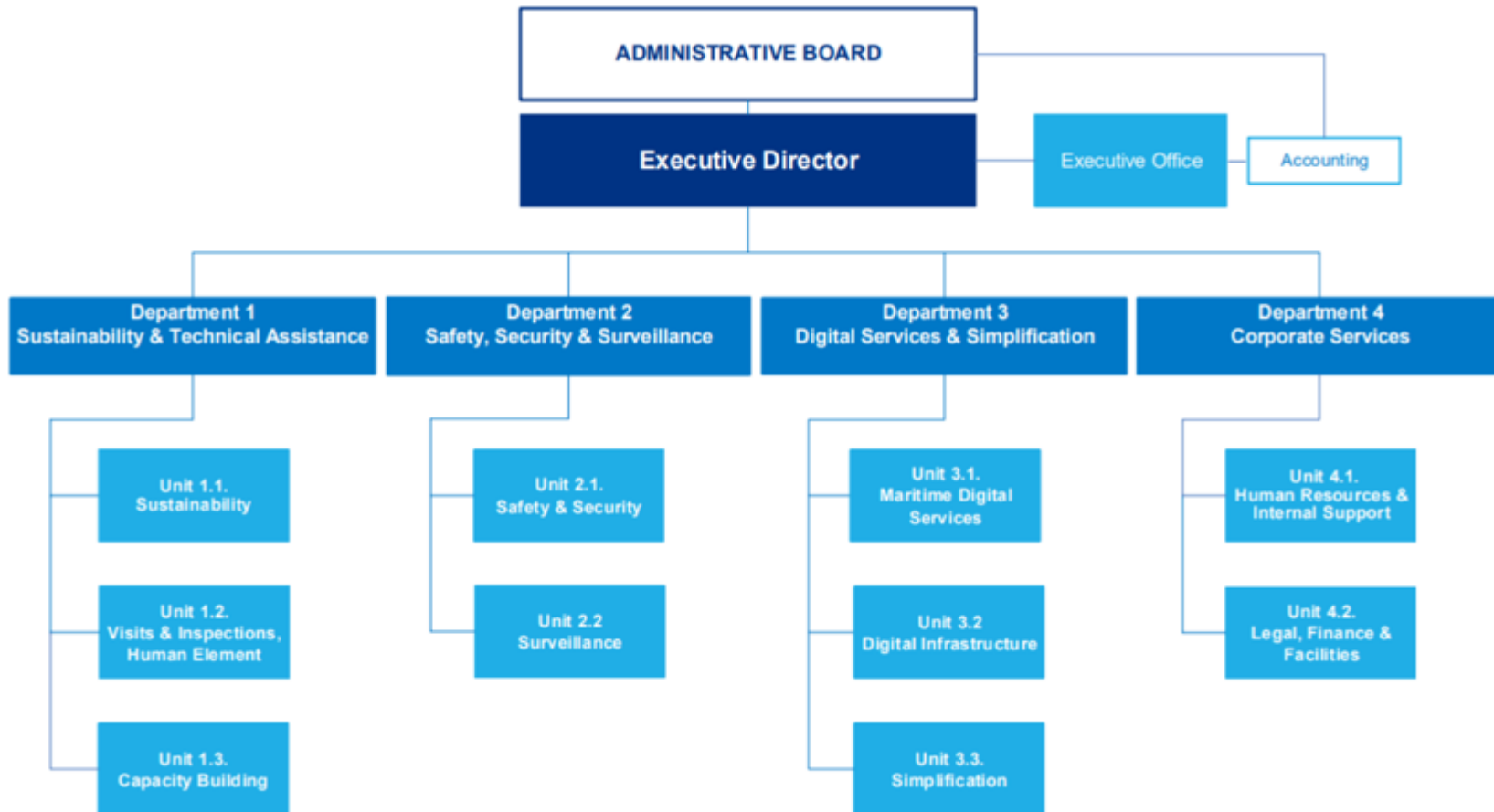
International Mobile Satellite Organization (IMSO)	SLA IMSO-EMSA.LRIT IDE.AUDIT 2021	01/04/2021	30/06/2022	No
Interspill LTD	2016 Interspill MoU	13/12/2016	No End Date	No
Italian Coast Guard - Comando Gen.del Corpo delle Capitanerie di Porto	SLA EMSA ICG REGIONAL SSN SERVER	22/10/2015	No End Date	Yes
Italian Coast Guard - Comando Gen.del Corpo delle Capitanerie di Porto	SLA for maintenance and operation of AIS REGIONAL SERVERS 2021 (MAR)-2022 (APR) IT	01/03/2021	30/04/2022	No
MAOC - Maritime Analysis and Operations Centre	2020/MAOC-EMSA COOPERATION AGREEMENT	17/12/2020	No End Date	No
Ministry of the Sea, Transport and Infrastructure of Croatia	Administrative arrangement with Croatia	03/07/2019	No End Date	No
Norwegian Coastal Administration	SLA EMSA NCA REGIONAL SSN SERVER	20/12/2016	No End Date	Yes
Norwegian Coastal Administration	SLA for maintenance and operation of AIS REGIONAL SERVERS 2021 (MAR) -2022 (APR) NO	01/03/2021	30/04/2022	No
Paris MoU	Conditions of Use for and Level of access to the THETIS Information Systems for PSC	01/01/2011	No End Date	No
Republique Française	Hosting & Development of Equasis	27/02/2009	No End Date	Yes
RISE - Research Institutes of Sweden	Lash Fire	17/03/2020	31/08/2023	No
The International Group of Protection and Indemnity Clubs	2018 MOU	27/12/2018	No End Date	No

Annex II. Statistics on financial management

Evolution of budget execution



Annex III. Organisational chart



Annex IV. Establishment plan and additional information on Human Resources management

Establishment plan 2021

Function Group and Grade	2020 Authorised		2021 Authorised		2021 Filled*	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
AD15	0	1		1		
AD14	0	2		2		3
AD13	1	4	1	5	1	3
AD12	1	10	1	12		8
AD11	0	17		20	1	12
AD10	1	20	1	30		35
AD9	0	40		35		25
AD8	0	31		24	1	24
AD7	0	18		15		10
AD6	0	3		3		22
AD5	0	3		2		6
Total AD	3	149	3	149	3	148
AST11	0	0				
AST10	0	1		1		
AST9	0	0				1
AST8	0	3		3		2
AST7	0	8		13		10
AST6	0	20		22		19
AST5	0	18		15		13
AST4	0	10		6		9
AST3	0	0				2
AST2	0	0				1
AST1	0	0				2
Total AST	0	60	0	60	0	59
Total	3	209	3	209	3	207
Grand Total	212		212		210	

* Including 5 offers letter (3 AD and 2 AST) sent and accepted in 2021.

Information on recruitment grade/function group for each type of post

Key functions	Type of contract	Function group, grade of recruitment	Area of support (Administration / Operational / Neutral / Coordination)
<i>Head of Department</i>	TA (level 2)	AD12	Operational
<i>Head of Unit</i>	TA (level 3)	AD9, AD10, AD11 or AD12, related to the mandate and dimension of the Unit	Operational
<i>Head of Sector</i>	TA (level 4)	AD8	Administration Operational
<i>Senior Project Officer</i>	TA	AD8	Coordination
<i>Project Officer</i>	TA	AD6 or AD7 depends on the functions that are allocated	Operational
Key functions	Type of contract	Function group, grade of recruitment	Area of support (Administration / Operational / Neutral / Coordination)

<i>Junior Officer</i>	TA	AD5	Administration / Operational / Neutral / Coordination
<i>Senior Assistant</i>	TA	AST4	Administration
<i>Head of Corporate Services</i>	TA	AD12	Administration
<i>Head of Human Resources and Internal Support</i>	TA	AD10	Administration
<i>Head of Legal, Finance and FAL</i>	TA	AD10	Coordination / Operational / Neutral
<i>Head of Operations Support (ICT)</i>	TA	AD10	Administration / Operational
<i>Administrative Assistant</i>	CA	FGII	Administration / Operational / Neutral Coordination
<i>Mail Clerk</i>	CA	FGI	Administration
<i>Webmaster -Editor</i>	TA	AST3	Administration / Coordination
<i>Data Protection Officer</i>	TA	AD8	Operational / Coordination
<i>Accounting Officer</i>	TA	AD8	Neutral
<i>Internal Control Coordinator</i>	TA	AD8	Administration
<i>Assistant to the Executive Director</i>	TA	AST2	Operational

Number of days of leave authorised to each grade under the flexitime and compensatory leave schemes in 2021

GRADE	Authorised flexitime leave
AD	148.50
5	6.5
6	30.5
7	11
8	36
9	19
10	34.5
11	10.5
12	1
14	0
AST	48
1	0
3	0
4	9
5	13.5
6	11.5
7	9.5
8	4.5
FG II	4.5
5	0
7	4.5
FG III	10.5
8	3.5
9	2.5
10	3
12	1.5
FG IV	1.5
14	1.5
15	0
SNE	37
SNE	37
Total	250

Results of the screening exercise

Job type (sub) category	Year N (%)	Year N-1 (%)
Administrative support and Coordination		19.66%
<i>Administrative support</i>		14.80%
<i>Coordination</i>		4.86%
Operational		71.98%
<i>Top Level Operational Coordination</i>		2.85%
<i>Programme Management & Implementation</i>		55.59%
<i>Evaluation & Impact assessment</i>		9.29%
<i>General Operational</i>		4.25%
Neutral		8.36%
<i>Finance/Control</i>		8.36%
<i>Linguistics</i>		0%

Implementing rule adopted in 2021

- Adoption by analogy of Commission Decision C(2020)4818 of 20 July 2020 amending Commission Decision C(2011)1278 of 3 March 2011 on the general implementing provisions for Articles 11 and 12 of Annex VIII to the Staff Regulations on the transfer of pension rights.

Annex V. Human and financial resources by activity

Planned and Actual Resources	Planned Human Resources					Actual Human Resources					Planned Financial Resources		Actual Financial Resources		Variance planned/actual	
	MANPOWER					MANPOWER					Total allocated costs Commitments	Total allocated costs Payments	Total allocated costs Commitment	Total allocated costs Payments	CA	PA
	Temporary Agents		CA	SNE	TOTAL	Temporary Agents		CA	SNE	TOTAL						
AD	AST	AD				AST										
21020 RPAS	8.00	1.00		1.00	10.00	8.00	1.00		1.00	10.00	18,290,353	17,847,976	20,028,150	20,274,735	9.50%	13.60%
21030 SafeSeaNet	3.00	2.50	0.25		5.75	3.75	2.75	0.25	-	6.75	1,556,927	1,344,000	2,194,545	2,022,848	40.95%	50.51%
21040 EMSW	1.50	1.00	0.25	1.00	3.75	1.50		0.25	-	1.75	1,044,797	785,552	435,815	400,466	-58.29%	-49.02%
22000 LRIT	2.75	2.00	0.25		5.00	1.50	1.50	0.25		3.25	3,178,259	2,894,476	2,354,399	2,294,444	-25.92%	-20.73%
24000 Maritime Support Services	1.00		4.00	5.00	10.00	1.00		4.25	3.00	8.25	1,433,184	1,448,184	1,391,109	1,101,238	-2.94%	-23.96%
31000 Classification Societies	8.50	1.25	0.25	1.00	11.00	8.00	1.25	0.25	1.00	10.50	2,189,835	2,189,835	2,078,000	1,974,614	-5.11%	-9.83%
32000 Seafarer Training and Certification	5.00	1.50	0.50	1.00	8.00	5.75	1.00	0.25	1.00	8.00	1,582,777	1,637,407	1,625,311	1,543,125	2.69%	-5.76%
33000 Visits to Member States	4.50	1.75	0.75	1.00	8.00	5.25	1.75	0.50	1.00	8.50	1,448,441	1,448,441	1,582,478	1,525,961	9.25%	5.35%
34000 Maritime Security	3.00	1.25		2.00	6.25	3.25	1.50			4.75	1,145,770	1,120,270	952,876	894,017	-16.84%	-20.20%
35000 Analytics and research	3.75	0.50			4.25	3.75	0.25	0.25		4.25	815,047	815,047	859,529	830,100	5.46%	1.85%
36000 Human element	1.25				1.25	1.25				1.25	458,134	358,134	264,138	255,480	-42.34%	-28.66%
42000 Accident investigation	2.75			1.00	3.75	2.75				2.75	792,211	774,210	581,103	562,057	-26.65%	-27.40%
43000 Capacity Building and EMSA Academy	10.25	0.50	0.50	2.00	13.25	10.25	0.25	0.75	2.00	13.25	3,759,962	4,009,249	3,690,160	3,631,563	-1.86%	-9.42%
44000 Maritime Safety	12.25	0.50		1.00	13.75	13.50	0.50		1.00	15.00	4,131,472	3,221,355	4,285,900	3,324,105	3.74%	3.19%
45000 Maritime Digital Services	25.75	9.25	0.25		35.25	24.25	10.25	0.50		35.00	15,105,214	14,114,414	16,849,362	14,416,088	11.55%	2.14%
46000 Prevention of Pollution	7.50	0.50		1.00	9.00	7.00	0.50			7.50	2,516,165	2,117,165	2,055,453	1,677,622	-18.31%	-20.76%
51000 Operational Pollution Response	9.50	1.50	2.00	1.00	14.00	9.75	1.50	2.00	1.00	14.25	15,842,618	18,510,871	14,962,637	17,772,317	-5.55%	-3.99%
52000 Satellite based Services and Innovation	11.00	1.50			12.50	11.25	1.50			12.75	7,654,915	8,309,495	6,689,422	6,461,928	-12.61%	-22.23%
60000 Communication	3.00	2.25	1.00		6.25	3.00	2.25	1.00	-	6.25	1,193,804	1,193,804	1,218,910	1,174,490	2.10%	-1.62%
65000 Missions and Events Support		1.75	5.00		6.75		2.00	3.25	-	5.25	1,039,130	1,039,130	697,914	660,891	-32.84%	-36.40%
61000 Management, quality & greening	13.25	7.00	1.00		21.25	11.25	6.75	1.25	-	19.25						
62000 Human resources, implementation of the Seat Agreement & document management	4.00	5.00	8.00		17.00	4.00	4.00	6.25	-	14.25						
63000 Facilities & logistics	1.25		2.00		3.25	1.25		2.00	-	3.25						
64000 ICT Operations	4.75	12.50	2.00		19.25	5.25	12.50	2.50	-	20.25						
66000 Legal & finance	4.50	5.00	2.00		11.50	4.50	6.00	2.25	-	12.75						
n/a Copernicus			3.00		3.00			3.00	-	3.00						
SUBTOTALS	152.00	60.00	33.00	18.00		151.00	59.00	31.00	11.00							
TOTAL	212.00		51.00		263.00	210.00		42.00		252.00	85,179,015	85,179,015	84,797,211	82,798,089	-0.45%	-2.80%

Annex VI. Grant and contribution agreements and other project financed actions

	General information				Financial and HR impact					
	Date of signature	Duration	Counterpart	Short Description		2020		2021		
Grant agreements						CA	PA	CA	PA	
SAFEMED IV EuroMed Maritime Safety Project	December 2016	December 2021	DG NEAR	Award of a financial contribution by the Contracting Authority to finance the implementation of the action entitled: SAFEMED IV, Euromed Maritime Safety Project	Amount	731,108.24	731,108.24	1,013,893.79	465,306.02	
					Number of CA			1	2	
					Number of SNE ⁸³			0.5	0.5	
BCSea Maritime Safety, Security and Environmental Protection in B&CS Regions	December 2016	2021	DG NEAR	Award of a financial contribution by the Contracting Authority to finance the implementation of the action entitled: Maritime Safety, security and marine environmental protection in the Black and Caspian Sea Regions	Amount	580,261.15	580,21.15	969,534.87	608,256.57	
					Number of CA			2	2	
					Number of SNE ⁸⁴			0.5	0.5	
EC Funds for candidate and potential candidate	December 2017	April 2020	DG NEAR	Award of a financial contribution by the Contracting Authority to finance the implementation of the action called: Preparatory measures for the participation of enlargement countries in EMSA's work	Amount	48,612.65	48,612.65	NA	NA	
					Number of CA			-	-	
					Number of SNE			-	-	
Interoperability project	September 2018	May 2022	DG MARE	Promotion of interoperability between industry and competent authorities in the European Maritime Single Window (EMSW) environment under the CISE Process	Amount	1,035,571.55	1,035,571.55	1,206,880.94	1,206,880.94	
					Number of CA			-	-	
					Number of SNE			-	-	
CISE Transitional Phase	April 2019	December 2023	DG MARE	Ad-hoc Grant agreement for the implementation of the action "Setting up and enabling the transitional phase to CISE Operations"	Amount	824,703.73	824,703.73	1,410,315.43	888,741.27	
					Number of CA			4	3	
					Number of SNE			-	-	

⁸³ SAFEMED IV and Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions share 1 SNE.

⁸⁴ SAFEMED IV and Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions share 1 SNE.

	General information				Financial and HR impact				
	Date of signature	Duration	Counterpart	Short Description		2020		2021	
Grant agreements						CA	PA	CA	PA
CISE Transitional Phase II	December 2020	December 2023	DG MARE	Grant Agreement for "Common Information Sharing Environment (CISE)" transitional Phase II	Amount	0.00	0.00	607,379.03	307,769.21
					Number of CA			3	
					Number of SNE			1	
Contribution agreement						CA	PA	CA	PA
IPA II	December 2019	February 2023	DG NEAR	Preparatory measures for the future participation of relevant IPA II beneficiaries in EMSA	Amount	2,700.77	2,700.77	179,514.15	96,020.23
					Number of CA			-	
					Number of SNE			-	
Contribution agreement					CA	PA	CA	PA	
Copernicus Maritime Surveillance	September 2021	December 2027	DG DEFIS	Implementation of Copernicus Maritime Surveillance Services	Amount	-	-	1,524,809.51	1,524,809.51
					Number of CA			3	
					Number of SNE			-	
Delegation agreement					CA	PA	CA	PA	
Copernicus Maritime Surveillance	December 2015	December 2021	DG DEFIS	Implementation of Copernicus Maritime Surveillance Services	Amount	11,037,237.94	11,037,237.94	4,814,253.31	4,814,253.31
					Number of CA ⁸⁵			(3)	
					Number of SNE			-	

⁸⁵ Up to 2021 HR costs for the project are included in the EMSA subsidy and therefore not counted in the total staff financed by grant, contribution and other project financed actions.

Cooperation agreements						CA	PA	CA	PA		
THETIS-EU	March 2018	March 2022	DG ENV	Cooperation Agreement for the support of the implementation of Directive (EU) 2016/802 of the European Parliament and of the Council of 11 May 2016 relating to a reduction in the sulphur content of certain liquid fuels, and technical assistance actions relevant to the Energy Community	Amount	33,052.79	33,052.79	86,670.35	86,670.35		
					Number of CA					-	
					Number of SNE					-	
THETIS-MRV	March 2016	March 2022	DG CLIMA	Support for the implementation of Regulation on the monitoring, reporting and verification of emissions of carbon dioxide, from maritime transport and amending Directive 2009/16/EC on PSC and relevant technical Assistance	Amount	61,592.10	61,592.10	172,872.85	172,872.85		
					Number of CA					-	
					Number of SNE					-	
Service Level Agreements						CA	PA	CA	PA		
THETIS-EU AWF	April 2021	April 2024 (36 months)	DG SANTE	SLA for the support of the implementation of Council Regulation (EC) No 1/2005 of 22 December 2004 on the protection of animals during transport and related operations (hereinafter referred to Council Regulation (EC) No 1/2005)	Amount	-	-	0	0		
					Number of CA						
					Number of SNE						
Other project financed actions ⁸⁶						CA	PA	CA	PA		
FRONTEX SLA	May 2016	Indefinite	FRONTEX	Service Level Agreement between the European Border and Coast Guard Agency (Frontex) and the European Maritime Safety Agency (EMSA) for the provision of surveillance tools and services in support of Frontex activities, including for the implementation of the EUROSUR framework	Amount	5,246,565.80	5,246,565.80	7,358,402.98	7,358,402.98		
					Number of CA					9	9
					Number of SNE					-	
EFCA SLA	June 2015	Indefinite	EFCA	Service Level Agreement between the European Fisheries Control Agency (EFCA) and the European Maritime Safety Agency for the provision and cooperation on maritime surveillance services	Amount	87,407.28	87,407.28	194,672.81	194,672.81		
					Number of CA					-	-
					Number of SNE					-	-
EQUASIS	May 2000	Indefinite	EQUASIS members	MOU on the establishment of the Equasis information system	Amount	399,673.98	399,673.98	415,581.10	451,701.00		
					Number of CA					-	-

⁸⁶ Other project financed actions includes legal instruments that have been concluded before 1 July 2019 (entry into force of current EMSA Financial Regulation)

					Number of SNE	-		-	
						CA	PA	CA	PA
Total					Amount	20,088,487.98	20,088,487.98	19,954,781.12	18,176,357.05
					Number of CA	16 (+3 CA for Copernicus included in the EMSA subsidy)			25
					Number of SNE	1			2

Annex VII. Draft annual accounts

Economic outturn account

	2021	2020
Revenues from administrative operations	17,967,384	19,404,646
Other operating revenue	84,440,005	80,294,974
TOTAL OPERATING REVENUE	102,407,390	99,699,620
Administrative expenses	-40,292,321	-43,885,932
All Staff expenses	-25,936,096	-24,660,709
Fixed asset related expenses	-8,386,860	-7,891,848
Other administrative expenses	-5,969,365	-11,333,375
Operational expenses	-62,678,426	-54,146,835
TOTAL OPERATING EXPENSES	-102,970,746	-98,032,767
SURPLUS/(DEFICIT) FROM OPERATING ACTIVITIES	-563,357	1,666,853
Financial revenues		
Financial expenses	-13,473	-162,993
SURPLUS/ (DEFICIT) FROM NON OPERATING ACTIVITIES	-576,830	1,503,860
ECONOMIC RESULT OF THE YEAR	-576,830	1,503,860

Summary of data provided by the Agency in its annual financial statement.

These accounts are drawn up on an accrual basis and are rounded.

Balance sheet

(in EURO)

	2021	2020
NON CURRENT ASSETS		
Intangible fixed assets	13,499,879	13,334,418
Tangible fixed assets	18,290,590	21,252,404
Long-term pre-financing	290,136	290,136
Long-term receivables	0	0
CURRENT ASSETS		
Inventories	4,473,476	4,473,476
Short-term pre-financing	5,211,965	3,136,002
Short-term receivables	3,311,635	2,913,365
Cash and cash equivalents	22,513,130	21,005,257
TOTAL ASSETS	67,590,811	66,405,058
NET ASSET	43,953,849	44,530,678
NON-CURRENT LIABILITIES		
Provisions for risks and charges		
Other long-term liabilities	105,510	105,510
CURRENT LIABILITIES		
Provisions for risks and charges	2,500	2,500
Accounts payable	23,528,952	21,766,370
TOTAL LIABILITIES	67,590,811	66,405,058