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European Maritime Safety Agency

EMSA Consolidated Annual Activity Report 2020

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European Maritime Safety Agency

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Assessment by the EMSA Administrative Board

The Administrative Board's assessment covers three main areas: strategic achievements (A), operational achievements (B) and the management of the Agency (C). 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 2020.

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.

The simplified and side-by-side representation of planned and actual output and the related achievements or difficulties encountered for each activity allows for an accurate comparison of objectives and results and assessment of the implementation of the annual programme of work for 2020 planned in the EMSA single Programming Document 2020-2022, as amended.

A) EMSA's strategic achievements in 2020

The EMSA 5-year Strategy 2020-2024 on which the Single Programming Document 2020-2022 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 strategic and operational achievements in each work area in 2020 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

In order to be able to mitigate shipping related environmental risks, there is a need to get an informed picture of the current situation and trends. To that effect, EMSA together with the European Environment Agency (EEA) worked on the draft of the first European Maritime Transport Environmental Report (EMTER), collecting verified information on the environmental footprint of shipping activities. As a first of its kind, this Report will feed different European Commission's policy initiatives linked to the European Green Deal. The draft report has been shared with all relevant stakeholders who were invited to participate in a dedicated on line workshop and further commented during a written consultation period. The final report is expected to be released by mid-2021. This project has also led to enhancing the efforts of the Agency to become a data hub for environmental data related to maritime transport.

services the highest volume of products were delivered since the Agency initiated activities in this field, with an overall 15% growth in services (compared to 2019) delivered to Member State administrations and EU institutions in the scope of CleanSeaNet, Copernicus Maritime Surveillance and support to Border Control activities, representing almost 2 billion km2 of sea surface monitored.

In terms of support to emergencies at sea, EMSA provided satellite monitoring to Member States in reaction to 20 distinct activations, linked with oil pollution, search and rescue and anti-piracy, which represents a 33% increase compared to 2019.

EMSA continued to offer capabilities based on Remotely Piloted Aircrafts (RPAS) technology supporting maritime surveillance and further increased its level of activities in this third year of operations, becoming a reference at EU and global level for the use of RPAS for maritime surveillance in the civil domain. Despite the (travel) restrictions - mainly during the first wave of the COVID-19 pandemic- EMSA deployed 8 RPAS missions in parallel at 8 different locations across Europe, either from land or vessel, serving multiple authorities of Member States and EU Agencies, providing remote live access to all the different entities through the EMSA RPAS Data Centre which is the central hub for distributing live feeds remotely. In 2020, the first steps were taken towards setting up more permanent regional deployments where RPAS services are serving entities of more than one country in the same region and therefore promoting the efficient use of resources in support of coast guard functions. EMSA has maintained an intensive dialogue with Member States regarding RPAS operations for maritime surveillance during the implementation of the operations, the RPAS Data Centre trainings and during the RPAS User Group which took place in September 2020. With regards to RPAS, the main risk remains with the delays in obtaining the authorizations to operate such a recent technology, with a new legal framework being rolled out by the European Union Aviation Safety Agency (EASA) in 2021.

With respect to SAT-AIS data services, EMSA continued to provide global satellite AIS data services to end-users. EMSA is now providing its users with global real-time SAT-AIS data service capability using high performance satellites. With a view to ensure seamless SAT-AIS data services, a new Framework Contract for services was put in place with a new SAT-AIS data provider to serve as a backup solution and to complement the present SAT-AIS data stream. New commercial T-AIS stream in specific areas of interest to Frontex (Eastern Mediterranean and Black Sea) were integrated at EMSA and were made available via system-to-system in the Frontex interfaces.

The European Commission has put in place a preparatory action for the operational implementation of the Common Information Sharing Environment (CISE) and has tasked EMSA to set up and coordinate the preparatory actions, known as the „transitional phase“. To finance the transitional phase activities two Grant Agreements (GA) between DG MARE and EMSA were signed, the 1st GA in April 2019 valid until October 2022 with a budget of 3.5 MEUR. The 2nd GA was signed in December 2020 for the duration of 3 years (until December 2023) with a budget of 3.4 MEUR. During the transitional phase, CISE has to be transformed from an EU research project into an EU wide operational maritime surveillance information network, giving all EU Member States and EU Agencies the possibility to connect. Since the Intellectual Property Right transfer of the results of the EUCISE2020 project was not transferred from the EUCISE2020 consortium to the European Commission (as initially planned), EMSA had to initiate the process for the re-development of the CISE components (namely the CISE's node, network, and adaptor) in order to re-build the new version of the CISE system, and will thereafter support the Member States to connect their legacy systems to CISE. To implement the operational phase of CISE, a number of actions have been started, being: i) from the political point of view, an auditing schema is going to be procured based on the Responsibility to Share principles. This will ensure the commitment of the Member States in sharing the information; ii) from the legal point of view, a Cooperation Agreement will be put in place to regulate the use of information shared within the CISE network; iii) from the operational point of view a number of use cases and services are going to be defined in order to ensure coherence of CISE with the overall maritime surveillance framework and

new data, information and functionalities. IMS are delivered to 27 Member States[1] and Montenegro, over 500 organisations and/or authorities and 5 EU Agencies/Bodies for a total of approximately 6,000 users, covering an ever wider range of maritime functions.

More functionalities have been added to IMS services and new system-to-system (s2s) options (e.g. STAR Streaming remote hub, JSON or OGC standards based, for the data distribution). The development of new Automated Behaviour Monitoring (ABM) algorithms and capabilities were stepped-up together with interested Member States and EU Agencies/Bodies. The IMS Automated Behaviour Monitoring (ABM) technical platform has been utilized in the context of the 'Interoperability' project, in one of the use case scenarios.

Progress was made in the services using Hybrid Cloud architecture. A Long Term Storage (LTS) solution capable of holding currently over 3.5 years (and in July 2022 5 years) of historical positions data (AIS, LRIT, VMS) was provided to identified IMS users. During 2020 work was started to build further on this project and implement initial historical capabilities of the Automated Behaviour Monitoring (ABM) as well as the automatic detection of port calls.

Progress was made regarding the IMS Correspondence Expert Group on "Drift Modelling" which terms of reference were agreed by the SSN HLSG on 16 December. The outcome of this group should be guidelines for developing an operational IMS Drift Modelling tool to be used for Search and Rescue and other Maritime Safety purposes.

Under the framework of the EMSA-EFCA Service Level Agreement (SLA), the two Agencies launched in 2019 major improvements to the IMS customised version provided by EMSA to support fisheries monitoring and control service to EFCA and Member State users. Implementation has continued in 2020 and will be completed in 2021.

Efforts to support the digitalisation/simplification of maritime transport continued with definition of the business rules and technical specifications for new SafeSeaNet (SSN v.5) to support the legal requirements for registration of persons on board passenger ships, the revised Port Reception Facilities Directive, improved Incident reports and additional security measures. The technical developments will start beginning of 2021 for both the central and the national systems of the Member States.

Progress was made regarding the development of the central Ships, Locations, HAZMAT and Organisations databases. The development of the new central geographical database was launched in 2020.

EMSA elaborated in cooperation with experts of the Member States and shipping industry's associations the technical specifications which will be used by the European Commission for the delegated and implementing acts of the European Maritime Single Window environment (EMSWe) Regulation (EU) 2019/1239. Such specifications related to the EMSWe dataset, the EMSWe ships, locations and HAZMAT databases, harmonised spreadsheet templates, message implementation guide and functionalities of the graphical user interfaces. They will set the technical reference that will be used by the European Commission and Member States for setting up harmonised Maritime National Single Windows through which all information necessary for the fulfilment of reporting obligations will be reported once and in a harmonised manner in all European maritime ports.

The Interoperability project continued with a revised plan and set of activities with a particular focus on the EMSWe. The project executed several of its deliverables such as a study in security and interoperability solutions for SafeSeaNet, a study on the use of block-chain for SafeSeaNet, specifications of harmonised dataset and processes related to reporting obligations in ports and

[1] The United Kingdom had access to IMS during the transition period, till the end of 2020.

and providing technical contributions to various IMO submissions, including support on other pollution prevention topics such as the AFS Convention with a dedicated study on cybutrine.

In addition, the Agency has been actively engaged in the relevant and politically sensitive discussions on the short-term measures within the recently established IMO Correspondence Group (CG) - which started immediately after MEPC 75 and ISWG-GHG 7 - on Guidance over technical and operational measures to enhance energy efficiency of the International Shipping i.e. Energy Efficiency Design Index for existing ships (EEXI), Carbon Intensity Indicators (CII), Ship Energy Efficiency Management Plan (SEEMP), Rating Mechanisms, Verification and Corrective Actions. The long-time experience in the past decade over these matters and the recent work related to the implementation of the EU MRV Regulation places the Agency in the privileged position to assist in particular in the evaluation of the IMO DCS 2019 data and the development of potential carbon intensity indicators.

EMSA also supported the European Commission within the framework of the Committee established under Regulation (EU) 1257/2013 on ship recycling in particular regarding the drafting of the Commission Notice for "Guidelines on the enforcement of obligations under the EU Ship Recycling Regulation relating to the Inventory of Hazardous Materials of vessels operating in European waters" (2020/C 349/01), in view of the entry into force of this obligation by December 2020. In addition, the Agency was able to release a dedicated module in THETIS-EU for the recording of inspections on the inventories of hazardous materials.

EMSA also continued to support the European Commission and the Member States in the preparation for the implementation of the new PRF Directive (Directive (EU) 2019/883) and in particular for the drafting of two Implementing Acts necessary for its entry into force, proposing concepts papers and assisting in their further developments with the Member States and the ESSF sub group on Wastes from ships. Work also started on the necessary adaptions on the PRF THETIS-EU module.

In the field of implementation of the Sulphur Directive (Directive EU 802/2016), EMSA assisted the European Commission in the monitoring of the implementation of the 2020 global sulphur cap in the EU. In addition, the Agency has supported the European Commission in the ongoing work within the Barcelona Convention framework to potentially establish a SECA area in the Mediterranean Sea.

Services for the prevention of, preparedness and response to, pollution caused by ships as well as response to marine pollution caused by oil and gas installations have become more adaptable and flexible in order to increasingly reflect regional capacity, requirements and risks. The outcome of the stress test exercise carried out in 2019 together with the Member States in order to further analyse the relevance and added value of EMSA resources in case of a major spill incident were analysed and fed into the discussions on the fine-tuning of the Agency's toolbox.

Despite the restrictions to movements due to COVID-19, the two EAS stockpiles and three recovery vessels that were in preparation phase were accepted for standby service and all EMSA contracted services confirmed their availability for emergency services. Almost all drills and Equipment Condition Tests due for 2020 were successfully completed, sometime with a delay due to local restrictions.

In the field of implementation of the Sulphur Directive EMSA performed 245 measurements of Sulphur Dioxide emission levels from vessels using RPAS in two Member States. The reports with measurements were made available to Member States through THETIS-EU. With regards to pollution monitoring EMSA delivered light RPAS services to the Port of Antwerp mainly for the monitoring of pollution in the port, but also to monitor safety of ship movements, degassing, and floating debris.

CleanSeaNet continued to provide near real time satellite oil spill monitoring to Member States and European Neighbourhood policy projects. The support provided to Member States was expanded and the number of images delivered in 2020 grew considerably (more than 15%), due to optimizations done in planning and the new contract frameworks (signed in 2018). The support provided to emergency requests presented a 33% increase compared to the previous year.

the heading Integrated Maritime Services (IMS), the Agency's systems and thematic services are a pivotal part of Member State monitoring, information and surveillance systems and benefit a steadily expanding list of other EU agencies and bodies where synergies with EMSA have been identified.

Building on the existing business intelligence platform used by EMSA, the EMSA Maritime Analytics Tool has been developed as a prototype with the main objective to provide analytical capabilities by combining different data sets, in order to support the 'Risk Assessment' activities of Member States and EU Bodies. What makes this tool unique is the possibility of combining and aggregating data that is traditionally presented separately in EMSA systems e.g. IMS position reports, ABM alerting, public PSC data, position reports analysis. Accordingly, the tool is not expected to be used in (near) real time/operationally, but rather more strategically e.g. in supporting the identification of shipping patterns in the most recently available 24 hours, 7 or 30 days.

New data, information and functionalities have been added to the IMS service, including inter-alia the availability of new vessel position reports and vessel enrichment information, long-term (3 years) historical vessel track queries and new system-to-system (s2s) interfaces, including ABM s2s. Progress was made with the rolling-out of new versions of the SafeSeaNet Ecosystem Graphical User Interface (SEG) which replaced old single system interfaces, offering a common and combined view of maritime information provided by several back-end systems operated by the Agency.

Operational and technical training sessions on the Agency's Integrated Maritime Services, SEG new functionalities, Automated Behaviour Monitoring and SSN user management were provided via videoconferences and webinars (due to COVID-19 related travel restrictions) to more than 150 personnel from Member States and EU Agencies.

The Traffic Density Mapping Service (TDMS) became operational in 2019 and was made available to Member States and EU Institutions via the SEG graphical user interface and to the public via the EMODnet portal. The TDMs illustrates vessel movement patterns for defined maritime geographical areas and time periods contributing to a better understanding of the maritime traffic patterns. In 2020, the service was continued on regular basis. Phase 2 of the project was initiated in April 2020, aiming at proving additional categories of maps and upgraded functionalities.

The Automated Behaviour Monitoring (ABM) continued operations via SEG and s2s interfaces. Additional ABM administrator accounts were allocated to the IMS users from Member States and EU Bodies. New algorithms were introduced (e.g. for monitoring the zone around the ship or using VDS uncorrelated dataExternal systems (Frontex, Poland, IRD) were connected via s2s interface for the configuration or distribution of the ABM alerting.

The Automated Behaviour Monitoring (ABM) and Advanced Analytics Workshop was held to present and discuss the ABM developments, share best practices, and discuss potential future changes, including the EMSA Maritime Analytics Tool and AI and Machine Learning scenarios. Since 2018, the Agency offers online access through the SEG to long-term storage of maritime information allowing for a more in-depth analysis by surveillance authorities of maritime patterns of vessels of interest over a period of around 3 years.

Extending the possibilities of the original THETIS information system, EMSA concluded the work on the voluntary module for Member States to report security inspections under Regulation 725/2004. During 2020 a module of THETIS-EU in support of inspections necessary for the Ship Recycling Regulation went live serving the Member States in their capacity as both Port State and Flag States In addition, starting 19 December 2019, THETIS and THETIS-EU catered for the Port State and Flag State provisions of Directive EU 2017/2110 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service and amending Directive 2009/16/EC. A pilot with Recognized Organization was concluded leading to the automated electronic provision of statutory certificates of all ships in their register. The service of THETIS in support of EU legislation (THETIS-EU) was extended to include a module for Maritime Security inspections as well

safe and controlled environment. Users will be able to connect to the platform from anywhere through internet, by either wearing their VR goggles or by using a normal computer and hence experiencing an enriched and immersive safety inspection onboard an array of different ships. The tool is also available through the Maritime Knowledge Centre Services (MaKCs 2020) of the Agency, which is now implemented through Moodle, a world-wide used and recognised learning management platform.

The Virtual Reality Room was equipped with state-of-the-art technology and inaugurated in 2020; it also hosts the eLaboratory of the Agency for the production of media contents for innovative training activities as well as delivering online trainings and webinars.

In 2020, support of Port State Control activities in different regions was further enhanced by providing access to RuleCheck and MaKCs to the Riyadh MoU on Port State Control, and access to RuleCheck to the Tokyo MoU on Port State Control. The given access will enhance global harmonization of the implementation of the international conventions, ensure a level playing field for EU ships calling ports in the Tokyo and Riyadh MoU areas and export worldwide solutions developed by the EU.

During 2020 the Agency provided regular and ad-hoc statistics and analytics aimed at expanding information services to analyse data and identify trends and risks to support safety, security and sustainability. such as the report on impact of COVID-19 on shipping activities (updates are published weekly on the EMSA webpage), statistics on recycling of EU-flagged ships, statistics on impact of COVID-19 on PSC activities, statistics in support of the EMTER, etc.

The concept of the Dynamic Overview of National Authorities (DONA) platform was finalised in close cooperation with Member States and the European Commission, through online meetings and dedicated correspondence groups. DONA is an important step towards digitalisation and simplification that will provide the general public with added value information via the Country Profile section, while at the same time offering to Member States the possibility to greatly reduce their administrative burden when using the DONA Reporting Gate to comply with their legal obligations for reporting vis-à-vis the European Commission.

All EU ship-safety initiatives and relevant negotiations at IMO were supported by EMSA technical assistance. The combined effort of EMSA and Member States in the programme of visits and inspections has provided essential feedback for European Commission initiatives to assess and fine-tune maritime safety EU legislation in order to improve the efficiency and effectiveness of the measures already in place. The programme of visits and inspections was heavily affected by the COVID-19 pandemic. Following a suspension of visits and inspections between March and September, a revised programme, based on a combination of field visits and remote sessions was put in place aiming at reducing the impact, as much as feasible, of travel restrictions and COVID-19 related measures implemented at national level on the visits and inspections programme. However, the overall number of visits, and in particular RO and STCW inspections, carried out was lower than planned. In the case of RO-related activity, following a request by the European Commission, EMSA focused its efforts on a monitoring exercise that looked at how ROs adapted their activity in the light of the COVID-19 pandemic with remote surveying. A dedicated report was provided to the European Commission and shared with the competent authorities of the Member States and based on the analysis provided, a dedicated campaign of remote inspections of RO head offices was launched, with focus on their remote surveying practices.

In addition, the horizontal analysis performed has provided fundamental input for policy development and improvement of the relevant EU legislation in the area. The mid-cycle horizontal analysis for the Marine Equipment Directive was delivered.

Preparatory work was concluded on the new cycle of visits for passenger ship safety, the first cycle that will cover multiple Directives, with a pre-cycle workshop being held with the Member States. However, the start of the visit cycle, originally planned for 2020, was deferred to 2021 due to the substantial component of field work, including visits to ships, that characterizes this new cycle.

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.

Following the outbreak of the COVID-19 pandemic which also affected the activities of the Agency, the Administrative Board welcomed the quick reaction and the measures EMSA implemented to 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 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. As a result of this continuous assessment and the proposals made by the Agency, the Administrative Board adopted two amendments to the EMSA Budget 2020 and corresponding amendment to the Single Programming Document 2020-2022 which ensured the most efficient budget execution.

The Agency executed 79,153,340.70 € in Commitment Appropriations (CA), representing 98.89% of the total budget of the year, and 77,981,449.75 € in Payment Appropriations (PA), amounting to 96.08% of the total budget. 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.

Based on information outlined in Parts II, III and IV of the CAAR2020 and on the work of the Administrative and Finance Committee throughout the year, the Administrative Board notes the Agency's exhaustive and meticulous approach to the follow-up of the outcome of audits by the various auditing bodies. In particular, the Administrative Board appreciates the fact that the Internal Audit Service of the Commission (IAS) and the European Court of Auditors (ECA) did not issue any critical audit recommendations or observations that could lead to a reservation in the annual declaration of assurance and that at the end of 2020, all audit recommendations issued and due by 31/12/2020 and earlier had been implemented.

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

Conclusion

The Administrative Board of the European Maritime Safety Agency concludes that the Agency has met its objectives in accordance with the annual work programme for 2020 and the overall multi-annual strategic framework with 2020 being the first year of its implementation.

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 incorporating new technologies into the

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; 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 2020, as published in the EMSA Single Programming Document 2020-2022, was drawn up within the multi-annual framework outlined above.

Despite the unprecedented situation created by the outbreak of the Coronavirus, the objectives set out for 2020 were achieved overall, through a high level of implementation of the annual work programme, as amended by written procedure of the EMSA Administrative Board N° 5/2020 of 20 August 2020.

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 developed new services to further support its stakeholders in the context of the pandemic.

Part I – Achievements of the Year

List of EMSA activities 2020

Area	Activity-Based Budgeting (ABB) code		Activity name	Project Financed Activities (PFA)
			Interagency cooperation with Frontex and EFCA on coast guard functions[1] – Annual Strategic Plan 2020	
Traffic monitoring and information on ships and cargoes	2100	7901	Union maritime information and exchange system (Integrated Maritime Services; Remotely Piloted Aircraft Services; SafeSeaNet; European Maritime Single Window)	Interoperability Project
		7210		EFCA SLA
	7200			Frontex SLA
	2200		EU LRIT Cooperative Data Centre and International LRIT Data Exchange	
	2300	7700	THETIS Information System	THETIS-EU
		7710		THETIS-MRV
	2400		Maritime Support Services	
	7500			Copernicus Maritime Surveillance
	7902			*CISE Transitional Phase*
Visits and inspections to monitor the implementation of EU legislation	3100		Classification Societies	
	3200		STCW	
	3300		Visits to Member States to monitor the implementation of Union Law	
	3400		Maritime Security	
	3500		Horizontal analysis and research	

[1] The expression “coast guard functions” as used in this document is not to be taken as conflicting with the meaning or the roles and responsibilities of the EU Member States as flag, port and coastal States in the context of the International Maritime Organisation, other international bodies and the EU.

Area	Activity-Based Budgeting (ABB) code		Activity name	Project Financed Activities (PFA)
Providing Member States and the Commission with technical and scientific assistance and facilitating technical cooperation between Member States' Maritime Authorities and with the Commission	4100		Port State Control & Flag State Enforcement	
	4200		Accident investigation	
	4300	7800	Training, cooperation and capacity building	EU Funds for enlargement countries
	4400		Marine equipment and ship safety standards (including IMO)	
	4500	7600	Enforcement and capacity building tools	Equasis (R0 funds)
	4600		Prevention of pollution by ships	
	7100			SAFEMED IV
	7400			BC Sea
Pollution preparedness detection and response	5100		Operational Pollution Response Services	
	5200		Pollution Surveillance (CleanSeaNet and illegal discharges; Remotely Piloted Aircraft Services)	
	5300		Cooperation and information relating to pollution preparedness and response	
Horizontal activities	6500		Communication, Missions & Events support	
	6100-6400		Overhead/horizontal tasks	

The Agency implements an activity-based approach to budgeting and reporting, which is explained in detail in Annex I.

Project Financed Activities are represented in the table above either on a separate line, when there is project-financed staff, or within the most relevant subsidy-financed activity.

Interagency cooperation with Frontex and EFCA on coast guard functions

EMSA has chaired the Interagency cooperation on coast guard functions until April 2020. In this capacity, EMSA hosted the online Annual Coast Guard Event in its headquarters in Lisbon in December 2020. The Annual Coast Guard Event is a consultation mechanism put in place by the Steering Committee under the Tripartite Working Arrangement (TWA) within which national authorities performing coast guard functions and other EU and international partners can provide consultation and feedback on the Agencies' cross-sectoral and cross-border cooperation activities. The event gathered 157 participants from the extended stakeholder communities of the three Agencies.

Annual Strategic Plan 2020

Objectives	Outcome
Horizontal	
To hold the annual joint European Coast Guard event under the coordination of EMSA in line with the experience gained at the previous annual events, while enhancing interaction between participants.	The European Coast Guard event was organized online on the 10 December 2020 under the coordination of EMSA. The event focused on challenges and opportunities that the Covid-19 pandemic brought before the EU coast guard cooperation, the developments in the cooperation and on the priorities of action for the years to come. 157 participants coming from national authorities of 3 communities (EFCA, EMSA and Frontex), EU Commission, EFCA, EMSA, SatCen, Frontex and European Coast Guard Functions Forum (ECGFF) attended the event.
To promote further European cooperation with national authorities on coast guard functions at EU, EU sea basins and national level.	The agencies provided information on the state of play of the cooperation to the Council Friends of the Presidency group on European Union Maritime Security Strategy (EUMSS). The agencies continued also the cooperation with the European Coast Guard Functions Forum (ECGFF). In February 2020 EMSA organized with the ECGFF a joint workshop, with the contribution of EFCA and Frontex, on "Information sharing and data security in the maritime safety and security domains" that was held in person, before travel restrictions were introduced. In October 2020, the three agencies jointly contributed to a panel discussion on the "EU Maritime Strategy" organized virtually by the Secrétariat général de la Mer (SG Mer) of France, as chair of the ECGFF, during the Euronaval exhibition. The three agencies also organized common virtual stands during the same exhibition.

To ensure the annual joint participation of the agencies in the European Maritime Day.	The agencies registered for a joint stand and for a joint Stakeholders' workshops with the subject "EU cooperation on coastguard functions in practice". Unfortunately, due to the coronavirus pandemic the European Maritime Day was cancelled in 2020. It will now be organized in May 2021 and the stakeholders' workshop will be held in virtual mode.
To produce a set of communication tools (brochures, videos etc.) promoting EU inter-agency Cooperation and make it available to the three agencies for dissemination.	The agencies developed specific videos material for the promotion of the EU coast guard cooperation. The agencies also coordinated communication through social media on specific events with joint activities or contributions were
To organise a joint hearing at the European Parliament in 2020 on the outcome of inter-agency cooperation.	This activity was not possible to implement due to the coronavirus pandemic.

Information sharing	
Exchange of vessel position and earth observation data between the three agencies based on the SLA's in place, complete the mapping of data sets, analyse the usefulness to identifying of cooperative and non-cooperative objects at sea and to take one area, SAR, for which all three agencies have an interest, to work together to support the Member States SAR Community, to improve the awareness of Member States of the data available and to improve the exchange of information with them.	The agencies noted the progress made on the objective of sharing data. This included the implementation of regular and systematic sharing of Earth Observation services between the three Agencies. Likewise, Terrestrial AIS data acquired from the commercial market and processed by EMSA on behalf of Frontex in specific areas of interest is now available to all three Agencies and their respective user communities. The agencies completed the mapping of data sets, including descriptions of the data sets themselves in a standardised and systemic manner. An overview table of data sets available to the communities of each Coast Guard Function was also prepared. Data sets, descriptions and mapping were compiled into one document, the Maritime Data Catalogue, as a definitive product of the work of the agencies Considering the current restrictions in place as a result of precautionary measures against COVID-19 and reflecting discussions in previous meetings, the agencies agreed to postpone the specific focus on supporting the Member States' SAR Community.
Visualisation and identification of assets participating in operations in the maritime picture, where possible.	The agencies have created a catalogue of the assets available from each of the three Agencies, however more detailed information such as areas of

	operations cannot be regularly shared in light of the restrictions in place. Considering such operational sensitivities, a potential way forward could be to create a repository where Member States can consult who the point of contact for each asset and associated deployment is.
Continue to explore machine learning/artificial intelligence applied to the maritime picture to the benefit of MS national authorities.	The first step in developing machine learning capabilities is to prepare data sets which can be used as training data. The work completed by the agencies in the form of the Maritime Data Catalogue may contribute to identifying relevant datasets. Regarding Earth Observation (EO), EMSA has a project to set up training datasets for the development of machine learning algorithms. The focus of such algorithms is on extracting information from Earth Observation images. EMSA is developing a historical Automated Behaviour Monitoring (ABM) and Global Port Calls detection capability. These two functionalities may produce datasets that can be used in training machine learning models. The Risk Analysis team is developing the use of algorithms. The main challenge is access to big data.
To explore how to structure enhanced cooperation between EU agencies and Member States, for example with Maritime Rescue Coordination Centres, for exchange of operational information in real time and other provisions related to responses.	The procedure for Incidental Sightings of Potential Marine Pollution is in place and cases are reported by Frontex to EMSA via this channel. The EMSA Central Organisation Database (COD) is an example of interagency cooperation that can lead to an increased exchange of information with Maritime Rescue Centres (MRCC). The locations, areas of responsibility and contact details for the MRCCs are made available in SEG to EFCA in a layer for displaying information from the COD and development is underway to provide this same service to Frontex (system-to-system).

Surveillance and communication services	
To analyse the possibility to increase specific surveillance and communication services to relevant stakeholders and to identify additional opportunities.	The systematic sharing of Earth Observation (EO) services between the three Agencies is in place. EMSA provides EO added value services to Frontex and EFCA and has shared the planning and products

	between the Agencies. The planning of EO services for the three Agencies by the same team at EMSA allows for the resolution of any conflict in acquisitions and to maximise access to quality services for all Agencies. The benefits of sharing Earth Observation services are clear. Those have been demonstrated in the Baltic Sea exercise, led by Frontex in cooperation with the Finnish authorities. In addition to the Vessel Detection Service (VDS) tasking specifically for the exercise, Frontex also exploited the VDS available from the planned CleanSeaNet oil spill monitoring imagery in the area.
To avoid duplication and overlap of surveillance and communication services, in particular in the area of RPAS services.	EMSA informed Frontex and EFCA during regular formal (SLA meetings, remotely piloted aircraft system (RPAS) user group) and informal meetings on the ongoing and planned developments regarding RPAS operations and invited them or their stakeholders in Member States to participate in the new regional deployments, such as in the Baltic where access to the flight information has been provided as agreed with the MS authorities in command of the surveillance service. The cooperation between EMSA and EFCA to support enhanced fisheries control by providing additional surveillance capacity from an (RPAS) has been very close. EMSA has made a quadcopter available for flights taking off from EFCA's chartered offshore patrol vessel, the LUNDY SENTINEL. In parallel, EMSA provides satellite communication services to EFCA to support all yearlong the Lundy Sentinel fisheries inspections patrols. Cooperation regarding maritime air surveillance continued between EFCA and Frontex through the specific SLA and the dedicated inter-institutional framework contract.
For EMSA to continue to offer RPAS services to Frontex and EFCA communities in support of coast guard functions.	A written communication from EMSA to the Executive Directors of EFCA and Frontex, reaffirmed the Agency's commitment and availability to support activities coordinated under their respective Coast Guard Functions.
Where possible, data should be exchanged between the agencies generated by RPAS deployments.	Exchange of data is taking place systematically via the EMSA RPAS Data Centre.

Capacity building	
To finalise and keep updated the Handbook on European Cooperation on Coastguard Functions.	The first version of the handbook was submitted to the European Commission in June 2020. The Commission provided feedback that the agencies incorporated in the final document. Experts from all the 22 Member States with a sea border contributed to the drafting process, together with Iceland and Norway as part of the Governing Boards of EMSA and Frontex. The handbook has 7 sections, with an introductory part explaining the scope and objectives, the inter-agency cooperation framework and 5 sections with appendixes consisting of: ▪ a service catalogue of the agencies (with indication on who and how to request the service), ▪ a training catalogue with all training and e-training of the three agencies, ▪ a best practices guidelines and manuals catalogue, ▪ a regional, bilateral, multilateral and international cooperation mechanisms catalogue and ▪ country factsheets with information about the entities and authorities in Member States with coast guard responsibilities. An important next step is the implementation of the handbook through an online portal, which has been discussed with Member States and the European Commission in 2020.
To ensure an appropriate follow-up by the agencies of the outcome of the relevant components of the ECGFA Network Project (including SQF).	The aim of the project follow-up by the agencies of the relevant components of the European Coast Guard Academies Network project is related to the coast guard exchange programme and to the Coast Guard Sectoral Qualifications Framework (SQF). The agencies have informed their stakeholder communities in the context of their specific network meetings and steering groups and have also sent a letter to the agencies training focal points, to request the nomination of contact points to follow-up with the project outcomes. To note that the COVID-19 pandemic has not permitted to progress on the above-mentioned exchange programme and there might be the need to look for other alternatives (such as electronic platforms). EFCA is now hosting the portal that resulted from the project (https://ecgf.efca.europa.eu/). Also, on SQF, EFCA launched at the end of 2020 a mapping/study to be carried by an external expert.

To offer the following joint cross-sectoral training to Member State national authorities: ▪ Search and Rescue (MRCC personnel) ▪ Maritime surveillance ▪ Fishing vessels safety/Fisheries control	In March and April 2020, a survey was launched by the three agencies on the follow up on cross-sector Search and Rescue training, to have feedback on the views of Member States. The agencies have been working on the content of these possible cross-sectoral training activities. The cross-sectoral training on maritime safety and fisheries control was canceled in 2020 since an important component of the training consisting of a site visit and practical exercise in port and in a fishing vessel was not possible to be implemented.
To jointly develop future EU capacity building cooperation programmes with third countries in coast guard functions, where relevant.	The agencies have been exchanging information and have been mapping the training activities they provide to third countries. Specifically, for Libya, the three agencies have been in contact with EU BAM Libya on the Maritime Strategy and have also liaised with EUNAVFOR MED IRINI on capacity building activities.

Risk analysis	
To further enhance cooperation on cross-sector risk management between the EU agencies and Member States authorities by: ▪ Providing procedures/methods to perform a combined (where possible) risk assessment at strategic level covering the areas of competence of each Agency (safety, security, environment, fishery, border, etc); ▪ Providing options to share the outcomes of risk assessments; ▪ Providing options for the establishment of a multi-risk sea picture, at a sea basin level with integrated analytical outcome.	The three agencies have been working on how risk analysis products or data from the three agencies could be joined to inform national authorities. Examples have been presented regarding mapping. The aim is to support Member States authorities on their cross-sectoral risk analysis needs. In order to have more specific information, it is foreseen to launch a consultation or a dedicated survey. This is in preparation and is planned to be launched early 2021. Also, in order to support interoperability and cross-sectoral cooperation, a glossary of terms has been developed by the three agencies.

Capacity sharing	
To further identify opportunities between EU agencies on capacity sharing for assets to support different coast guard functions, such as the operation of the EFCA vessel which has been equipped and trained by EMSA for antipollution purposes.	The agencies have been exchanging information about the technical requirements and capabilities of sea and airborne assets to perform CG functions. In addition, the agencies have conducted the mapping of the assets, owned, leased, or otherwise available from the agencies which could be considered for capacity sharing. The mapping of the technical and operational indicators for assets to perform Coast Guard Functions missions has been also completed. As a result a matrix has been released providing these indicators as well as the assets owned or leased (chartered) by the agencies able to perform those missions.
To develop a common understanding between EU Agencies of the concept for European Multipurpose Maritime Activities, including new identified elements, such as the capacity sharing with the use of multinational crews/experts and assets for the implementation of Multipurpose Maritime Operations (MMOs) in various basins of European Union.	The concept for European Multipurpose Maritime Activities with integration of operational modules is under development. The agencies have been discussing on the need to harmonize the various terminologies used in the context of multipurpose maritime operations and/or activities, including the EMMA and MMO concepts. The agencies have agreed that, as a first step, the MMO concept should be defined because without MMO's definition, the agencies would not be able to define EMMA concept, which will be at strategical level. This first step has been completed in 2020 as the agencies have developed and agreed on the text of an MMO concept at technical level. During the 3rd Annual European Coast Guard Event 2020 took place the official announcement of the common definition of the MMO concept.
To develop guidelines for multipurpose operations implemented by EU agencies based on the related existing regimes.	The agencies have agreed that before developing any guidelines the definition about the MMO had to be agreed and the feedback from MSs - received. The development of MMO Guidelines have been incorporated in the ASP 2021 and are being developed taking into consideration best practises available at EFCA, EMSA and Frontex and the relevant legal frameworks.

Maritime Transport and Surveillance - information on ships, cargoes and ship movements

2.1. THE UNION MARITIME INFORMATION AND EXCHANGE SYSTEM

Planned input		***Actual Input***
CA	*25,915,429*	***24,950,481***
PA	*27,400,755*	***25,791,932***
Staff	*37 AD[2], 13 AST[3], 3 SNE, 1CA*	***37 AD , 11 AST, 1 CA***

a. Integrated Maritime 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*

Multi-annual strategic objectives	
Security	14. Provide further information services to protect the EU merchant fleet worldwide
	16. Develop robust solutions to protect its maritime applications and information services
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
	22. Monitor the emergence of promising technologies and operationalise them for new services for Member States and the Commission
	23. Develop machine learning and artificial intelligence applications in order to improve risk assessment, vessel position predictability, statistics and innovation
	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
	25. Support Search & Rescue efforts of Member States
	26. Move the EU maritime picture to the cloud and explore the added value of other cloud-based services
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data

Expected outcome 2020
Provision of Integrated Maritime Services to EU Member States authorities executing functions in the maritime domain,
EU bodies **and/or third countries will continue**. New data streams from national or commercial sources will be included where available and when feasible.
Member States will be given the opportunity to share experiences, identify, develop and implement 'best practice' approaches based on the principles of integrating and sharing relevant maritime information.
Member States will be provided with new IMS functionalities, ABMs and system-to-system interfaces.

[2] 8 AD for the European cooperation on coast guard functions (in planned and actual input).
[3] 1 AST for the European cooperation on coast guard functions (in planned and actual input).

Member States will share experiences gained on MASS trails/ testing areas and will be given the opportunity to discuss issues and potential solutions in relation to autonomous navigation and routing from the perspective of monitoring, management and control.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

Two agreements regarding to the provision of IMS related services, namely with MAOC(N) and EUNAVFOR-Med (Operation Sophia), had expired with associated follow-up actions undertaken in 2020. After the endorsement of the Administrative Board a new Cooperation Agreement was signed on 17 December with MAOC(N), reflecting the deeper and more established working relationship between the two organisations. EUNAVFOR-Med (Operation Sophia) was replaced by Operation Irini. EMSA is in the process of setting up a new cooperation mechanism with Operation Irini.

EUNAVFOR Somalia (Operation Atalanta) deters, prevents and represses acts of piracy and armed robbery off the Somali coast and protects vessels of the World Food Programme (WFP) delivering aid to displaced persons in Somalia. With Brexit, command and control of EU NAVFOR passed from the UK to Spain, supported by France. As a consequence of the UK decision to leave the European Union, the Operational Headquarters were relocated from the UK to Rota / Brest. 2020 saw EMSA and the new command structure further developing their working relationship. This is especially relevant as the mandate of EUNAVFOR Somalia (Operation Atalanta) will be extended and broadened in 2021.

EMSA and EUROPOL collaborate through a Working Arrangement. A dedicated IMS service is provided to EUROPOL staff for law enforcement monitoring and training is provided on IMS and ABMs (Automated Behaviour Monitoring products and services).

EMSA has launched a maritime analytics tool (EMAT) prototype to support the decision-making and risk analysis of member state authorities and other EU bodies. The prototype, which was financed by Frontex, draws on a combination of different data sets to present aggregated statistics. The focus is on ships which are not reporting regularly, drifting into key areas of the EU, ships considered 'Not under command' as well as the Paris MoU 'Black Flag' ships operating around the EU. The tool is gradually being rolled-out to Frontex and IMS member state users and will enhance the portfolio of Automated Behaviour Monitoring (ABM) scenarios and advanced analytics services.

As regards the use of new technologies, work continued on the High Performance IMS (HP-IMS) project, based on a Hybrid Cloud architecture. The HP-IMS project allows scaling the positions 'data ingestion' performance and implements an LTS solution capable of holding 5 years of positions data (AIS, LRIT, VMS). During 2020 the Long-Term Storage (LTS) was opened to identified IMS users (Member States, EFCA and MAOC-N). In order to benefit from the investment made and the experience gained from the HP-IMS, it was decided to build further on this project and implement essential historical capabilities of the Automated Behaviour Monitoring (ABM) algorithms. A new, pilot project was launched in 2020 to complement the already existing near real-time ABMs, by providing the users the capability of making these analyses for longer periods in the past. The project, embracing six most popular algorithms, includes a new service that automatically detects calls of ships in ports.

EMSA, in collaboration with Member States and EU Bodies, elaborated a set of business scenarios for the potential usage of artificial intelligence and Machine Learning.

The transition of the system-to-system 'SSN Streaming Interface' to the STAR Streaming remote hub was completed during 2020, for the reception and provision of AIS data (both terrestrial and satellite based).

In the framework of the 'Interoperability' project, the IMS Automated Behaviour Monitoring (ABM) technical platform was utilized in one of the use case scenarios, to trigger distribution of the report to the relevant coastal authorities upon entry of a ship to the specific area.

Due to the COVID-19 situation and related travel restrictions EMSA continued supporting the IMS community via, distance-learning/webinar sessions. Topics and schedules of these webinars were either tailor-made (based on individual consultation with interested MS/authorities) or open to all MS/authorities. They covered specific IMS functionalities, interfaces (e.g. IMS Mobile App) or potential support to MS SAR or salvage activities using IMS/SEG/ABMs. Altogether, over 28 sessions took place for more than 150 users.

The provision by EMSA to MS, EU Agencies and Coast Guard authorities of Satellite AIS to identify and track vessels worldwide was reinforced in 2020 through the purchase of an additional SAT-AIS data set. The annual SAT-AIS Collaborative Forum meeting was organised and chaired by EMSA. The primary aim of the Forum is to support and collaborate with EU Member States and/or public national administration with a programme or interest in the development of a Satellite AIS/VDES capacity at national level.

In June 2020, EMSA and the European Space Agency (ESA) agreed to extend their Cooperation Agreement for another five years until 1 July 2025. Both Agencies have agreed to further intensify their cooperation which over the past years proved to be an effective basis for bilateral cooperation concerning the use of space-based systems and data in support of EMSA's operational maritime activities. This included activities in the field of earth observation, maritime safety and security, surveillance, sustainability, ship source pollution, and cooperation in the field of integrated space-based solutions.

Objectives 2020	Achievement
Continue the operation, delivery and development of Integrated Maritime Services in line with user requirements from EU Member States authorities executing functions in the maritime domain, EU bodies and/or third countries, including provision of operational support such as training and helpdesk activities.	✓
Explore and analyse new technologies and information products to enhance and complement the Integrated Maritime Services portfolio, in terms of capacity by using cloud-based solutions and in terms of data sources).	✓
Advance the collaboration with the IMS Member State and EU bodies within the context of the "Automated Behaviour Monitoring and Advanced Analytics" Working Group, to further develop the portfolio of ABM services and define the requirements for Data Analytics tools and products.	✓
Further collaboration within the context of the ESA-EMSA VDES collaboration and with those Member States that have SAT-AIS or VDES missions or programmes, in order to continue the provision of global feeds of SAT-AIS data to EMSA's users.	✓

Planned output 2020	Achievement / Actual output 2020
Provide Integrated Maritime Services for Member States and other EU stakeholders with maritime related tasks / functions.	✓
Host and manage the "IMS Group User Consultation Meetings", including related working groups ("Automated Behaviour Monitoring and Advanced Analytics" and "Correspondence Expert Group on Drift Modelling"), under the auspices of the High-Level Steering Group for Governance of the Digital Maritime System and Services (HLSG).	✓
Further development of the platform for the provision of Integrated Maritime Services, including enhancement of the long-term storage of vessel position reports and related data in the cloud (HP-IMS); developing Search & Rescue functionalities (collaborative chat and drift modelling tools); new ABM and further look into data analytics exploitation tools; and air emission monitoring functionalities. Training support for end-users and stakeholders provided as appropriate, for individual systems or combined data services.	✓ Note: The need for the collaborative chat functionality will be reassessed during 2021 within the IMS user consultation meetings. The terms of reference for the drift modelling group were revised and agreed by the SSN HLSG
Procure new development services to ensure continuity of for the SafeSeaNet IMS common interface and the IMS mobile application further developments.	✓
Process, store, and distribute global satellite AIS data to end-users. Continue to procure SAT-AIS global data to ensure continuity of SAT-AIS data services of good quality.	✓
Explore the VTS challenge of managing autonomous vessels / MASS.	✓
Host the EU Satellite-AIS Collaborative Forum at least once per year.	✓

Provide support and input to the *ad hoc* expert sub-group on MASS created under the HLSG of the Commission and collaborate with ESA on space-based applications related to MASS.	✓

Output Indicators		Target 2020	Result 2020
Integrated Maritime Services Availability	percentage per year availability to Member States	99	99.75
	percentage per year availability to EUNAVFOR Atalanta	99	99.75
	percentage per year availability to IMS mobile application users	99	99.78
SAT-AIS	global data stream availability	99	99.93

b. Remotely Piloted Aircraft services

Multi-annual strategic objectives	
Security	13. Support proper implementation of EU and International maritime security legislation
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
	22. Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission
	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
	25. Support Search & Rescue efforts of Member States
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

Expected outcome 2020
RPAS operations will be continued to be offered as a service to interested Member States and EU Agencies. Member States will be given the opportunity to share experiences, identify, develop and implement 'best practice' for RPAS operations used for maritime surveillance.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

Despite the restrictions due to the COVID-19 pandemic, EMSA managed to deploy 9 RPAS missions 3 of which for APM - in parallel in 12 different locations across the Union delivering 944 operational days and reaching 1,372 flight hours, either from land or from patrol vessels, serving multiple authorities of Member States and EU Agencies. EMSA also deployed permanently a light-weight RPAS on board EFCA's chartered vessel LUNDY SENTINEL to support fishery monitoring and inspection activities.

During those operations EMSA provided Satellite Communication services and remote live access to the different entities through the EMSA RPAS Data Centre, which is the central hub for distributing live feeds remotely. The next generation of the RPAS Data Centre has been procured and contracted.

In 2020, the first steps were taken towards setting up more permanent regional deployments where RPAS services are serving entities of more than one country in the same region. The RPAS service of EMSA was also used in a Multipurpose Maritime Operation in cooperation with Frontex and EFCA in the Black Sea.

EMSA has maintained an intensive dialogue with Member States and EU Coast Guard Agencies regarding RPAS operations for maritime surveillance during the implementation of the operations. In addition Member States were involved in the preparation of future RPAS operations, in RPAS Data Centre trainings and at the annual RPAS User Group meeting.

Objectives 2020	Achievement
Offer maritime surveillance services with Remotely Piloted Aircraft Systems (RPAS).	✓
Explore the feasibility of longer deployments with a regional or sea basin approach, whereby one RPAS can be used to cover surveillance needs of a number of neighbouring coastal states.	✓
Further develop the EMSA RPAS Data centre to integrate and interface the data received from the RPAS missions with that available in the EMSA IMS and THETIS systems.	✓
Promote the exchange of best practices among EU and National authorities in the use of RPAS for civil maritime surveillance purposes, in particular through the EMSA RPAS User group.	✓
Reinforce cooperation with EASA under the SLA agreement to promote safe and efficient RPAS services.	MoU/SLA was not signed by EASA
Explore other remote sensing technologies such as mobile detection sensors and platforms such as HAPS (High Altitude Pseudo Satellites).	✓

Planned output 2020	Achievement / Actual output 2020
Provide RPAS Services for Member States and EU Agencies executing coast guard functions, including improved satellite communications capacities.	✓
Maintain and develop as appropriate the RPAS DC capabilities to support the needs of integrated maritime services.	✓
Host and manage the EMSA RPAS User Group by meeting at least once per year.	✓

Output Indicators		Target 2020	Result 2020
RPAS operations	number of RPAS available for deployment for multipurpose operations	4	6
	number of deployment days per year	300	944
	RPAS DC availability	95%	99%

c. 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)*

Multi-annual strategic objectives	
Safety	11. Become the technical facilitator in relation to autonomous ships
Security	16. Develop robust solutions to protect its maritime applications and information services
Simplification	20. Facilitate the improvement of overall efficiency of shipping in Europe where feasible
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system

	22. Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission
	25. Support Search & Rescue efforts of Member States
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data

Expected outcome 2020
The Agency will assist Member States to continue improving the monitoring of maritime traffic, safety and logistics. Operational/technical training regarding existing and new functionalities will be available for Member State personnel supported by new eLearning and webinar training tools. Member States will be given the opportunity to share experiences, identify, develop and implement "best practice" approaches based on experience operating SafeSeaNet and other maritime related information e.g. working groups and/or development and revision of guidelines.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The central SafeSeaNet service continued to function well throughout 2020. The Agency continued to provide support to Member States for testing their national SSN systems which are now fully operating in SSN v4. The focus on data quality improvements remained and EMSA continued to work closely through bilateral meetings and trainings (organised via videoconference) with Member States.

Efforts to support the digitalisation/simplification of maritime transport continued with the definition of the business rules and technical specifications of the new SSN v5 to support the legal requirements for registration of persons on board passenger ships, the revised Port Reception Facilities Directive, improved incident reports and additional security measures. The technical developments will begin in 2021 for both the central and the national systems of the Member States.

Further progress was made regarding the development of the central ships, Locations, HAZMAT and organisations databases.

The Traffic Density Mapping Service (TDMS) operational since 2019 was made available to Member States and EU Institutions via the SEG graphical user interface and to the public via the EMODnet portal. In 2020, the service was continued on regular basis and phase 2 of the project was initiated in April 2020, aiming at proving additional upgraded functionalities.

During 2020 the Agency provided regular and ad-hoc statistics on the impact of COVID-19 on shipping activities to support Member States (updates published on the EMSA webpage).

Objectives 2020	Achievement
Ensure that the SafeSeaNet central service is available on a 24/7 basis, and provide operational support to all users, including necessary training, technical guidance and help desk activities.	✓
Maintain and upgrade as appropriate the central SafeSeaNet system, improving functionality and efficiency in line with Union legislation and requirements of stakeholders.	✓
Provide support to Member States regarding the operation of their national SafeSeaNet systems in particular the incorporation of any new message and business logic.	✓
Support the Commission in any work related to preparing legislative proposals in this field.	✓
Provide operational/technical training for users of SSN. Develop further courses on the eLearning platform as well as webinars for SafeSeaNet.	✓

Refine and improve the central databases: CHD, CLD and COD, build an additional CSD for the purposes of the EMSW Regulation.	✓
Support users' statistical needs (MS and Eurostat).	✓
Provide support to the MS cooperation group on Places of Refuge.	✓

Planned output 2020	Achievement / Actual output 2020
SafeSeaNet is operational on a 24/7 basis to support Member States to undertake activities related to maritime monitoring.	✓
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).	✓
Provide support to Member States regarding compatibility of national systems with SafeSeaNet and potential improvements.	✓
The SafeSeaNet Ecosystem Central Databases will be operational and available to use in national systems and improve data quality on related national databases.	✓
Develop SafeSeaNet version 5 based on the agreed schedule by the HLSG.	✓
Maintain, and upgrade as needed, the Traffic Density Map service.	✓

Output Indicators		Target 2020	Result 2020
SafeSeaNet system: Service Operation	percentage per year availability of central SafeSeaNet system	99	99.57
	hours maximum continuous downtime of central SafeSeaNet system	max 12	07h:00min
SafeSeaNet system: Reporting Performance	percentage of notifications processed in time in accordance with SafeSeaNet IFCD requirements	99	100
	percentage of responses to Member States' requests delivered in accordance with SafeSeaNet IFCD (time) requirements	99	100

d. European Maritime Single Window

***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)*

Multi-annual strategic objectives	
Simplification	20. Facilitate the improvement of overall efficiency of shipping in Europe where feasible
	18. Support further simplification, harmonisation and rationalisation of reporting formalities
	19. Support the transition of the EU maritime sector to a paperless environment including e-certificates
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
Reliable partner	31. Engage actively with industry to generate transfer of knowledge and provide non-commercial technical maritime advice
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability

Expected outcome 2020
The Agency will support the Commission, using its expertise in electronic data transmission and in maritime information exchange systems, to simplify reporting formalities for ships with a view to the elimination of barriers to maritime transport.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

EMSA elaborated in collaboration with experts of the Member States and shipping industry's associations the technical specifications which will be used by the European Commission for the delegated and implementing acts of the European Maritime Single Window environment (EMSWe) Regulation (EU) 2019/1239. Such specifications relate to the EMSWe dataset, the EMSWe ships, locations and HAZMAT databases, harmonised spreadsheet templates, message implementation guide and functionalities of the graphical user interfaces of the Member States' Maritime National Single Windows (MNSW). They will set the technical reference used by the Commission and Member States for setting up harmonised MNSWs through which all information necessary for the fulfilment of reporting obligations will be reported in a unique and harmonised manner in all European maritime ports.

The Agency elaborated the revisions of the NSW Guidelines in support of the implementation of Directive 2010/65/EU to reflect the changes stemming from the revised Port Reception Facilities Directive (EU) 2019/883 and Directive (EU) 2017/2109 on registration of persons on board.

EMSA contributed to the maintenance of the IMO compendium on facilitation and electronic business which aims at defining a harmonised dataset and message structures for maritime data exchanges. For that purpose, EMSA participated to the work of the IMO Expert Group on Data Harmonization (EGDH) which elaborated the specifications of additional datasets, related to e.g. ship reporting systems, ship certificates, information on dangerous goods and information on stowaways. The contribution of the Agency aimed at bringing its expertise in maritime data modelling and ensuring that the work on the EMSWe and the IMO Compendium are aligned.

Objectives 2020	Achievement
Assist the Commission where possible with the implementation of Regulation (EU) 2019/1239 establishing a European Maritime Single Window environment and repealing Directive 2010/65/EU.	✓
Contribute to the maintenance of the IMO Compendium.	✓
Provide technical assistance in the implementation of Directive (EU) 2017/2109 amending to Directive 98/41/EC on registration of persons on board and Directive 2010/65/EU on reporting formalities, including organisation of workshops.	✓
Work on measures which will facilitate the overall effectiveness/efficiency for ships in relation to reporting formalities.	✓

Planned output 2020	Achievement / Actual output 2020
Assist the Commission in implementation of the new EMSWe Regulation and with the Reporting Formalities Regulation currently in force, including helping to define the data set and start building a new CSD and upgrading other central data bases.	✓
Assist Member States and the Commission in the implementation of Directive (EU) 2017/2109 amending Directive 98/41/EC on registration of persons on board, including organisation of workshops.	✓

Output Indicators	
SafeSeaNet system data exchange	*The information exchange is covered by the SafeSeaNet indicators.*

Project: Promotion of interoperability between industry and competent authorities in the European Maritime Single Window (EMSW) environment (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)*

Project	***Interoperability Project***
Funding source	***DG MARE***
Time frame	*2018-2021*
Envelope	*3,000,000 €*
Expenditure 2020	***Committed: € 1,689,301*** ***Paid: € 848,718***
Staff	*No extra staff*

Multi-annual strategic objectives	
Simplification	20. Facilitate the improvement of overall efficiency of shipping in Europe where feasible
	18. Support further simplification, harmonisation and rationalisation of reporting formalities
	19. Support the transition of the EU maritime sector to a paperless environment including e-certificates

Expected outcome 2020
The outcome of the project has to be achieved by 2021. The benefits of using VDES technology will be demonstrated particularly in respect of exchanging maritime digital data on a global basis in support of ship-to-shore reporting of operational voyage information.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The Interoperability project continued with a revised plan and set of activities approved by the project's steering committee in July with a particular focus on the EMSWe. The project executed several of its deliverables such as a study on security and interoperability solutions for SafeSeaNet, a study on the use of distributed technologies such as Blockchain for SafeSeaNet and specifications of harmonised dataset and processes related to reporting obligations in ports. Interim results were obtained on technical solutions for facilitating ship-shore reporting, use of reference databases to support Member State authorities and EU agencies, automatic detection of port calls and data computation solutions for Member States related to monitoring of traffic density in EU waters. Further cooperation with the European Space Agency (ESA) and

Norway on the VHF Data Exchange System (VDES) took place and several technical meetings were held. Through such cooperation, a technical solution was designed aiming at demonstrating the benefits of VDES in the domain of ship-shore communication including the exchange of Mandatory Report System (MRS) reports by ships.

Objectives 2020	Achievement
The project will demonstrate over a three-year period how to achieve:	✓
▪ a more efficient data exchange between different authorities of Member States using SafeSeaNet, including exchange of cargo information.	✓
▪ better connectivity among all relevant authorities and end-users in the different Member States.	✓
▪ Specific interoperability solutions contributing to the development of an EMSW environment.	✓
▪ Improved information exchange between ship to shore using VHF Data Exchange-satellite (VDE-SAT) communications. Where possible EMSA will cooperate with Norway and ESA using the Norwegian's satellite with a VDE-SAT payload for testing and validation to explore the potential use of VDES for ship-to-shore reporting and other maritime applications.	✓

Planned output 2020	Achievement / Actual output 2020
The Steering Committee has agreed on the following output for 2020:	✓
▪ Facilitation of MRS and VTS reporting.	✓
▪ Use of reference databases to support MS authorities and EU agencies.	✓
▪ Definition of the EMSWe processes.	✓
▪ Assessment of EMSWe data exchanges via SSN.	✓

Output Indicators		Target 2020	Result 2020
Pilot project and study reports	Outcome and results of pilot projects and studies executed in cooperation with the Commission, Member States and Industry.	Number of reports: 4 (see topics under Planned output above)	3[4]

[4] In line with the revised project plan agreed with Interoperability project's steering Committee and communicated to DG MARE on 7 Sept 2020.

Project: EFCA Service Level Agreement with EMSA

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

Project	***EFCA SLA***
Funding source	***EFCA***
Time frame	SLA: Automatic renewal since 2015
Envelope	IMS for EFCA project: 2019-2020: 150,000 Euro
Expenditure 2020	***Committed: € 80,991*** ***Paid: € 86,783***
Staff	*No extra staff*

Multi-annual strategic objectives	
Surveillance	22. Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission
	23. Develop machine learning and artificial intelligence applications in order to improve risk assessment, vessel position predictability, statistics and innovation
	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
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
Reliable partner	32. Seek synergies with complementary EU bodies and communities to add more value for the EU

Expected outcome 2020

EMSA Integrated Maritime Services (IMS) are offered to EFCA in accordance with their user requirements and their end users in the Member States and the Commission, and EFCA VMS data transmitted by EFCA is integrated in the Integrated Maritime Services (IMS).

The IMS service for EFCA will be further developed in 2020, in response to specific requirements provided by EFCA. These include an overhaul of the user interaction with the SEG user interface, the ability to independently display all last VMS position reports, as well as access to the 5-year archive of vessel position data through the Long Term Storage (LTS).

Earth observation information (including images and value-added products) obtained via the Copernicus Maritime Surveillance service continues to be shared by EFCA with Frontex.

EFCA capacity regarding their fishery control activities will be improved. EFCA, with EMSA support, will share their RPAS experience to identify, develop and implement 'best practice' for RPAS operations in the fisheries control domain.

Sharing of operational capacities and services (vessels, Earth observation services, maritime traffic picture, RPAS) for multipurpose activities will be further intensified.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

Fisheries authorities and EFCA are the main beneficiaries of the IMS provided to support fisheries monitoring and control activities. The number of IMS users at DG MARE, EFCA and the Member States increased reaching 1,093 active users.

For the first time ICCAT (International Commission for the Conservation of Atlantic Tunas) fishing authorisation data were available to MS fisheries control authorities to support the 2020 ICCAT and the General Fisheries Commission for the Mediterranean (GFCM) fisheries monitoring and surveillance operations. The online availability of historical vessel position data has been extended up to 3 years.

The development of the EFCA IMS service v2 with EFCA funding continued in 2020 and will be completed in 2021. It will include, the integration of new high-performant Real Time Maritime Picture Service (RTMPS).

In the framework of the Copernicus Maritime Surveillance service, 379 SAR and 2 optical products were delivered to support EFCA' activities which, compared to 2019, represents a 221% increase.

EMSA continued providing Light RPAS services operating from the fisheries patrol vessel LUNDY SENTINEL chartered by EFCA and including a live data stream sent to EFCA facilities in Vigo. EMSA further enhanced the cooperation with EFCA by equipping this patrol vessel with oil pollution response equipment and by providing associated training.

Objectives 2020	Achievement
Continue implementing the Service Level Agreement signed between EMSA and EFCA.	✓
Service delivery based on the SLA and associated (annual) specific agreement signed with EFCA.	✓
Following identification of appropriate business needs, further develop services for EFCA and their end users in Member States.	✓
Evaluate possible needs for sharing of resources (pollution response vessels, equipment and dispersants).	✓
RPAS operations will continue to be offered as a service to EFCA.	✓

Planned output 2020	Achievement / Actual output 2020
Provision of integrated maritime services under the existing EFCA-EMSA SLA framework, including training and support	✓
Provision of the version 2 of the IMS service for EFCA	Ongoing and extended to 2021
Provision of RPAS services to support EFCA operations	✓
Provide operational and training support to users	✓
Possible additional areas of cooperation in the sharing of operational resources (dispersants, pollution response equipment	✓

Output Indicators		Target 2020	Result 2020
Integrated Maritime Services	percentage per year availability to EFCA	99	99.74

Project: FRONTEX Service Level Agreement with EMSA

***Legal basis**: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.4 (a), 2.4 (b); Regulation (EC) N° 1052/2013 Art. 18. (EUROSUR)*

Project	***Frontex SLA***
Funding source	***Frontex***
Time frame	*Automatic renewal since 2018*
Envelope	*45,000,000 €*
Expenditure 2020	***Committed: € 8,830,726*** ***Paid: € 5,681,829***
Staff	*9 CA*

Multi-annual strategic objectives	
Surveillance	22. Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission
	23. Develop machine learning and artificial intelligence applications in order to improve risk assessment, vessel position predictability, statistics and innovation
	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
	25. Support Search & Rescue efforts of Member States
Reliable partner	32. Seek synergies with complementary EU bodies and communities to add more value for the EU

Expected outcome 2020

Integrated Maritime Services are offered to Frontex in accordance with their user requirements and their end users in Member States.

Frontex capacity regarding their border control activities will be improved. Frontex, with EMSA's support, will develop 'best practice' approaches to use RPAS in the border control domain.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

EMSA continued to provide value-adding operational products and improvements to enhance and support Frontex in conducting operations to address irregular migration and cross-border crime along the external European maritime border. Evidence of this is the increasing portfolio of services provided, which has been expanded over the years through a continuous improvement approach. In 2020, the emphasis was on providing the equivalent of an EMSA-IMS-Frontex through the JORA and Eurosur interfaces.

In terms of the data portfolio, new commercial T-AIS streams in specific areas of interest to Frontex (Eastern Mediterranean and Black Sea) were integrated as well as a Port Calls Service and Latest Voyage Service. The last two give Frontex access to current and historical voyage information as recorded by Member States in SafeSeaNet, as well as access to the information being transmitted directly by each vessel via their AIS reporting systems. Regarding the provision of Earth Observation (EO) products, EMSA maintained a high level of service delivery for both Synthetic Aperture Radar (SAR) and optical imagery. This has been facilitated by Frontex support in requesting EO products with a multi-month perspective. The Maritime Central Database Service was launched in 2020 and currently provides Frontex with the mapping of critical transportation infrastructure around the world, including ports, offshore platforms, border crossing points etc.

Regarding the exploitation of the vast amount of maritime data provided to Frontex, three new Automated Behaviour Monitoring (ABM) algorithms were introduced. These included the first ABM integrating results from the EO based Vessel Detection Service. In addition, the Maritime Risk Analysis Service saw the deployment of the EMSA Maritime Analytics Tool (EMAT). This tool has a particular strength of being able to analyse holistically data sets normally managed in different systems in order to support the 'Risk Assessment' activities of Member States and EU Bodies. Developments regarding the speed and visualisation e.g. exploiting the Real Time Maritime Picture Service (RTMPS), resulted in a significant improvement in performance of the Vessel Monitoring and Tracking Service.

In the RPAS domain, EMSA completed in January the operational service provided to Frontex end of 2019.

Objectives 2020	Achievement
Continue implementing the Service Level Agreement signed between EMSA and Frontex.	✓
Service delivery based on the SLA Annual Programme and associated specific agreement signed with Frontex.	✓
Following identification of appropriate business needs, further develop services to Frontex and their end users in Member States.	✓
Provide operational and training support to users.	✓
If so requested, RPAS operations will continue to be offered as a service to Frontex.	✓

Planned output 2020	Achievement / Actual output 2020
Provision of Integrated Maritime Services and training under the existing Frontex-EMSA SLA framework, which includes support regarding development and operation of new ABMs and the implementation of the EUROSUR regulation.	✓
If so requested, provision of RPAS services to support Frontex operations.	✓
Sharing of operational capacities and services (vessels, Earth observation services, RPAS) for multipurpose activities will be further explored.	✓

Output Indicators		Target 2020	Result 2020
Frontex Service platform	percentage per year availability to Frontex	99	99.83
Frontex operational Exercises	minimum number of exercises EMSA participates in	2	2

2.2 EU LONG RANGE IDENTIFICATION AND TRACKING (LRIT) COOPERATIVE DATA CENTRE (CDC) AND LRIT INTERNATIONAL DATA EXCHANGE (IDE)

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

Planned input		***Actual Input***
CA	*3,899,116*	***3,645,835***
PA	*3,862,906*	***3,315,489***
Staff	*7 AD, 7 AST*	***5 AD, 7 AST***

Multi-annual strategic objectives	
Security	13. Support proper implementation of EU and International maritime security legislation
	14. Provide further information services to protect the EU merchant fleet worldwide
	16. Develop robust solutions to protect its maritime applications and information services
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
	25. Support Search & Rescue efforts of Member States

Expected outcome 2020
The Agency will continue to operate the LRIT IDE and the EU LRIT CDC in compliance with the IMO Performance Standards in the most efficient and economical manner. The Agency will monitor the discussion at IMO regarding the e-Navigation concept and improvement of the LRIT system as appropriate.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The Long Range Identification and Tracking (LRIT) services hosted by EMSA, consisting of EU LRIT CDC, LRIT IDE, EU LRIT Ship Database and LRIT Consumption Tool, were fully operational throughout the year, except for a 5h30 downtime of the LRIT IDE on 1 of January 2020 due to a certificate issue, and a 6h downtime of the LRIT IDE on 17 of November 2020 due to a Disaster Recovery failover exercise with USCG. The LRIT IDE provided services and testing support to 67 LRIT DCs worldwide.

Four new releases for the EU LRIT CDC and the LRIT IDE have been developed and deployed in 2020.

Finally, after a call for tender was initiated in August 2020, a new contract for the maintenance of the LRIT services has been awarded.

Objectives 2020	**Achievement**
Continue operation and maintenance of the LRIT IDE and the EU LRIT CDC in accordance with IMO performance standards.	✓
Provide operational support to all users of the EU LRIT CDC, including training and helpdesk activities.	✓
Provide LRIT services to new participants wishing to join the EU LRIT CDC.	✓
Organise regular meetings with relevant LRIT users.	✓
Provide training on EU LRIT CDC to LRIT users.	✓
Meet legal and financial obligations concerning the exchange of LRIT data.	✓

Planned output 2020	**Achievement / Actual output 2020**
Continued operations and ongoing maintenance of the LRIT IDE and the LRIT CDC.	✓

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

Output Indicators		Target 2020	Result 2020
EU LRIT DATA CENTRE			
System operational	percentage per month availability	99	99.89
	hours maximum continuous downtime	max 4	00h37min
EU CDC reporting performance	percentage position reports delivered in accordance with IMO requirements (periodic reports: 15 min; polls: 30 min)	99	99.57
Web user interface	percentage per year availability to users	99	99.83
LRIT - IDE			
LRIT-IDE System operational5	percentage per year availability of LRIT IDE in accordance with IMO requirements	99.9	99.68[6]
	hours maximum continuous downtime of LRIT IDE	max 4	6h[7]

[5] Discussions on the hosting of the LRIT-IDE are on-going. 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. After the completion of the hand-over process these indicators will be deleted.

[6] Below the target due to the failover exercise to and for the Disaster Recovery (DR) site, operated by the USCG, 17-19 Nov. During the exercise the DR LRIT IDE did not deliver the service as expected due to configuration issues in the DR network infrastructure.

[7] See above.

2.3 THETIS and its modules

***Legal basis**: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.3(a), 2.2.(b) and 2.5; Directive (EU) 2017/2110, Art.10; Directive 2009/16/EC as amended; Directive (EU) 2016/802; Directive (EU) 2017/210; Directive 2000/59/EC; Directive (EU) 2019/883 (PRF)*

Planned input		***Actual Input***
CA	*1,912,354*	***2,291,688***
PA	*2,186,685*	***2,335,532***
Staff	*4 AD, 1 AST*	***3 AD, 1 AST***

Project	***THETIS- EU***
Funding source	***EC, DG ENV as concerns the Sulphur Directive***
Time frame	*2018-2021*
Envelope	200,000 €
Expenditure 2020	***Committed: € 101,066*** ***Paid: € 32,937***
Staff	*No extra staff*

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
	8. Support Maritime Administrations in their PSC role and promote a harmonised approach to PSC globally
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation
International reference	34. Step up technical and operational support where EMSA can add value to relevant EU foreign policies

Expected outcome 2020

The Agency operates the Port State Control information system (THETIS) in line with the Port State Control Directive (2009/16/EC) as amended, including the Implementing Acts and the Paris MoU text, the RoPax Directive ((EU) 2017/2110), Regulation 391/2009 on common rules and standards for ship inspection and survey organisations, the BWMC and Regulation 1257/2013 on Ship Recycling.

THETIS-EU caters enforcement of the provisions of Directive 2016/802/EU and the calculation of frequency of inspections and samples and the future targeting system.

THETIS-EU supports as a voluntary module Member States in reporting security inspections in accordance with Regulation 725/2004; supports the Port Reception Facilities Directive (2000/59/EC for 2020 and 2021 and Directive (EU) 2019/883 from 2021 and onwards); caters for the Flag State elements of the Directive on a system of inspections for the safe operation of ro-ro ferry and high-speed passenger craft in regular service and amending Directive 2009/16/EC on Port State Control.

THETIS-MRV caters for the provisions of Regulation (EU) 2015/757 and may cater for the reporting obligations stemming from the international level.

THETIS-MED supports as a dedicated inspection database the work of the Med MoU.

Operations of THETIS and its modules are supported technically and operationally by a helpdesk. All elements of THETIS will be communicating with a dedicated tool for analysis and statistics where appropriate.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

A new module of THETIS-EU in support of ship inspections in accordance with the Ship Recycling Regulation, available to all Member States, was put in operation in June 2020. Training to end-users was provided to facilitate its smooth introduction.

THETIS-EU and THETIS were updated in December 2019 to cater for the new 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. The impact on the implementation of the Directive on Port State Control was closely monitored throughout 2020.

An extended webservice was developed for eCertificates to be shared between Recognised Organisation and THETIS. One RO has co-developed and sends detailed information since June 2020. A similar service is available to Administrations (Flag states) and other ROs and further developments are ongoing. Detailed certificate information is a precondition for future modernisation of various types of inspections.

A new off-line system was developed and made available to all Member States. This system allows inspectors to work off-line with THETIS and THETIS-EU, which ensures significant improvement of flexibility and efficiency.

On 1 February 2020 THETIS Med went live. THETIS Med provides digital solution for the members of the Mediterranean MoU on Port State Control. All inspections previous recorded in the CIMED system have been migrated to THETIS Med, and new inspections, as performed, are recorded in accordance with relevant procedures.

EMSA provided RPAS emission monitoring services to Denmark and France (see also §5.2b). Similar to the operation performed by the Belgian Coast Guard, the measurements by RPAS of the SOx and CO concentration in the plumes of vessels passing by, and thus the derived sulphur content in the burnt fuel, are automatically ingested in THETIS-EU and the appropriate alerts are sent out. A new system-to-system interface with THETIS-EU Sulphur was put in place to automatically transfer emission measurements carried out by the national Authorities with manned aircraft, significantly boosting the overall number of measurements and associated alerts.

Objectives 2020	Achievement
Ensure the proper operation of THETIS, THETIS-EU and other newly developed modules.	✓
Ensure on time development to comply with new or amended International or EU legislation coming into force.	✓
Ensure relevant training, including the development of best practises and guidance.	✓
Ensure regular meetings with relevant end users.	✓

Planned output 2020	Achievement / Actual output 2020
Information System THETIS: operational, maintained and under continuous enhancement to meet new requirements. Enhanced to support the PSC provisions of Directive (EU) 2017/2110 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/EC.	✓
Information System THETIS-EU: operational, maintained, and under continuous enhancement to meet new requirements. Enhanced to support the FS provisions of the Directive (EU) 2017/2110 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service and amending Directive 2009/16/EC of the European Parliament and of the Council	✓

on port State control and repealing Council Directive 1999/35/EC, Regulation 1257/2013 on Ship Recycling, Regulation 725/2004 on maritime security and Directive 206/802/EU and Directive 200/59/EC on Port Reception Facilities for as long as it will be valid and Directive (EU) 2019/883 when it comes into force including the foreseen Union risk based targeting mechanism for the selection of ships to be inspected.	
Interface with SafeSeaNet operational.	✓
Web Service connecting Flag States and or ROs with THETIS operational.	✓
Interfaces with remote sensing installations in the Member States operational.	✓
THETIS-MRV operational and maintained.	✓
Cooperation with Paris MoU and Member States to supervise, verify and validate the operation and further enhancement of the THETIS system, including the development of a standard for eCertificates.	✓
Cooperation with a number of Member States (PSC and Flag States) to verify efficiency gains by controlling eCertificates through THETIS.	✓
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.	✓
Cooperation with the Commission, COSS, the Sulphur Committee, the Ship Recycling Committee and MARSEC Committee to supervise, verify and validate the operation and further enhancement of THETIS-EU as relevant.	✓

Output Indicators		Target 2020	Result 2020
System operational	availability in percentage	96	99.50
	hours maximum continuous downtime	max 6	3h:41m:30s
Helpdesk Service	percentage of requests closed in less than 5 days[8]	75	97.80

[8] The statistics required to report on this KPI have not been available since November 2016, following a change of contractor and ticketing tool. The capability to support this KPI has been re-established during the 1st quarter of 2019.

Project: 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.*

Project	***THETIS-MRV***
Funding source	***EC, DG CLIMA***
Time frame	*2016-2020*
Envelope	*500,000 €*
Expenditure 2020	***Committed: € 154,908*** ***Paid: € 61,414***
Staff	*No extra staff*

Multi-annual strategic objectives	
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
	2. Intensify pollution prevention activities by building Member State capacity and developing practical guidance and tools for the wider maritime cluster
	3. Promote and support the development and implementation of innovative EU and global solutions to mitigate climate change
Safety	8. Support Maritime Administrations in their PSC role and promote a harmonised approach to PSC globally
	7. Support Maritime Administrations in their Flag State implementation effort
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data

Expected outcome 2020
THETIS- MRV operational. Subject to the outcome of ongoing discussions, development of a web-based application, using available data from the THETIS-MRV, to support the reporting obligations of the Member States to the IMO Global Data Collection System (DCS).

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

THETIS-MRV was operational uninterruptedly during the year and catered for recording of the emissions over 2019. A technical enhancement was implemented in quarter four of 2020, in time for the annual reporting cycle over 2020. Support of the end-user (companies) was ensured within the KPI even throughout the pre-deadline spike in April 2020.

Objectives 2020	**Achievement**
Implementation of the tasks defined in the relevant cooperation agreement with the Commission.	✓
THETIS-MRV operational.	✓
Setting-up of Helpdesk for Member States and end-users.	✓
Organisation of workshops and/or trainings for users.	✓
Provision of technical assistance to the Commission with respect to delegated and implementing acts adopted pursuant to the MRV Regulation.	✓

Planned output 2020	Achievement / Actual output 2020
THETIS-MRV operational.	✓
Organisation of awareness and technical workshops for stakeholders (industry, MRV shipping verifiers) and competent authorities of Member States as relevant.	✓

Output Indicators		Target 2020	Result 2020
THETIS-MRV	timely delivery of tasks foreseen by the cooperation Agreement	THETIS-MRV operational.	yes
		System to provide the necessary data to support the publication of information foreseen by the MRV Regulation.	yes

2.4 MARITIME SUPPORT SERVICES

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

Planned input		***Actual Input***
CA	*1,447,379*	***1,441,269***
PA	*1,447,379*	***1,341,974***
Staff	*3 AD, 4 SNE, 4 CA*	***3 AD, 3 SNE, 4 CA***

Multi-annual strategic objectives	
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
	25. Support Search & Rescue efforts of Member States
Sustainability	4. Further develop an agile, effective, innovative and risk-based response toolbox to top up Member Sate capacity to deter, detect and respond to pollution from ships and oil pollution from gas installations

Expected outcome 2020
Users of the vessel traffic and maritime information services benefit from timely and appropriate helpdesk and monitoring services. Users of EMSA's operational services benefit from 24/7 availability to activate and mobilise such resources during an emergency, by triggering the EMSA contingency plan.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The Maritime Support Services (MSS) provided uninterrupted 24/7 operational and technical helpdesk services to users using vessel traffic monitoring and surveillance systems hosted by the Agency. The MSS provided continuous monitoring of all EMSA hosted maritime applications, thus ensuring the availability of such applications with high performance standards .

Related to operational services, the EMSA emergency services within the Contingency Plan were activated on 19 occasions by Member State authorities, e.g. the grounding of the bulk carrier WAKASHIO in the republic of Mauritius and the subsequent pollution caused by the bunkers on board. EMSA supported also the Bulgarian authorities following an illegal discharge of palm oil, tracking the spill and identifying possible polluters that crossed the area in previous days.

Regular assessments and reporting of SafeSeaNet and LRIT data quality, implementation and performance to the SafeSeaNet National Competent Authorities carried out by MSS staff have shown the effectiveness that such assessments may have for Member States in terms of improvement of their existing applications.

Finally, the MSS supports Member States and the Commission by tracking vessels of interest (e.g., the nuclear powered Russian bulk carrier, SEVMORPUT, on his voyage to Saint Petersburg from West Africa) or providing detailed analysis on historical tracks to national administration. In addition, several reports COVID-19 related were drafted and regularly distributed (e.g., cruise ship reports or impact on shipping traffic)

Objectives 2020	**Achievement**
Ensure timely and appropriate helpdesk and monitoring services.	✓

Planned output 2020	**Achievement / Actual output 2020**
Maritime Monitoring Services to be provided on a 24/7 basis including: ▪ Monitoring availability and performance of EMSA maritime systems. ▪ Ensuring continuity of dataflow by data providers. ▪ Verifying and reporting on quality of data in systems.	✓

- Maintaining ship watch reference lists (banned ships, single hull tankers, location codes, reference ship identifiers, Member State contacts or responsible authorities).
- Providing timely and appropriate operational and technical helpdesk to the Commission and Member State users of the maritime information services.
- Implementing a survey assessing user perception of MSS services every 2 years.
- Refining procedures to maximise efficiency in relation to pending requests.

In the event of maritime emergencies, the MSS will:

- Act as single point of contact.
- Provide reporting to EMSA and the Commission on maritime accidents of EU interest in accordance with the EMSA contingency plan

If appropriate, initiate the procedure of mobilising EMSA operational services in accordance with pre-defined procedures.	✓

Output Indicators		Target 2020	Result 2020
Maritime Support Services available 24/7[9]	average time in hours for feedback or resolution of issues relating to emergencies, incidents in maritime applications or urgent helpdesk requests	<2	6.8 minutes
	average time in hours for feedback or resolution of issues relating to non-urgent helpdesk requests or scheduled interventions	<8	12.3 minutes
MSS Data Quality Reports	reporting on the SafeSeaNet /LRIT implementation and data quality (overall and per Member State)	20 Reports	23 Reports

[9] The statistics required to report on this KPI have not been available since November 2016, following a change of contractor and ticketing tool. The capability to support this KPI has been re-established during the 1st quarter of 2019.

Project: CISE Transitional Phase

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

Project	***CISE Transitional Phase***
Funding source	***EC, DG MARE***
Time frame	*April 2019 - October 2022*
Envelope	*3,500,000 €*
Expenditure 2020	***Committed: € 1,262,350*** ***Paid: € 608,080***
Staff	*4 CA*

Multi-annual strategic objectives	
Security	17. Enhance involvement as a technical and operational partner in the context of the EU maritime security strategy
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
	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
Reliable partner	32. Seek synergies with complementary EU bodies and communities to add more value for the EU
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data

Expected outcome 2020
Progress will be discussed and agreed with the CISE Stakeholder Group. Objectives as described above should be reached by the end of the project in December 2023

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

EMSA has been tasked by DG MARE using two Grant Agreements to coordinate the CISE transitional activities. The main activities undertaken were:

- **Coordination of the CISE Stakeholder Group (CSG)**: The CSG meets regularly every 3-4 months. In 2020 three CSG meetings were held by EMSA with two of them being conducted virtually due to COVID-19 travel restrictions;
- **Project management**: The roadmap for the transitional phase was defined and was regularly monitored, updated and reported to the CSG members. In addition, bilateral meetings with the CSG members were conducted on a weekly basis and working groups with representatives from MS were coordinated to support the transitional phase activities (Configuration Board, the procurement of the Responsibility to Share audit methodology, the setting-up of the Cooperation Agreement).
- **Technical and Operational support**: The service support to the Member States was set up and EMSA/JRC provided assistance to Member States where needed and requested. The procurement for the evolutive maintenance of the CISE network was awarded in Q1 of 2020. This framework contract has been used from June 2020 to start developing a new CISE node to overcome the long overdue transfer of the IPR between the EUCISE2020 consortium and Commission. Therefore, the assessment of the EUCISE2020 deliverables could still not take place and were taken out of scope.
- **Training and Best practices**: In 2020, two trainings (20 participants each) for the node administrators were organized virtually. A workshop to discuss the development of CISE pre-operational services (40 participants) was also held.
- **Establishing the administrative framework**: In 2020 the Cooperation Agreement (CA) was further developed and discussed in view of finalizing the text of the agreement by the end of 2020. The CA defines the conditions of use for the information being exchanges within CISE once it becomes operational. The requirements to define the Responsibility to Share audit was drafted in collaboration with the MS working group, and sequentially the

procurement was launched. Three brainstorming workshops were organized to start collecting possible use cases to be implemented in CISE.

- **Communication**: The CSG members were updated regularly about the development of the CISE transitional phase activities. The collaborative platform to share documents was intensively used.

Planned outputs 2020	Achievement
The outcome of the "Lessons learnt from EUCISE2020" should be covered by a report. The report shall be presented to the CISE Stakeholder Group and it should be used to further finetune the priorities for the Transitional Phase.	Taken out of scope
The expected results for the action "Coordination of the CISE Stakeholders Group" are defined in the governance structure of the Stakeholder Group. Furthermore, a collaborative platform shall be established and managed to share documents (project library) among the project stakeholders.	✓
The CISE Project Plan will constitute the tangible results of the action "Project Management". When relevant the project plan, its status and the outstanding risks will be discussed during the Stakeholder Group meetings.	✓
EMSA shall implement the "EMSA adaptor", install a node to enable data exchange through the CISE network.	✓ Implementation of the EMSA's adaptor has been postponed to 2021
Establish the technical and operative framework to maintain and carry out the evolutive maintenance of the CISE building blocks.	✓
EMSA shall put in place legal support to address the administrative frameworks which need to be in place at the beginning of the operational phase and to cover any legal issue that may arise during the transitional phase.	✓

Output Indicators	Target 2020	Result 2020
CISE nodes	11	11

Project: COPERNICUS MARITIME SURVEILLANCE SERVICE

***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); Regulation (EU) Nº 377/2014 of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010*

Project	***COPERNICUS Maritime Surveillance Service***
Funding source	*EC, DG GROW*
Time frame	*2015-2021*
Envelope	*40,000,000 €*
Expenditure 2020	***Committed: € 15,721,398*** ***Paid: € 10,892,276***
Staff	*3 CA*[10]

Multi-annual strategic objectives	
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
	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
Reliable partner	31. Engage actively with industry to generate transfer of knowledge and provide non-commercial technical maritime advice
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability
International reference	34. Step up technical and operational support where EMSA can add value to relevant EU foreign policies

Expected outcome 2020
Copernicus services are offered through EMSA to stakeholders in the maritime surveillance domain in accordance with user requirements, based on an implementation plan approved by the Commission.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In 2020 the Copernicus Maritime Surveillance (CMS) service, implemented on behalf of the Commission, provided satellite-based surveillance information in the areas of fisheries control, maritime safety and security, law enforcement, customs, marine environment pollution monitoring, and support to international organisations.

50 Member State administrations, EU institutions and international organisations were registered to receive operational services in 2020, representing a growth of 22% in organisations served compared with 2019. There were 5,497 earth observation services delivered (i.e. satellite image products and associated added value products, such as vessel detection, etc.) which represents a 40% increase compared to the previous year. The COVID-19 pandemic contributed to the uptake of earth observation services for surveillance, as the delivery of satellite based capabilities was not impacted and could support Member States by, in some cases, mitigating gaps in coverage caused by the decrease in use of other (manned) surveillance assets.

[10] These positions are covered by EMSA's subsidy.

Ten requests were made for emergency support, including: searching for missing vessels; monitoring debris and pollution following vessel groundings, fires on board, and sinking; monitoring oil pollution; and, locating containers washed overboard.

Training activities were strengthened considerably. 58 participants attended a live online CMS Basic Training course and 138 further participants obtained training in the Copernicus Maritime Surveillance service as part of EMSA trainings with a broader scope. A further 324 participants accessed the modular CMS e-learning course.

Objectives 2020	Achievement
Implement the activities defined in the Copernicus Maritime Surveillance Services Annual Implementation Plan for 2020.	✓
Support the function areas as defined in the delegation agreement, including: - Fisheries control; - Maritime safety and security; - Law enforcement; - Customs; - Marine environment (pollution monitoring); - Cooperation with international organisations and other activities.	✓
Develop EMSA's portfolio of Earth observation products and services in areas relevant for Copernicus activities.	✓
Increase user awareness, foster user uptake and refine user requirements.	✓
Deliver training sessions for CMS users to provide a basic introduction and overview of the capabilities and limitations of EO products, and how they can be used in different operational contexts, with a hands-on component related to using the EMSA interfaces.	✓
Organise the CMS user group and function specific user workshops.	✓
Phase in previously identified new satellite data sources relevant to the service (i.e. satellite video, thermal infra-red, radio frequency detection, etc).	✓

Planned output 2020	Achievement / Actual output 2020
Provision of CMS services to the six functions areas defined in the Annual Implementation Plan.	✓
Increase in the number of organisations served by CMS.	✓
Organising the CMS annual user group meeting.	✓
Delivery of planned training and user uptake activities.	✓

Output Indicators		Target 2020	Result 2020
Copernicus Maritime Surveillance service Earth observation (EO) image delivery	percentage per year EO image delivery ratio	90	94
Number of user organisations registered	Number of Member States National Administrations, EU institutions and international organisations using the service	40	50

Visits and Inspections to monitor the implementation of EU legislation

3.1 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	*2,191,734*	***2,023,693***
PA	*2,167,734*	***1,934,436***
Staff	*10 AD, 1 AST, 1 SNE*	***9 AD, 1 SNE, 1 CA***

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
	7. Support Maritime Administrations in their Flag State implementation effort
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation

Expected outcome 2020
Based on the reports submitted by the Agency, the Commission should be able to make a sound assessment of the ROs and QACE and, where appropriate, request corrective measures of Recognised Organisations or take decisions on withdrawal of recognition or other sanctions, in order to improve the overall quality of the certification work undertaken by those organisations. Due to the COVID-19 pandemic, the number of inspections expected to be carried out in 2020 is considerably reduced compared to previous years. Due to the concentration of inspections in the last quarter of 2020, the associated reports are not expected to be issued until 2021.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In shaping its programme of inspections of Recognised Organisations (ROs) and determining their scope and location, the Agency implemented a risk-based approach, taking into account, inter alia, the EMSA inspection history, results of Member States' monitoring activities, the outcome of the Commission's assessments and follow-up on corrective actions, as well as industry developments.

The initial planning for 2020 was disrupted by the COVID-19 pandemic outbreak by which time only one RO Head Office inspection had been carried out. An alternative plan was agreed with the Commission and EMSA gathered information regarding the measures and actions taken by each RO in the light of the COVID-19 pandemic, with focus on remote survey practices, and conducted a desk study of their activities. Based on the analysis provided to the Commission and the Member States, a campaign of remote Head Office inspections starting in September 2020 was launched, focussing on the measures adopted by the ROs in response to the pandemic. Four such inspections were conducted by the end of 2020, with the other ROs to be inspected by July 2021. This work will feed into expected future discussions on remote surveys at international level.

EMSA also continued to assist the Commission in its preparation of the assessment of ROs and in the evaluation of the ROs' responses to the Commission's assessments, as well as, following the amendment to Regulation (EC) No 391/2009 as a consequence of BREXIT, in discussions with the Member States to implement the monitoring of ROs in a more efficient and effective way.

Objectives 2020	**Achievement**
Implement as much as feasible the original field inspection programme of ROs, following the suspension of inspections due to the COVID-19 pandemic.	✓
Continue to apply a risk-based approach for RO inspections.	✓

Provide assistance to the Commission and Member States as concerns the monitoring of Recognised Organisations including a monitoring exercise regarding RO remote auditing activities conducted in the context of the COVID 19 pandemic and the implementation of a new working arrangement to be put in place by the Commission.	✓
Support and implement ideas for more effective sharing of information on inspections.	✓
Assist the Commission in the periodic assessment of QACE.	No assistance requested.
Provide draft assessment reports to support the Commission's assessments of Recognised Organisations.	✓

Planned output 2020	Achievement / Actual output 2020
7-9 field inspections of Recognised Organisations' offices.	Inspections were suspended from March to September and a different strategy was agreed with the Commission for subsequent inspections, carried out remotely.
Upon request of the Commission, initiate inspections of classification societies following any new request for EU recognition.	No requests received.
Upon request of the Commission, provide technical assistance in the periodic assessment of the Quality Assessment and Certification Entity set up by the Recognised Organisations in accordance with Article 11 of Regulation (EC) No. 391/2009.	No requests received.
Provide draft assessment reports to assist the Commission in its preparation of the assessments of Recognised Organisations and their follow-up.	✓
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.	✓
Assist the Commission in the development and implementation of a new working arrangement for the participation of authorising Member States in EMSA inspections and dissemination of inspection results,	✓

Output Indicators[11]		Target 2020	Result 2020
Inspections	number of RO inspections per year	7-9	5[12]
Reports	number of reports per year	8	7[13]

[11] Indicators exclude inspections and reports of candidate ROs and ad hoc ship visits.

[12] RO inspections were suspended from March due to the COVID-19 pandemic. From September, a campaign of remote inspections focused on the measures adopted by ROs in response to the pandemic.

[13] The suspension of RO inspections from March to September due to the COVID-19 pandemic meant there were fewer reports to send out.

Draft assessment reports	number of reports per year	5	5

3.2 STCW

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

Planned input		***Actual Input***
CA	*1,726,613*	***1,713,780***
PA	*1,933,683*	***1,678,259***
Staff	*6 AD, 2 AST, 1 SNE*	***6 AD, 2 AST, 1 SNE***

Project	***Participation of developing countries in the international workshop on MLC 2006 on 18-20 February 2020***
Funding source	***IMO***
Time frame	2019-2020
Envelope	*85,000 USD*
Expenditure 2020	***Committed: € 33,507*** ***Paid: € 28,100***
Staff	*No extra staff*

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
	7. Support Maritime Administrations in their Flag State implementation effort
	12. Enhance role in relation to the human component of shipping
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation
	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data

Expected outcome 2020

Based on the reports submitted by the Agency, the Commission should be in a position to take policy decisions and/or request corrective measures of third countries or Member States, in order to improve the overall quality of the education and training of seafarers and the correctness of their certification in line with the STCW Convention or Directive 2008/106/EC, as amended, respectively.

The assistance provided by the Agency to the Commission for the implementation of the revised Directive should contribute to better legislation within the EU, as well as to the incorporation in the EU legislation of the most recent amendments to the STCW Convention.

The suspension of visits and inspections due to the COVID-19 pandemic means that the number expected to be carried out in 2020 will be reduced compared to previous years. For the visits and inspections planned for the last quarter of 2020 the associated reports are not expected to be issued until 2021.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The Agency planned to carry out inspections of the maritime education, training and certification systems in third countries and visits to Member States. Due to the COVID-19 pandemic, EMSA conducted one field inspection in a third country, the

Philippines. An inspection of Brazil was carried out remotely; follow-up fieldwork will be carried out when conditions allow. Other planned inspections were postponed. The Agency also continued the second cycle of Member States visits, conducting five visits through a series of remote sessions, to be supplemented with fieldwork in 2021 whenever conditions allow.

Support to the Commission was provided with technical opinions on corrective action plans and for follow-up activities stemming from EMSA's visits and inspections, including in the drafting of assessments of compliance.

A fifth statistical review regarding seafarers holding valid EU certificates and endorsements of recognition, representing a snapshot of the European labour market, was published. The report was based on data extracted from certificates and endorsements registered by EU Member States up to 31 December 2018 and recorded in the STCW Information System. EMSA started a project to enhance the STCW-IS by developing a web-based tool for interactive statistical review by public users.

Following the work initiated in 2019, EMSA continued participating in the correspondence group on the review of the STCW-F Convention. Furthermore, an online workshop with Member States was organised to prepare a document to be submitted to the IMO proposing a review of the STCW Convention and Code, for further discussion at Council level.

As a joint initiative with the Commission, IMO and ILO, EMSA organised an "International Workshop on the Maritime Labour Convention", in Lisbon in February. The workshop aimed to ensure further implementation of the Convention and create a worldwide level playing field through harmonisation and uniformity in compliance and enforcement.

Objectives 2020	Achievement
Reduced number of visits and inspections due to COVID-19 pandemic.	✓
Ensure the availability of the STCW Information System.	✓
Produce an Annual Review of Seafarer Statistics.	✓
Provide any necessary technical assistance on aspects related to the education, training and certification of seafarers and social issues.	✓
Assist the Commission in any development of new legislation regarding the training, certification and working conditions of seafarers and fishermen.	✓

Planned output 2020	Achievement / Actual output 2020
2-3 inspections to third countries.	✓
3-4 visits to Member States.	✓
Maintain the STCW Information System; minimising down-time, ensuring a high level of availability and providing system support to users.	✓
Organise a workshop on the implementation of MLC 2006 and facilitate the participation of selected third countries.	✓

Output Indicators		Target 2020	Result 2020
Inspections and visits	number of inspections and visits per year	5-7	6[14]
	percentage of visit notifications sent to Member States with at least three months' notice	95	100
Reports	number of reports per year	4	3[15]
	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
STCW Information System	percentage per year availability	96	99.17

[14] STCW visits and inspections suspended from March due to COVID-19 restrictions. Visits and inspections were carried out remotely from September.

[15] STCW visits and inspections suspended from March to September 2020 due to COVID-19 restrictions so fewer reports to be sent out.

3.3 VISITS TO MEMBER STATES TO MONITOR THE IMPLEMENTATION OF UNION LAW

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

Planned input		***Actual Input***
CA	*1,484,055*	***1,541,469***
PA	*1,484,055*	***1,480,968***
Staff	*5 AD, 3 AST, 1 SNE*	***5 AD, 3 AST, 1 SNE***

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation

Expected outcome 2020

Provide advice to enable the Commission and the EFTA Surveillance Authority to assess and verify the implementation of EU maritime legislation in the Member States visited.

Assist EU and EFTA Member States in their understanding of the requirements of EU legislation and the resources needed for its effective implementation.

The suspension of visits due to the COVID-19 pandemic means that the number expected to be carried out in 2020 is reduced compared to other years. For the visits planned in the last quarter of 2020 the associated reports are not expected to be issued until 2021.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

EMSA continued the agreed cycles of Member State visits to assist the Commission and the EFTA Surveillance Authority in assessing Member States' effective implementation of Union maritime law. The visits were carried out based on the specific technical methodology for each visit cycle and in accordance with the Methodology for Visits to Member States, with the additional objective of creating value for the visited Member States in the form of advice and guidance and reduce administrative burden. Due to the COVID-19 pandemic, nine of the initially planned 17 visits were carried out remotely, with the necessary fieldwork to be carried out when conditions allow.

In 2020, visits were carried out in respect of four EU Directives dealing with: the sulphur content of marine fuels ((EU) 2016/802), Port State Control (2009/16/EC), marine equipment (2014/90/EU) and harmonised requirements for the safe loading and unloading of bulk carriers (2001/96/EC). For the first time, the PSC visits to EU Member States covered the requirements of Directive (EU) 2017/2110 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service.

A report of each visit completed in full was presented to the Member State in question and the Commission (and where appropriate the EFTA Surveillance Authority).

Preparatory work for commencing a new cycle of visits on passenger ship safety, including the holding of a pre-cycle workshop with the Member States, concerning the following Directives was completed:

- Directive 98/41/EC on the registration of persons sailing on board passenger ships operating to or from ports of the Member States of the Community, as amended;
- Directive 2003/25/EC on specific stability requirements for ro-ro passenger ships, as amended; and
- Directive 2009/45/EC on safety rules and standards for passenger ships, as amended.

However, the start of the cycle, highly dependent on field work, was postponed to 2021 due to the COVID-19 pandemic.

The detailed information assembled from each cycle is the essential source of information needed for horizontal analysis on operational implementation of the respective Union law and on the cost-effectiveness of the measures in place for such implementation, conducted once a full cycle of visits has been completed.

The Quality Management System covering the full scope of the Agency's visits and inspections activities continued to be implemented and provides a solid framework for continuous improvement.

Objectives 2020	Achievement
Sound implementation of the Methodology for Visits to Member States.	✓
Primary focus on port State control, the sulphur content of marine fuels safe loading and unloading of bulk carriers and marine equipment.	✓
Prepare and start a new cycle of visits on passenger ship safety legislation.	✓

Planned output 2020	Achievement / Actual output 2020
3-4 visits to Member States in respect of Directive 2009/16/EC on port State control and related activities.	✓
4-5 visits on the implementation of the Sulphur Directive and related Commission Implementing Decisions.	✓
4-5 visits in respect of Directive 2014/90/EU on marine equipment.	✓
2-3 visits in respect of Directive 2001/96/EC on the safe loading and unloading of bulk carriers.	✓
1-2 visits in respect of Directives 98/41/EC, 2003/25/EC and 2009/45/EC, all as amended, related to passenger ship safety.	The start of this visit cycle was deferred to 2021 due to the COVID-19 pandemic.
1 visit to an EFTA Member State in respect of Directive 2000/59/EC on port reception facilities.	This visit was cancelled by the EFTA Surveillance Authority.
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.
Upon request by the EFTA Surveillance Authority other visits to EFTA Member States to monitor the implementation of relevant legislation.	No requests received.
1 pre-cycle workshop for the new cycle of visits on Passenger Ship Safety.	✓

Output Indicators		Target 2020	Result 2020
Visits	number of visits per year	15-20	17[16]
	percentage of visit notifications sent to Member States with at least three months' notice	95	100[17]
Reports	number of reports per year	12-14	12[18]
	percentage of draft reports submitted to the visited Member State within 90 days from end of visit	95	100

[16] STCW visits and inspections suspended from March to September 2020 due to COVID-19 restrictions so fewer reports to be send out.
[17] To reduce the risk of having to change the visit dates due to COVID-19, the deadline was reduced to two months for visits from Q3. The KPI is reported on that basis.
[18] Visits suspended from March to September 2020 due to COVID-19 restrictions so fewer reports to be sent out.

3.4 MARITIME SECURITY

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

Planned input		***Actual Input***
CA	*828,447*	***931,020***
PA	*830,533*	***882,364***
Staff	*3 AD, 1 SNE, 1 CA*	***4 AD[19], 1 SNE***

Multi-annual strategic objectives	
Security	13. Support proper implementation of EU and International maritime security legislation
	15. Provide the platform to exchange best practices and ensure cross-sectoral cooperation on cybersecurity for the maritime cluster
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation

Expected outcome 2020
Provide technical assistance to enable the Commission and the EFTA Surveillance Authority to assess and verify the implementation of EU maritime security legislation in the Member States visited and identify any changes that may be needed in the conduct of the Commission inspections in order to improve the overall level of maritime security. The suspension of inspections due to the COVID-19 pandemic means that the number expected to be carried out in 2020 is reduced compared to other years.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In 2020, the Agency continued providing technical assistance to the European Commission and the EFTA Surveillance Authority (ESA) in the performance of their inspections under Regulation (EC) No. 725/2004.

EMSA kept on supporting DG MOVE and the Member States in various tasks notably within the Maritime Security Committee (MARSEC) and the Stakeholders Advisory Group on Maritime Security (SAGMAS). A project on developing interim Guidance on Maritime Security jointly with DG MOVE was kicked off in 2020. The Agency also participated in the evaluations of the monitoring reports that Member States are obliged to submit to the European Commission on an annual basis.

EMSA cooperated with ENISA regarding its recently published Guidelines - Cyber Risk Management for Ports. In the wake of its new 5-year strategy, EMSA increased also its Cyber security activity with the establishment of a dedicated in-house Task Force. This TF conducted a mapping and a gap analysis on maritime cybersecurity in the ecosystem of ships and port facilities with a view to provide tailor-made guidance on maritime cybersecurity and to propose new projects to address the identified gaps.

On request by the Commission a project to address challenges by the increase of remote MARSEC inspections was initiated.

Objectives 2020	**Achievement**
Similar effort of missions as in 2019 was planned, but due to COVID-19 travel restrictions the overall number of visits carried out will be less.	✓

[19] 1 AD for the European cooperation on coast guard functions (in actual input).

Provide the Commission and the EFTA Surveillance Authority with timely advice on the level of security implementation by the Member States.	✓

Planned output 2020	Achievement / Actual output 2020
14-16 missions to EU Member States, upon request of the Commission, are not achieved due to COVID-19.	✓ The actual missions conducted were 8 (4 physical and 4 remote)
1-2 missions to Norway and Iceland, upon request of the EFTA Surveillance Authority.	✓ 0 missions at EFTA
Upon request of the Commission, contribute to the updating and enhancement of the procedures for performing maritime security inspections.	✓
Upon request of the Commission, provide assistance on the follow-up of the deficiencies identified during inspections.	✓

Output Indicators		Target 2020	Result 2020
Inspections	number of missions per year	4 missions have been carried out due to COVID-19 and 4 remote inspections	8[20]
Reports	number of reports per year[21]	35	7[22]
	percentage of inspection reports concluded within the deadline agreed with the European Commission	95	100

[20] Considering the evolution of the COVID-19 crisis, DG MOVE initiated remote MarSec inspections as from October 2020.

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

[22] With the new approach of "remote" inspections the reporting system evolved. By now a single report is issued for the entire inspection.

3.5 HORIZONTAL ANALYSIS AND RESEARCH

***Legal basis**: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2(c) and 3.5*

Planned input		***Actual Input***
CA	*556,195*	***392,884***
PA	*568,195*	***374,242***
Staff	*3 AD*[23]	***2 AD***

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
	8. Support Maritime Administrations in their PSC role and promote a harmonised approach to PSC globally
	7. Support Maritime Administrations in their Flag State implementation effort
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability
	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation
Knowledge hub	36. Support innovation and development of new technologies

Expected outcome 2020
Provide advice to enable the Commission and the EFTA Surveillance Authority to assess and verify the implementation of EU maritime legislation and to identify whether and if so, what changes are needed to Union law to improve the level of maritime safety and the prevention of pollution by ships in the EU.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In 2020 the Agency developed one Horizontal and Cost-Effective Analyses (HA and CEA[24]), on Marine Equipment Directive (MED). The MED HA offered to Member States and the Commission the possibility to assess the level of MED implementation throughout the EU, identifying common problems and root-causes, thus supporting ongoing improvements and building capacity among Member States. The CEA completed the picture on how MSs are actually implementing MED requirements, going beyond the regulatory compliance verification. A preliminary presentation was delivered to MED experts in a meeting at EMSA.

[23] 1 AD for the European cooperation on coast guard functions (in planned and actual input).

[24] As foreseen by Article 3.5 of the EMSA Founding Regulation, the Cost-Effectiveness Analysis (CEA) adds value to the Horizontal Analysis (HA) of the visit findings, being fully integrated in each HA report. In a nutshell, the CEA completes the picture on how MSs are actually implementing the various directives' requirements, going beyond the regulatory compliance verification. Looking at resources, costs incurred by MSs and their achievements, the CEA aims at drawing meaningful considerations to improve effectiveness and efficiency, at EU-wide level, as well as by each MS, if needed.

Objectives 2020	Achievement
Carry out horizontal analyses of cycles and part cycles of visits and inspections to identify horizontal findings and general conclusions on the effectiveness and cost-efficiency of the measures in place, including the identification of good practices.	✓
Hold workshops, as relevant and appropriate, with the Commission and Member States to review the horizontal analyses and provide the Member States with a forum for the sharing of lessons learnt and best practices and identifying possible future training needs.	✓
Support the Commission in its assessment of the results of visits and inspections, including follow-up with Member States and, when required, in any wider follow-up action (e.g. consultations with Member States, workshops on best practice, possible changes to Union law including contributions to impact assessments, etc.).	✓
Participate in on-going research projects relevant to the mandate of the Agency.	✓
Analyse research instrumental to other tasks (especially in relation to ship safety and environmental protection issues).	✓

Planned output 2020	Achievement / Actual output 2020
1-2 Horizontal Analyses of full or part cycles or series of visits and inspections.	✓
Analyses of research projects, upon request, to assist the Commission with preparatory work for updating/developing legislation.	✓
Support the Commission and the Member States by sharing the results of and knowledge gained from the Horizontal Analyses through workshops and seminars.	✓

Output Indicators		Target 2020	Result 2020
Analyses on the basis of full or part cycles or series of visits and inspections	number of horizontal analyses per year	1-2	1

Providing Member States and the Commission with technical and scientific assistance and facilitating technical cooperation between Member States' Maritime Authorities and with the Commission.

4.1 PORT STATE CONTROL & FLAG STATE ENFORCEMENT

***Legal basis**: Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.4(d) and 2.4(h); Directive 2017/2110 on a system of inspections for the safe operation of ro-ro ferry and high-speed passenger craft in regular service and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/EC.*

Planned input		***Actual Input***
CA	*407,160*	***196,321***
PA	*408,724*	***189,233***
Staff	*2 AD*	***1 AD***

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
	7. Support Maritime Administrations in their Flag State implementation effort
	8. Support Maritime Administrations in their PSC role and promote a harmonised approach to PSC globally
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
International reference	34. Step up technical and operational support where EMSA can add value to relevant EU foreign policies
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards

Expected outcome 2020

The Agency will continue to support the Port State Control system in line with the PSC Directive (2009/16/EC) as amended. The support includes inter alia the maintenance and further enhancement of the information system (THETIS), the maintenance and further development of RuleCheck and MaKCs and technical assistance to the Member States and the Commission on matters related to PSC.

The Agency is working towards harmonising Port State Control in and by Member States, by developing a more structured and modular approach for the professional development and training of the PSCOs using as a basis the Paris MoU regulatory context and organising common training and common PSC tools. This will contribute to a more harmonized level of PSC in the European Union, establishing a more unified level of maritime safety.

The Agency will support the modernization and update of the regulatory context (MoU text, instructions, circulars) thus improving the support to the MoU members and PSCOs in their PSC work.

The Agency will support the implementation of the Flag State provisions of the Directive (EU) 2017/2110 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/ The support include inter alia the enhancement of the information system (THETIS-EU), the training of officials from competent authorities, the development of relevant eLearning modules in MaKCs and technical assistance to the Member States and the Commission on relevant issues.

The Agency will work towards harmonising inspections by competent authorities foreseen by the Directive establishing a more unified level of maritime safety.

The Agency will support Member States in implementing PSC provisions not falling within the context of Directive 2009/16/EC, such as the provisions of Directive (EU) 2016/802, the Directive (EU) 2019/883 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC and Regulation (EU) No 1257/2013.

The Agency will support the European Commission in the preparatory measures for the revision of Directives 2009/16/EC and 2009/21/EC.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In 2020, support to Port State Control activities in the context of the Paris MoU was further enhanced by the work done within the Paris MoU Advisory Board (MAB) which has produced and approved provisional guidance for the PSCOs to establish a common approach on PSC inspections by taking into consideration the special circumstances of the COVID-19 pandemic. This guidance sets out a pragmatic approach to address the various issues such as delays of surveys, inspections and audits, validity of the ship's certificates, periods of service on board, periods for personnel certification.

In the context of the IMO Sub-Committee on Implementation of IMO Instruments (III), a Correspondence Group (CG) on Measures to Harmonize Port State Control (PSC) Activities and Procedures Worldwide was established to which EMSA, on behalf of the European Commission, acts as the coordinator. The CG has been tasked to develop additional guidance for the PSC procedures and to identify possible areas where there may be a need for additional guidance on relevant conventions currently not covered by the Procedures for PSC.

In 2020, EMSA chaired, facilitated and organised the work of the Correspondence Group and drafted the report (III 7/5) to be presented to Sub-Committee III which was postponed to 2021.

Objectives 2020	Achievement
Assist in the publication of information relating to ships (PSC Directive 2009/16/EC as amended and Directive (EU) 2017/2110 on a system of inspections for the safe operation of ro-ro passenger ships and high-speed passenger craft in regular service).	✓
Provide technical assistance as concerns the Paris MoU on Port State Control.	✓
Provide technical assistance in the implementation of 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 and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/EC.	✓
Provide technical assistance in the implementation of the Flag State 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 and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/EC.	✓
Assist the Commission in any development of relevant legislation arising from the fitness check & REFIT evaluation of Directives 2009/16/EC and 2009/21/EC.	✓

Planned output 2020	Achievement / Actual output 2020
Management and enhancement of harmonised training tools.	✓
Developing a more structured and modular approach for the professional development and training of the PSCOs using as a basis the Paris MoU regulatory context.	✓
Supporting the Paris MoU Secretariat in order to modernize and update the regulatory context (MoU text, instructions, circulars) thus improving the support to the MoU members and PSCOs in their PSC work.	✓
Keeping up-to-date the publication of banned vessels.	✓
Ensuring the daily publication of the list of poor performing companies.	✓
Providing statistics upon request.	✓

Supporting the Commission in the implementation of the PSC Directive (2009/16/EC) as amended.	✓
Providing assistance to Member States and the Commission on the implementation of 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 and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/EC.	✓
Providing assistance to Member States in implementing PSC provisions not falling within the context of Directive 2009/16/EC, such as the provisions of Directive (EU) 2016/802, the Directive (EU) 2019/883 on port reception facilities for the delivery of waste from ships, amending Directive 2010/65/EU and repealing Directive 2000/59/EC and Regulation (EU) No 1257/2013.	✓
Providing 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 and amending Directive 2009/16/EC of the European Parliament and of the Council on port State control and repealing Council Directive 1999/35/EC.	✓
Participation in all technical meetings and working groups of the Paris MoU, and certain policy meetings, on behalf of the Commission, although due to COVID-19 meetings have been postponed or cancelled and some of them will be conducted remotely.	✓
Assistance to the Commission in the potential revision of Directive 2009/16/EC on PSC and Flag State Directive 2009/21/EC.	✓

4.2 ACCIDENT INVESTIGATION

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

Planned input		***Actual Input***
CA	*877,771*	***854,689***
PA	*869,539*	***831,008***
Staff	*3 AD, 1 SNE*	***3 AD, 1 SNE***

Multi-annual strategic objectives	
Safety	10. Explore further work on safety standards for vessels not covered by relevant international conventions
	12. Enhance role in relation to the human component of shipping
	6. Lead expertise and support the development, implementation and enforcement of safety standards
	9. Intensify work on ships for which the risk and impact of accidents are potentially higher
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation
	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability

Expected outcome 2020
EMSA's activities will improve the accident investigation capabilities of Member States. By analysing data held in EMCIP, EMSA will add value by identifying relevant lessons learned at an EU level.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In 2020, EMSA enriched the European Marine Casualty Information Platform (EMCIP) with a Business Intelligence (BI) platform supporting bespoke reports, dashboards, and analytics, based on EMCIP data.

EMSA has applied its methodology to analyse the safety investigations reported in EMCIP to detect possible safety issues involving container vessels based on the accident events and the factors that contributed to the occurrences. This comprehensive analysis encompassed 156 safety investigations conducted by the national Accident Investigation bodies on marine casualties and incidents, including occupational accidents, which occurred between June 2011 and December 2019. The analysis also considered the remedial actions suggested to prevent similar occurrences in the future.

EMSA kept providing services as the Secretariat of the Permanent Cooperation Framework (PCF) composed of the Accident Investigation Boards AIBs of EU Member States and facilitated the technical cooperation between AIBs which is essential for the proper implementation of Directive 2009/18/EC.

Objectives 2020	**Achievement**
Ensure the proper running of EMCIP.	✓
Enhance the EMCIP.	✓
Carry out analysis of the safety investigation data reports made available to EMSA, in particular on container vessels.	✓
Publish the annual overview of marine casualties and incidents on the basis of EMCIP data.	✓
Support the Permanent Cooperation Framework set-up under Art.10 of the Directive.	✓
Support the Commission in the potential revision of the Accident Investigation Directive.	✓

Planned output 2020	Achievement / Actual output 2020
Supporting the Member States and the Commission in the implementation of the Accident Investigation Directive.	✓
Providing the Secretariat of the Permanent Co-operation Framework, as foreseen by Regulation (EU) No 651/2011 adopting the rules of procedure of the PCF.	✓
Maintaining the new European Marine Casualty Information Platform (EMCIP) released in 2018.	✓
Enhancing EMCIP by developing new functionalities.	✓
Monitoring EMCIP data quality through sampling verification.	✓
Analysing casualty data and reports from safety investigations and proposing, when relevant, any appropriate Safety Recommendations to the Commission.	✓
Publishing the annual overview of marine casualties and incidents on the basis of data provided by the Member States.	✓
Assist the Commission in the potential revision of the Accident Investigation legislation.	✓

Output Indicators		Target 2020	Result 2020
EMCIP meetings	number of meetings per year	2	2
PCF meetings	number of meetings per year	1	2
New EMCIP	percentage per year availability	98	98.30

4.3 TRAINING, COOPERATION AND CAPACITY BUILDING

***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	*2,517,981*	***2,915,576***
PA	*2,508,890*	***2,670,699***
Staff	*6 AD[25] , 1 AST, 1 SNE, 1 CA*	***7 AD[26], 1 AST, 2 SNE, 1 CA***

Project	***EU Funds for Candidate and Potential Candidate Countries***
Funding source	***EC, DG NEAR***
Time frame	ongoing
Envelope	*n/a*
Expenditure 2020	***Committed: € 52,113*** ***Paid: € 50,494***
Staff	*No extra staff*

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
	2. Intensify pollution prevention activities by building Member State capacity and developing practical guidance and tools for the wider maritime cluster
International reference	34. Step up technical and operational support where EMSA can add value to relevant EU foreign policies
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	28. Extend and formalize EMSA training schemes

Expected outcome 2020

To promote best practices between EU Member States and increase knowledge and awareness of solutions found, benefiting maritime safety, ship security and prevention of and response to marine pollution by ships.

To support the professional development of staff of maritime administrations in relation to functions falling under the mandate of the Agency.

To support the process of approximation to EU maritime safety “acquis” for enlargement countries.

To develop specialised training courses to tackle all end-users’ pre-defined needs and support national authorities carrying out coast guard functions at national and Union level within the domain of the Agency.

To extend the use of eLearning modules and, where applicable, consider the completion of a relevant eLearning module as a pre-requirement for the participation to specialised house training.

[25] 2 AD for the European cooperation on coast guard functions (in planned input).

[26] 1 AD for the European cooperation on coast guard functions (in actual input).

To extend training capabilities with new technologies, such as using virtual reality and 3D simulation of vessel inspections for training purposes.

To organise and deliver training through seminars for Port State Control Officers.

To strengthen cooperation, within their mandate, between EMSA, Frontex and EFCA and with the national competent authorities, to increase maritime situational awareness as well as to support coherent and cost-efficient action. To promote exchange of best practices and increase knowledge and awareness with a cross-sectoral approach for the different coast guard functions.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In line with the new approach endorsed by the Administrative Board, in 2020 the EMSA Academy was established.

Despite the pandemic and the associated restrictions, the Academy:

- delivered all planned training events on a live broadcasting synchronous mode, reaching a wider number of audiences compared to previous years;
- developed and delivered an innovative pilot online course over several weeks on “Inspection Principles and Techniques for Flag State Inspectors”;
- Developed a Virtual Reality Environment for Ship Inspections (VRESI);
- Inaugurated its Virtual Reality Room and eLaboratory;
- Introduced a new Learning Management System (Moodle) to support the Agency’s eLearning platform MaKCs;
- Started the design and development of common core curricula in support of EMSA's professional development programs;
- Engaged into preparatory measures for the introduction of a quality management system for the services to be offered by the EMSA Academy.

The innovative integrated and modular approach to capacity building services, combined with the use of state-of-the-art technologies fostered the toolbox offered by the EMSA Academy to the competent authorities in the EU in support of development of knowledge and skills of relevant staff.

In 2020, the project – “Preparatory measures for the future participation of relevant IPA II beneficiary countries in the European Maritime Safety Agency (EMSA)” funded by the EU through the Instrument for Pre-accession Assistance (IPA), started on 1 May 2020 and will be completed by the end of December 2023. The project was entrusted to EMSA after the successful completion of the previous IPA project on 30 April 2020 in recognition of the role played by the Agency in support of the approximation of maritime standards applied by the candidate countries to those implemented in the EU.

Objectives 2020	Achievement
Offer an enhanced portfolio of trainings and eLearning modules for Member States and Enlargement countries.	✓
Enrich training capabilities with new technologies, such as using virtual reality and 3D simulation of vessel inspections for training purposes.	✓
Development of Best Practices and Guidance Notes as relevant.	✓
Provision of training to enlargement countries (specific budget provided by the Commission).	✓
PSC training for countries taking part in the Paris MoU.	✓
Cooperation with Frontex and EFCA.	✓
Participation to the work of the European Coast Guard Functions Forum.	✓
Participation and support to the work of the Mediterranean Coast Guard Functions Forum.	✓
Assess the ECGFA Network project results as being relevant and opted to be continued and sustained in the future under the framework of the TWA shall be allocated into different work streams, each of them under the coordination of one of the three Agencies.	✓
Develop a structured and modular approach to professional development and training with focus on functions relevant for the competent authorities of the Member States.	✓

Planned output 2020	Achievement / Actual output 2020
Up to 11 training sessions for Member States on the range of topics covered by EMSA's mandate.	✓
Up to 6 sessions for training/technical assistance for officials from enlargement countries related to EU-legislation and EMSA activities.	✓
Up to 2 Best Practices and Guidance Notes for the implementation of EU Legal acts (subject to agreement by the Commission where relevant).	✓
Development of the concept of Dynamic Overview of National Authorities (DONA)	✓
Development of up to two professional development schemes in cooperation with Member States and other interested parties (e.g. Paris MoU secretariat)	✓
Develop a Virtual Reality Environment to support EMSA capacity building activities.	✓

Output Indicators		Target 2020	Result 2020
Training for Member States	number of MS training sessions per year (including live broadcasting)	Up to 11	24
	number of MS experts attending per year	320	627
Training for enlargement countries	number of AC training sessions per year	Up to 6	8
	number of AC experts attending per year	50	37[27]
Customer satisfaction	level of customer satisfaction	>85%	>85%
Professional Schemes	Number of schemes	Up to 2	1[28]

[27] There have been fewer participants in trainings than expected due to the COVID-19 pandemic.

[28] have been fewer participants in trainings than expected due to the COVID-19 pandemic.
Despite that fact that framework contract including these professional schemes was awarded in Q4 and its implementation started in December, an online course for FS Inspectors, which will be part of the scheme was developed and delivered in 2020.

4.4 MARINE EQUIPMENT, AND SHIP SAFETY STANDARDS (including IMO)

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

Planned input		***Actual Input***
CA	*2,277,200*	***2,061,604***
PA	*2,463,436*	***2,404,378***
Staff	*8 AD[29], 1 AST, 1 SNE*	***8 AD, 1 SNE***

Multi-annual strategic objectives	
Safety	10. Explore further work on safety standards for vessels not covered by relevant international conventions
	11. Become the technical facilitator in relation to autonomous ships
	6. Lead expertise and support the development, implementation and enforcement of safety standards
	7. Support Maritime Administrations in their Flag State implementation effort
	9. Intensify work on ships for which the risk and impact of accidents are potentially higher
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation

Expected outcome 2020
The Agency will contribute to the safety of ships and marine equipment at European level by supporting the implementation, update and development of appropriate and harmonised safety standards. It will also contribute to the functioning of the internal market by assessing individual safety problems and market distortions due to differences in application of standards.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In 2020, EMSA continued to put emphasis on fire safety onboard ro-ro passenger ships by actively contributing at IMO within the work of the Fire Protection Correspondence Group. The FIRESAFE II study became the main document at IMO for the discussions for amending SOLAS. In relation to the review of Directive 2003/25/EC on specific stability requirements for ro-ro passenger ships, the Agency continued to provide support to the European Commission and Member States in the ongoing technical discussions. A study on Steering and Manoeuvrability was conducted and will be finalised in early 2021 with the objective of stimulating in the near future discussions at IMO.

In supporting the Member States and the European Commission at the IMO, EMSA has had an active participation in various IMO Correspondence Groups i.e. the Life Saving Appliances CG, the Fire Protection CG, the International Code of Safety for Ship Using Gases or Other Low-flashpoint Fuels (IGF) CG and the OPS (Onshore Power Supply) Expert Group.

EMSA continued assisting the European Commission by assessing requests for national exemptions to Directive 98/41/EC on the registration of persons sailing on board passenger ships operating to or from ports of the Member States of the Community (three closed cases in 2020) and Directive 2009/45/EC on safety rules and standards for passenger ships (five on-going cases and one closed case in 2020). Similarly, support was provided on the follow-up and review of the European Commission's study on Small Passenger Ships.

EMSA enhanced its efforts to act as a facilitator on the issue of Maritime Autonomous Surface Ships (MASS) and has established a dedicated Task Force to deal with MASS related issues. The SAFEMASS study was published and sent to EU MS Administrations. The study is an important building block, mapping functions and associated risks, to further efforts of understanding and developing regulations on MASS, while it also supports the new study that was commenced by the Agency which has an objective of developing a Risk Based Assessment Tool (RBAT) for MASS. Furthermore, EMSA

[29] 1 AD for the European cooperation on coast guard functions (in planned and actual input).

closely monitored and supported DG MOVE on the finalisation of the first draft of the EU Operational Guidelines on trials of MASS.

EMSA put emphasis on Containership Safety, creating a dedicated multidisciplinary Task Force (TF) in 2020.

In the area of Shore Side Electricity (SSE), in particular Onshore Power Supply (OPS), the Agency has continued the work on the development of SSE Guidance, covering different safety and standardization aspects in interoperability and interconnectivity of SSE and OPS to ships at berth.

The EMSA marine equipment web-based portal became fully operational.

Finally, EMSA and the European Centre for Disease Prevention and Control (ECDC) developed the COVID-19 EU Guidance for resumption of Cruise Ship Operations providing a goal based guidance on the gradual and safe resumption of operations of cruise ships in the European Union.

Objectives 2020	Achievement
Provide technical assistance in the implementation of amended Directives, i.e. Directives 2009/45/EC on safety rules and standards for passenger ships, 98/41/EC on the registration of person sailing on board passenger ships.	✓
Provide technical support and contribution for the technical discussions on IMO concerning ro-ro vehicle deck fire safety, promoting the results of the work already carried out and potential update of steering and manoeuvrability requirements.	✓
Continue the work and assist the Commission in the follow-up actions arising from the REFIT on passenger ship safety legislation.	✓
Support the Commission and the Member States in relation to the submissions and work of the technical bodies of the IMO on ship safety and to the Member States' expert group meetings for passenger ship safety, with regard to matters of Union competence and interest.	✓
Support the Commission and the Member States in relation to Maritime Autonomous Surface Ships (MASS).	✓
Update the list of standards for marine equipment subject to flag State approval, conduct technical review of safeguard clause cases and facilitate the Market Surveillance action/cooperation in this area.	✓
Support the Commission and the Member States in work arising from the co-ordination group of Notified Bodies, authorised by the Member States to carry out the conformity assessment procedures in accordance with the Marine Equipment Directive.	✓
Implementation and further development of the new Marine Equipment Database able to support electronic tagging for marine equipment.	✓
Act as the MARED Technical Secretariat and support the work of the MarED co-ordination group of Notified Bodies.	✓
Follow-up of the EU-USA Mutual Recognition Agreement and management of the alert system.	✓
Technical support for the implementation, update in line with the development of international legislation and development of Ship Safety and Marine Equipment legislation, including technical review of notified exemptions and derogations.	✓

Planned output 2020	Achievement / Actual output 2020
Providing technical support to the Commission and the Member States on the work at IMO in the field of Maritime Safety Standards.	✓
In particular, the Agency will provide technical support regarding developments on Maritime Autonomous Surface Ships (MASS), fire safety, updating steering and manoeuvrability standards, the ISM code, using, where appropriate, the Goal Based Standards methodology,	✓
Providing technical support to the Commission in delivering relevant actions identified during the REFIT process of passenger ship safety legislation.	✓

Facilitating and providing technical assistance in the implementation of amended passenger ship safety legislation including technical assistance in the assessment of notified exemptions and derogations.	✓
Initial analysis of potential container ship safety issues, which will continue in 2021.	✓
Preparation of the update to the list of standards for marine equipment that is subject to flag State approval (yearly basis).	✓
Technical review of safeguard clause cases submitted under the Marine Equipment Directive.	✓
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.	✓

Output Indicators		Target 2020	Result 2020
MED Database	percentage per year availability of MED DB	95	99.23

4.5 ENFORCEMENT AND CAPACITY BUILDING TOOLS

***Legal basis**: Regulation (EC) N° 1406/2002 as amended, Art. 1.2 and 2.4(d); Directive 2000/59/EC Art.12.3; Directive (EU) 2019/883, Art. 11; Regulation (EU) 2015/757 Art.21.6; Commission Implementing Decision 2015/253 Art.8; Directive 2009/16/EC as amended; Directive (EU) 2017/2110*

Planned input		***Actual Input***
CA	*1,740,961*	***1,702,418***
PA	*1,720,241*	***1,706,672***
Staff	*5 AD[30], 2 SNE*	***6 AD[31], 1 SNE***

Project	***EQUASIS***
Funding source	***Equasis Member States***
Time frame	*ongoing*
Envelope	*n/a*
Expenditure 2020	***Committed: € 604,615*** ***Paid: € 399,674***
Staff	*No extra staff*

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
	8. Support Maritime Administrations in their PSC role and promote a harmonised approach to PSC globally
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data
Reliable partner	31. Engage actively with industry to generate transfer of knowledge and provide non-commercial technical maritime advice
	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation
	28. Extend and formalize EMSA training schemes

Expected outcome 2020

Reliable information systems that can significantly contribute towards rationalising and optimising assessment of the compliance with the requirements of International and EU legislation.

Reliable and compatible data support the Agency's tasks in preparing and making use of up-to-date and validated information on maritime safety.

[30] 2 AD for the European cooperation on coast guard functions (in planned input).

[31] 3 AD for the European cooperation on coast guard functions (in actual input).

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

During 2020 the Agency developed a framework in support of regular and ad-hoc statistics and analytics aimed at expanding information services to analyse data and identify trends and risks to support safety, security and sustainability. The framework was then used to produce various statistic and analytic reports such as the report on impact of COVID-19 on shipping activities (updates are published regularly on the EMSA webpage), statistics on recycling of EU-flagged ships, statistics on impact of COVID-19 on PSC activities, etc.

The concept of the Dynamic Overview of National Authorities (DONA) platform was finalised in close cooperation with Member States and the Commission, through online meetings and dedicated correspondence groups. DONA is an important step towards digitalisation and simplification that will provide the general public with added value information via the Country Profile section, while one the same time will offer to Member States the possibility to reduce heavily their administrative burden when using the DONA Reporting Gate to comply with their legal obligations for reporting vis-à-vis the European Commission. Member States also welcomed, and contributed to develop, the new DONA proposed service on regular statistics which will support their daily work as Flag, Port and Coastal State.

Finally, EQUASIS continued to be a reference platform for fostering quality shipping worldwide.

Objectives 2020	Achievement
Enhance and promote reliable statistics using the MARINFO Project.	✓
Address complex requests through the MARINFO HelpDesk.	✓
Increase the number of data providers contributing to Equasis.	✓
Search for new signatory parties for the Equasis.	✓
Implement the five-year strategy of Equasis.	✓
Promote and disseminate regular maritime-related statistics (through DONA) with particular focus on the EU ships and EU waters.	✓
Support to the Commission by providing reliable statistics.	✓
Ensure proper operation of RuleCheck and MaKCs for Paris MoU, and ENP beneficiary countries, EU Accident Investigation bodies, EU Flag Administrations, and PSC MoUs with access granted through specific agreements.	✓
Provide training, day to day instruction and operational support for RuleCheck, MaKCs and Equasis to facilitate end-users of these applications.	✓
Update existing eLearning modules available for end-users beyond the PSC community, thus supporting national authorities in their different coast guard functions.	✓
Ensure, upon request, the creation of more and different User Groups in RuleCheck, thus offering the option of uploading folders relevant to the work of end-users (national legislation folders).	✓
Upgrade RuleCheck with a mobile App.	✓
Develop the concept of “DONA” (Dynamic Overview of National Authorities) with added value for the national authorities performing coast guard functions falling within the remit of the Agency.	✓

Planned output 2020	Achievement / Actual output 2020
Management of Equasis.	✓
Publishing the annual statistical report on the world merchant fleet in Equasis.	✓
Production of statistical products (regular or ad hoc) from the THETIS environment including MARINFO database, as well as analyses, services and publications, for internal and external use, as appropriate.	✓
Support data analysis pilot projects.	✓

Analysis of statistics on the basis of the reports submitted by the Member States through THETIS-EU, on the appropriate implementation of Directive 2016/802/EU as regards the sulphur content of marine fuels.	✓
Further development of RuleCheck and MaKCs in order to support distance learning options for different end-users and national authorities carrying out coast guard functions.	✓
Upgrading RuleCheck with mobile App.	✓
Linking MaKCs platform with the Virtual Reality tool.	✓
Development of the concept of DONA with added value for the national authorities performing coast guard functions falling under the remit of the Agency.	✓

Output Indicators		Target 2020	Result 2020
EQUASIS - Availability of the system	percentage per year availability	99.5	99.92
EQUASIS - Users	number of users per month	32 000	34 288
EQUASIS - Contributors	number of contributing members	9-10	10
RuleCheck system operational	percentage per year availability	85	99.75
	days maximum continuous downtime	9d	0d:0h:15m:0s
RuleCheck Helpdesk Service	percentage of requests closed in less than 9 days	75	100
MaKCs system operational	percentage per year availability	85	99.85
	days maximum continuous downtime	9	0d:7h:59m:45s
MaKCs Helpdesk Service	percentage of requests closed in less than 9 days	75	99.55

4.6 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	*1,247,148*	***2,003,889***
PA	*1,223,048*	***1,806,967***
Staff	*5 AD, 1 SNE*	***8 AD, 1 AST, 1 SNE***

Multi-annual strategic objectives	
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
	2. Intensify pollution prevention activities by building Member State capacity and developing practical guidance and tools for the wider maritime cluster
	3. Promote and support the development and implementation of innovative EU and global solutions to mitigate climate change
Knowledge hub	35. Provide the central EU maritime information hub and access point for open data
Reliable partner	31. Engage actively with industry to generate transfer of knowledge and provide non-commercial technical maritime advice
	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation
	28. Extend and formalize EMSA training schemes

Expected outcome 2020
The Agency's expertise in matters related to environmental protection assists the Commission and Member States to better tackle a variety of ship-sourced pollution and emission problems, with regard to implementation as well as new legal developments

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

During 2020, the Agency strengthened and expanded its capacity in pollution prevention. The first-ever environmental compendium related to maritime transport, the European Maritime Transport Environmental Report, was developed. This process has also enhanced cooperation with the European Environmental Agency and triggered new activities such as those on environmental data acquisition.

Also in 2020, the Agency has been fully involved in work directly related to the European Green Deal such as support to the Commission in the Fuel EU Maritime or Zero Pollution Initiatives. Thanks to EMSA's work in GHGs, the Agency has further received a request for supporting the Commission in the work towards the potential extension of ETS to maritime transport. This request is based on the knowledge and experience gained in running the THETIS-MRV system and supporting the annual report by the Commission.

The Agency assisted the Commission and the Member States in discussions and work held at the IMO in relation to Greenhouse Gases and other sustainability issues, including energy efficiency and carbon intensity.

The Agency has largely contributed to the implementation of the PRF Directive and related work. Support was also provided regarding the necessary amendments to the IMO guidelines induced by the ban of Cybutryne as an anti-fouling substance.

Due to COVID-19, a practical way for the enforcement of the new obligation regarding the inventory of hazardous materials under the Ship Recycling Regulation had to be developed and numerous related questions by the industry were addressed in close cooperation with DG ENV.

A procurement for a framework contract for new studies on the use of alternative fuels and sources of energy was launched. Similarly, work on emerging areas such as underwater radiated noise was kicked off with a new study.

Support to the Commission and the Member States was ensured in relation to the Sulphur Directive and the application of the 2020 global sulphur cap. The Agency has acted as technical secretariat in 10 ESSF meetings.

Objectives 2020	Achievement
Technical assistance to the Commission in monitoring compliance with the requirements relating to sulphur content in fuel.	✓
Technical assistance to the Commission related to the new Directive on Port Reception Facilities ('PRF') and in particular for its swift transposition and implementation by the Member States.	✓
Technical assistance to the Commission for further actions related to air quality.	✓
Technical assistance to the Commission for the Fuel EU Maritime initiative.	✓
Technical assistance to the Commission for the review of the Ship-source Pollution Directive.	✓
Provide assistance to Member States mainly by appropriate training of Sulphur inspectors.	✓
Provide technical assistance to the ESSF and the relevant subgroups.	✓
Follow-up of international developments in IMO and provide technical assistance to the Commission in IMO.	✓
Monitoring, Reporting and Verification (MRV) Regulation: Assist the Commission in the implementation of the MRV legislation, including training of national authorities for the use of THETIS-MRV.	✓
Provide technical assistance to the Commission and to the Member States on the availability, the approval and use of abatement methods for different air pollutants.	✓
Technical assistance to the Commission for the implementation of Title II of the Ship Recycling Regulation.	✓
Support the Commission and Member States in matters regarding maritime liability and compensation.	✓
Support the Commission and the Member States in the implementation of Regulation (EC) 782/2003 on the prohibition of organotin compounds on ships.	✓
Support as appropriate the Member States in the implementation of the Ballast Water Management Convention.	✓
Further activities related to marine pollution prevention by deterrent effect of monitoring and detection based on satellite and remotely piloted aircrafts sensing services are also addressed in Sections 2.5 (Copernicus Maritime Surveillance) and 5.2 (Pollution surveillance).	✓

Planned output 2020	Achievement / Actual output 2020
1. Port reception facilities:	
Supporting the Commission in preparing the Implementing act foreseen by Directive (EU) 2019/883 to define the methods to be used for the calculation of the sufficient storage capacity.	✓
Supporting the Commission in preparing the Implementing act to define the criteria for determining that a ship meets the requirements of article 8(5)b ('green ship') of Directive (EU) 2019/883 in relation to the ship's on-board waste management.	✓
Supporting the Commission in preparing the Implementing act to define the detailed elements of the Union risk-based targeting mechanism to provide for uniform conditions for selecting ships for inspection (Article 11(2) of Directive (EU) 2019/883).	✓
Organisation of exchanges of experience between the MS authorities and experts, including those from the private sector, civil society and trade unions on the application of the Directive (Article 17 of Directive (EU) 2019/883).	✓

Providing assistance to the ESSF Sub-group on Waste from Ships (Port Reception Facilities and Ship Source Pollution) thus acting as technical secretariat, liaising with the Commission, the co-chair and the rapporteur of the subgroup, providing technical advice to the Commission and contributing with technical papers and presentations to the work of the sub-group.	✓
2. Greenhouse gases:	
Providing technical assistance to the Commission on the implementation of Regulation (EU) 2015/757 on the monitoring, reporting and verification of emission of carbon dioxide from maritime transport, and amending Directive 2009/16/EC, in particular for the analysis of reports in THETIS-MRV as well as the Preparation of the annual report on C02 information from ships to be published by DG CLIMA**.**	✓
Providing technical assistance to the Member States on the implementation of Regulation (EU) 2015/757 on the monitoring, reporting and verification of emission of carbon dioxide from maritime transport, and amending Directive 2009/16/EC, in particular for the use (consultation) of information from THETIS-MRV.	✓
Providing technical assistance to the Commission in reviewing and assessing various voluntary and mandatory technical and market-based measures to reduce greenhouse gases from ships, depending on the regulatory choices made at international or EU level.	✓
Providing assistance to the Commission in following the international developments, notably in relation to the Energy Efficiency Design Index, its review and its extension to additional ship types.	✓
Providing assistance to the Commission in following the international developments for the Global Data Collection System for maritime transport covering fuel consumption and greenhouse gas emissions as well as for further technical and operational measures to enhance the energy efficiency of ships.	✓
Providing technical assistance for the potential alignment of THETIS-MRV to the Global Data Collection System.	✓
Providing assistance to the ESSF Sub-group on Ship Energy Efficiency thus acting as technical secretariat, liaising with the Commission, the co-chair and the rapporteur of the subgroup, providing technical advice to the Commission and contributing with technical papers and presentations to the work of the sub-group.	✓
3. Air emissions:	
Providing technical assistance to the Commission in the implementation of Directive 2016/802/EU as regards the sulphur content of marine fuels. Assistance could include analysis of the reports submitted by Member States as foreseen by article 7 of the Directive and by the Commission Implementing Decision 2015/253, analysis of the data extracted from THETIS-EU, calculation and monitoring of inspection and sampling obligations of Member States.	✓
Integration of the measurements of Sulphur dioxide as captured by the RPAS services to THETIS-EU and their subsequent sharing with other Member States.	✓
Providing technical assistance to the Member States in the implementation of Directive 2016/802/EU as regards the sulphur content of marine fuels. Assistance could include further enhancement of guidance manuals for control, sampling and analysis, training for Sulphur Inspectors and workshops for the exchange of best practices.	✓

Providing technical assistance to the Commission and the Member States on the development of alternative emission abatement methods such as alternative fuelling (LNG, methanol, etc.), on the sustainability of exhaust gas cleaning systems (scrubber) in view of IMO developments, biofuels and other alternative methods as required by Directive 2016/802/EU as regards the sulphur content of marine fuels.	✓
Providing technical assistance to the Commission in the development of the Fuel EU maritime initiative, including the delivery of a technical overview of existing studies.	✓
Providing assistance to the ESSF Sub-group on Air Emissions Sub-Group Ship Energy Efficiency, for as long as it stands and to the Sub-group on Sustainable Alternative Power for Shipping thus acting as technical secretariat, liaising with the Commission, the co-chair and the rapporteur of the subgroup, providing technical advice to the Commission and contributing with technical papers and presentations to the work of the sub group.	✓
Providing technical support to the Commission within the context of the Sulphur Committee foreseen by Directive 2016/802/EU.	✓
Providing technical assistance to the Commission and the Member States to support effective and consistent implementation of the 0.50% global limit on the sulphur content of fuel oil which will apply from 1 January 2020.	✓
Providing assistance to the EPF sub-group on Sustainable Ports (SPS) and participate as appropriate.	✓
Developing a Technical Guidance for On-Shore Power Supply (OPS) to Port Authorities and Administrations.	✓
4. Ship recycling:	
Providing technical assistance to the Commission on the implementation of the Hong Kong Convention by participating in IMO deliberations as technical advisor.	✓
Organising training and workshops for Flag State and Port State Inspectors with reference to the enforcement provisions of Title II of the SRR, using as a basis the guidance note developed by the Agency in 2019.	✓
Providing technical assistance to the Commission on the discussion on the recycling capacity needs of the EU shipping industry.	✓
Providing technical assistance to the Commission within the context of the Ship recycling Committee foreseen by Regulation (EU) 1257/2013.	✓
Providing, upon request of Member States, operational support such as satellite monitoring in support of investigations by law enforcement authorities into dumping of end-of-life vessels (through the Copernicus Maritime Surveillance service).	Not requested
5. Ballast water and anti-fouling systems:	
Supporting Member States in the implementation of the IMO Convention by organising training and/or workshops as relevant.	✓
Helping Member States implement the Convention as requested by the CNTA (i.e. guidance notes/best practises for sampling).	✓
Providing technical assistance to the Commission and the Member States regarding the issue of anti-fouling systems, as appropriate.	✓

6. Other:	
Develop a European Maritime Environmental Report in cooperation with the European Commission, the European Environmental Agency (EEA) and the Innovation and Networks Executive Agency (INEA) (for 2019) by May 2020.	✓
Provision, upon request, of technical assistance and support to the Commission and Member States in the implementation of the Marine Strategy Framework Directive and Maritime Spatial Planning.	✓
Support the Commission in its contribution to the IMO Strategy Plan for the reduction of Marine Plastic Litter pollution from international shipping. This new IMO initiative is expected to create the necessary framework conditions, and ambition levels, for the implementation of the Action plan to address marine plastic litter from ships (resolution MEPC.310(73)), approved in 2018.	✓
Support the Commission for the review of the Ship-source Pollution Directive.	✓
Support the work of the correspondence group on Member State reporting obligations under the Ship-source Pollution Directive.	✓
Provision, upon request, of technical assistance and support to the Commission and the Member States on issues of underwater noise.	✓

Project: SAFEMED IV, EuroMed Maritime Safety Project

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

Project	***SAFEMED IV, EuroMed Maritime Safety Project***
Funding source	***EC, DG NEAR***
Time frame	2017-2021
Envelope	*4,000,000 €*
Expenditure 2020	***Committed: € 1,178,900*** ***Paid: € 731,108***
Staff	*1 CA + ½ SNE*[32]

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
Security	13. Support proper implementation of EU and International maritime security legislation
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
International reference	34. Step up technical and operational support where EMSA can add value to relevant EU foreign policies
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation

Expected outcome 2020
Through the implementation of the project the Agency contributes to improving the relevant capacities of maritime administrations in the Mediterranean partner countries in the field of maritime safety, security and prevention of marine pollution as well as preparedness and response.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The efforts of the SAFEMED IV beneficiary countries to foster control and enforcement through Port State Control was enhanced in 2020, after EMSA has delivered THETIS-Med, a modern state of the art inspection database, equal to the one used by EU Members States within the context of Paris MoU. THETIS-MED marks the beginning of a new era on how ships are targeted for inspection in the Mediterranean region, how these inspections are recorded, and how the results are made available for the exchange of information between EU and non-EU countries which are members of the Med MoU.

Through structured technical assistance offered by EMSA to the beneficiaries, within the context of preparatory and follow up measures for IMSAS, systems to discharge their obligations as flag, port and/or coastal States emanating from applicable international law were established or enhanced. Through structured technical assistance offered by EMSA, within the context of preparatory and follow up measures for IMSAS, procedures and processes were established or enhanced to foster beneficiaries capacity when discharging their obligations as flag, port and coastal States deriving from international conventions. Through the said support beneficiaries enhanced their overall performance, improved and fostered their capabilities in implementing, controlling and enforcing international requirements, thus promoting safety, security and protection of the marine environment.

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

In 2020, further progress was made on the pilot project on AIS sharing between countries participating in MARES (beneficiaries and selected EU MSs). The foreseen data exchange allows better overall picture of the maritime traffic, improves maritime domain awareness and consequently supplements and enhances the national capacity of the beneficiaries for vessel traffic monitoring, PSC, maritime pollution preparedness in a sensitive and protected area like the Mediterranean Sea.

Finally, despite the pandemic and the associated restrictions, trainings and other activities were delivered on a live broadcasting synchronous mode, while access to tools and applications continued without any interruption.

Objectives 2020	Achievement
Continue with the implementation of the new project for assistance in the Mediterranean Region covering the period between 2017 until 2021.	✓
Contribute to improvement of cooperation at regional level.	✓
Continue to provide Beneficiary countries with access to RuleCheck; developing appropriate modules and providing access to Beneficiary countries for MaKCs for PSCOs.	✓
Continue with the implementation of the pilot projects to extend the cooperation on AIS related issues.	✓
Continue to provide Integrated Maritime Services and CleanSeaNet services to interested beneficiary countries according to the Terms of Reference.	✓
Continue to involve beneficiary country in the EMSA's activity on pollution response, particularly with the Network of Stand-by Oil Spill Response Vessels.	✓
Support the beneficiaries in the context of the Mediterranean Coast Guard Functions Forum, including its Secretariat.	✓
Support a harmonised scheme for the training and assessment of competences of port state control inspectors.	✓

Planned output 2020	Achievement / Actual output 2020
Up to 5 technical meetings per year (seminars, workshops, training sessions).	✓
Up to 6 activities per year (studies, technical support, exercise, bilateral activities, etc.).	✓
Provision of RuleCheck and DLP for relevant authorities of the beneficiaries as relevant.	✓
Host, maintain and enhance the inspection database (THETIS-MED) to support the PSC MeD MoU.	✓
Provision of pilot service on cooperation on AIS matters	✓
Provision of IMS/CleanSeaNet services.	✓

Output Indicators		Target 2020	Result 2020
Implementation of SAFEMED IV, EuroMed Maritime Safety Project	number of training sessions per year	Up to 5	7
	number of activities per year	Up to 6	13.5
	number of ENP experts attending per year	90	115
	level of customer satisfaction	>85%	>85%

Project: Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions (BC SEA)

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

Project	***Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions (BC SEA)***
Funding source	***EC, DG NEAR***
Time frame	2016-2021
Envelope	*4,000,000 €*
Expenditure 2020	***Committed: € 1,063,797*** ***Paid: € 580,261***
Staff	*2 CA + ½ SNE*[33]

Multi-annual strategic objectives	
Safety	6. Lead expertise and support the development, implementation and enforcement of safety standards
Security	13. Support proper implementation of EU and International maritime security legislation
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
International reference	34. Step up technical and operational support where EMSA can add value to relevant EU foreign policies
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	27. Consolidate EMSA support to the Commission for the development of EU and international legal acts and for assessing their implementation

Expected outcome 2020
By providing complementary activities to those implemented by the current DG NEAR contractor the Agency contributes to achieving an improved level of quality by the beneficiary countries' maritime administrations in the field of maritime safety, security and prevention of marine pollution as well as preparedness and response.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In 2020, the pilot project on AIS sharing between countries participating in MARES (beneficiaries and selected EU MSs) was extended beyond the Med Region to the Black Sea. Georgia and Ukraine, having benefited from the donation by EMSA of central nodes and AIS stations, started sharing their data and got access to a better overall picture of the maritime traffic, that had improved maritime domain awareness and consequently supplemented and enhanced the national capacity of the beneficiaries for vessel traffic monitoring, PSC, maritime pollution preparedness, in the Black Sea.

Recognising that States can carry out their obligations as required by the instruments to which they are Parties only if the relevant national legislation is in place, EMSA has supported beneficiaries to prepare implementing provisions that are associated with transposition laws as well. Technical assistance was also offered for the transposition of the EU maritime acquis into the national legislation for those beneficiaries who have an association agreement with EU. Those activities will foster proper implementation and enforcement by the beneficiaries and will improve safety and environmental standards as well as living and working conditions on board ships.

Through structured technical assistance offered by EMSA to the beneficiaries, within the context of preparatory and follow up measures for IMSAS, systems to discharge their obligations as flag, port and/or coastal States emanating from

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

applicable international law were established or enhanced. The said support assisted beneficiaries to improve their capabilities, whilst contributing to the enhancement of global and individual State's overall performance thus promoting safe, secure, environmentally sound, efficient and sustainable shipping.

Finally, and despite the pandemic and the associated restrictions, trainings and other planned activities were delivered on a live broadcasting synchronous mode, while access to tools and applications continued without any interruption.

Objectives 2020	Achievement
Continue with the implementation of the new project for technical assistance in the region of the Black and Caspian Seas covering the period between 2017 until 2021.	✓
Contribute to improvement of cooperation at regional level.	✓
Continue to provide Beneficiary countries with access to RuleCheck; developing appropriate modules and providing access to Beneficiary countries for the Distant Learning Package (DLP) for PSCOs.	✓
Launch a pilot project to extend the cooperation on AIS related issues	✓
Continue to provide Integrated maritime Services and the CleanSeaNet service to interested Beneficiary countries.	✓
Continue to involve beneficiary country in the EMSA's activity on pollution response, particularly with the Network of Stand-by Oil Spill Response Vessels.	✓

Planned output 2020	Achievement / Actual output 2020
Up to 5 technical meetings per year (seminars, workshops, training sessions).	✓
Up to 6 activities per year (studies, technical support, practical exercises etc.).	✓
Provision of RuleCheck and MaKCs for PSCOs as relevant.	✓
Provision of IMS/CleanSeaNet services.	✓

Output Indicators		Target 2020	Result 2020
Implementation of Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions	number of training sessions per year	Up to 5	10
	number of activities per year	Up to 6	11.25
	number of ENP experts attending per year	70	207
	level of customer satisfaction	>85%	>85%

Pollution preparedness, detection and response

5.1 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	*20,004,067*	***19,790,671***
PA	*18,949,174*	***18,550,375***
Staff	*10 AD, 2 AST, 1 SNE, 2 CA*	***10 AD, 2 AST, 1 SNE, 2 CA***

Multi-annual strategic objectives	
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
	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
	5. Prepare for response to new, evolving and diversified environmental challenges
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards

Expected outcome 2020

The network of stand-by oil spill response vessels, the stand-alone equipment available through the EAS and the dispersant stockpiles offer a European tier of pollution response resources to top-up the capacities of coastal States protecting their coastlines from marine pollution caused by ships or oil and gas installations.

In 2020 the Agency will continue implementing a programme aiming at the enhanced operational cooperation with the Member States through seminars, eLearning modules and the provision of “hands-on” training on the operation of complex EAS equipment systems. Moreover, EMSA will explore opportunities for sharing operational resources with EFCA and FRONTEX within the framework of cooperation on Coast Guard Functions), as well as with industry.

The Agency will participate in international at sea response exercises and multipurpose operations with Member States, as requested.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The Pollution Response Services managed by EMSA were maintained and fully operational throughout the year permanently ready to assist, despite the difficult circumstances and restrictions due to COVID-19.

In order to overcome the travel restrictions imposed by the pandemic, a specific procedure to address the “remote acceptance” of new contracted arrangements was developed and successfully implemented.

Three vessels entered into operational service in the areas of Adriatic Sea (Kijac), West Mediterranean (Monte Anaga) and Central Mediterranean Sea (Adelia). One vessel from a running contract was replaced.

The procurement to replace response capacity for the Southern Atlantic coast and the Western and Central Mediterranean was successfully concluded. The three newly contracted vessels will become operational by the end of 2021.

The equipment assistance service (EAS) for the Southern Baltic Sea and the North Sea Northern Baltic became operational.

The procurement to replace the EAS for the Adriatic Sea was successfully completed. The new stockpile will be operational by mid-2021.

At the end of 2020, the operational services comprised 17 fully equipped oil spill response vessels, four EAS arrangements and eight dispersant stockpiles.

Regarding technical developments, in 2020 three additional vessels were equipped with lightweight RPAS to improve the on-board capabilities for oil slick detection as well as to support any other surveillance activities, reaching a total number of eight vessels equipped with RPAS. In addition, the technical capability on board two response vessels was enhanced by installation of a high-capacity skimmer and replacement of the boom system.

Furthermore, in order to enhance the toolbox available from the EAS, two state-of-the-art arctic skimmers were delivered to the Northern Baltic stockpile.

Due to COVID-19, some operational activities had to be rescheduled or cancelled, namely a number of exercises organised by Member States as well as one hands-on training for EAS organised by EMSA. Nevertheless, EMSA participated in three exercises with Member States, which included the deployment of four vessels, one EAS system with relevant training for deployment, and two light RPAS.

Moreover, one operational hands-on training session organised with Member States on specific EAS equipment systems was conducted.

Discussions were held within the context of the Administrative Board on how to enhance the toolbox offered by the Agency, to take into consideration emerging challenges and needs. The outcome of such discussions will be taken into account in the planning of activities for the years to come.

In order to expand the range of equipment available for Member States and based on technical discussions held during the "stress test" in 2019, a framework contract for the provision of 3 new types of medium size equipment was successfully completed.

Objectives 2020	Achievement
Support coastal States in case of pollution caused by ships or oil and gas installations, by making available upon request via the ERCC: ▪ the network of response vessels; ▪ the Equipment Assistance Service (EAS), through the provision of specialised stand-alone equipment; ▪ stock of dispersants; ▪ technical expertise	✓
Ensure operational integration of EMSA's pollution response services within Member State, Regional Agreement and third country response chains through participation in exercises, as well as meetings with end users.	✓

Planned output 2020	Achievement / Actual output 2020
Manage the current stand-by service contracts, including supervision of vessel and equipment performance as well as crew capability for oil pollution response.	✓
Following the expected signature of the Vessel Availability Contracts for the West and Central Mediterranean and Adriatic Sea in 2019, the vessels will become operational in 2020.	✓
Retender three stand-by oil spill response service contracts for the Central and Western Mediterranean Sea and the Southern Atlantic coast to replace the non-renewable contracts ending in 2021.	✓
Renewal of two vessel availability contracts covering the Baltic Sea, and the Canary Islands and Madeira for an additional 4-year period.	✓
Manage the existing Equipment Assistance Service (EAS) contracts, monitoring equipment management and level of training of technical support personnel.	✓
Following the expected signature of the EAS contracts for the Southern Baltic Sea and the North Sea in 2019, the arrangements will become operational in 2020.	✓
Retender the EAS contract in the Adriatic Sea to replace the non-renewable contract ending in 2021.	✓
Complete procurement procedure for the purchase of equipment to complement the different types already offered to Member States.	✓

Management of the existing dispersant stockpiles in the Black Sea, Adriatic Sea, East and Central Mediterranean Sea, Canary Islands and Madeira, Southern Atlantic and North Sea.	✓
Improve the response capacity of certain Vessel and EAS arrangements through equipment upgrades.	✓
Enhance the detection capability for oil pollution in a number of suitable oil spill response vessels to be equipped with light RPAS systems.	✓
Replace or declassify obsolete equipment, in line with the 'Equipment Policy' of the Agency.	✓
Organise the participation of EMSA's pollution response assets in exercises, using the mobilisation procedure of the ERCC.	Due to COVID-19, a number of exercises were cancelled or re-scheduled for 2021
Arrange for "hands-on" training in the use of EAS equipment for Member States' operators.	A lack of participants due to COVID-19 led to one training being cancelled
Mobilise pollution response assets in case of request for assistance by a Requesting Party.	✓
Provide expertise to Member States and/or the European Commission in case of pollution incidents.	✓
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.	✓

Output Indicators		Target 2020	Result 2020
Stand-by Oil Spill Response Vessel Network	number of fully equipped vessels for mechanical recovery	17	17
	number of vessels equipped for dispersant application	6	6
	number of vessels equipped with RPAS	8	8
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	68	72

Vessel/Equipment drills and exercises	number of operational exercises per year	6	5[34]
	number of Equipment Assistance Service (EAS) drills	16	26
	number of notification exercises per year	6	5[35]
Training on the use of the Pollution response services	number of seminars and “hands-on” training sessions	2	1[36]
Response to requests for vessel/equipment services	mobilisation time in hours	24	24
Dispersant stockpiles	number of stockpiles	6	8
	minimum quantity of dispersants available at any time	1600 tonnes	1600 tonnes

[34] Due to COVID, a number of exercises were cancelled or re-scheduled for 2021.

[35] See above.

[36] Lack of participants due to COVID led to one training being cancelled.

5.2 POLLUTION SURVEILLANCE

Planned input		***Actual Input***
CA	*8,198,139*	***8,249,669***
PA	*8,212,632*	***8,214,368***
Staff	*6 AD*[37]	***5 AD***

a. CleanSeaNet and illegal discharges

***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*

Multi-annual strategic objectives	
Surveillance	21. Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system
	22. Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
	4. Further develop an agile, effective, innovative and risk-based response toolbox to top up Member Sate capacity to deter, detect and respond to pollution from ships and oil pollution from gas installations
	5. Prepare for response to new, evolving and diversified environmental challenges
Reliable partner	33. Support EU neighbourhood and sea basin policies to level-up and harmonise standards
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability

Expected outcome 2020
The Agency provides a routine and emergency satellite image-based service to support coastal States and the Commission in their efforts to improve the identification and pursuit of ships making unlawful discharges, and to respond to large-scale marine pollution incidents. CleanSeaNet provides a sustainable service upon which users can base their activities for targeting illegal discharges in European waters. The Earth Observation Data Centre (EODC) also supports other maritime surveillance services, such as detection of targets by satellite radar (Vessel Detection System, VDS), activity detection and change detection. The EODC capabilities will be extended to match new user requirements, not only from CleanSeaNet but from across EMSA's range of maritime services, as these develop.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The CleanSeaNet service is based on permanent monitoring of coastal waters through near real time analysis of Earth Observation (EO) Synthetic Aperture Radar (SAR) and optical satellite images. It is available to EU, EFTA and EU candidate countries, as well as to SAFEMED IV and Black and Caspian Sea project beneficiary countries. In 2020, 8,276 images were delivered and a total of 8,158 possible oil spills were detected, 4,645 of which with the highest level of confidence (Class A) regarding the probable detection of hydrocarbons.

[37] 1 AD for the European cooperation on coast guard functions (in planned and actual input).

Twelve requests for additional support from EMSA´s CleanSeaNet service were received from coastal states addressing accidental spills and emergencies and an additional 33 images were provided in that context.

The emergency support provided was for the purpose of detecting oil pollution from sinking vessels, from bunkering operations, and washing up ashore; palm oil pollution reaching shore; and algae pollution.

Due to the constraints imposed by COVID-19, the annual CleanSeaNet User Group meeting scheduled for March 2020, was cancelled. Information and presentations were shared online. In September and October, the annual training was offered to users in an online format and additional dates were added following a high level of interest. In total, 76 participants attended, and reported a very high level of satisfaction with the training.

Objectives 2020	Achievement
Provide the CleanSeaNet service to Member States, Commission and interested enlargement and ENP countries.	✓
Further utilise the Sentinel-1 missions as appropriate and phase-in other missions if cost efficient.	✓
Apply homogeneous quality management across the different data sources.	✓
Cooperate with existing regional arrangements related to marine pollution.	✓
Respond to ad hoc requests for assistance in case of pollution emergencies or threat thereof.	✓
Participate in oil spill response exercises by providing satellite feasibility planning for the operations.	✓
Explore how Earth Observation based services can further address other forms of marine pollution.	✓ (Input to ESA project provided. Further work pending)
Explore how reporting on pollution sightings, from other sources than satellite can be further integrated in the CSN system.	Not implemented due to systems development delays

Planned output 2020	Achievement / Actual output 2020
Maintain, upgrade and provide CleanSeaNet services, mainly based on satellite images and alerts to coastal States, on a regular basis for the monitoring of seas and detection of illegal discharges and polluting vessels.	✓
Provide assistance to coastal States and the Commission in case of accidental spills if operationally feasible.	✓
Participate in oil spill response exercises organized by Member States.	✓
Provide training to coastal States on CleanSeaNet.	✓
Organise meetings of the EMSA CleanSeaNet User Group at least once per year.	Cancelled in 2020 due to COVID-19 Documents and presentations distributed
Develop activities with enforcement authorities to promote effective follow-up to CleanSeaNet detections.	✓
Extend the EODC capabilities to support the needs of integrated maritime services.	✓

Output Indicators		Target 2020	Result 2020
CleanSeaNet service Earth observation (EO) image delivery	percentage per year EO image delivery ratio	90	98

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
Earth Observation Data Centre operational availability	EODC availability (alert reports distribution) for scheduled acquisitions of the CleanSeaNet Service	97.5	99

b. RPAS

***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.*

Multi-annual strategic objectives	
Surveillance	22. Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
	4. Further develop an agile, effective, innovative and risk-based response toolbox to top up Member Sate capacity to deter, detect and respond to pollution from ships and oil pollution from gas installations
	5. Prepare for response to new, evolving and diversified environmental challenges
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability

Expected outcome 2020
The Agency provides RPAS based services to support coastal States and the Commission in their efforts to protect the marine environment.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

In the field of pollution response, EMSA continued improving the operational support of its OPR vessels by equipping in 2020 four additional vessels with RPAS capacity reaching a total of eight. In additional to drills on the Pollution Response Vessels, EMSA participated in the Balex Delta and Breeze exercises with the Light RPAS Service.

EMSA supported the implementation of the Sulphur Directive by delivering RPAS services to monitor ship emissions in two Member States. In this regard, EMSA continued to scale up its portfolio to cope with the very high demand for such services from the Member States. EMSA performed 245 measurements of Sulphur Dioxide emission levels from vessels using RPAS in two Member States. The reports with measurements were made available to Member States through THETIS-EU.

EMSA also delivered new services with light RPAS to the Port of Antwerp mainly for the monitoring of pollution in the port, but also to monitor degassing, floating debris, and safety of ship movements.

With regards to pollution monitoring, the Agency complemented satellite imagery by offering RPAS monitoring services for the pollution verification and monitoring was part of the multipurpose surveillance service to Croatia, Italy, France, Finland, Romania, Denmark, Greece, and Estonia (see also §2.1).

All RPAS operations were supported by SATCOM services and made available to the users in real-time via the RPAS Data Centre.

Objectives 2020	Achievement
Provide RPAS based monitoring activities in support of the protection of the marine environment, including emissions monitoring and pollution response.	✓

Planned output 2020	Achievement / Actual output 2020
Provide RPAS based services to coastal States, depending on available capacity, for the monitoring of seas, emissions by vessels and detection of illegal discharges and polluting vessels (see chapter 2).	✓
Provide assistance to coastal States and the Commission in case of accidental spills if operationally feasible.	✓

Output Indicators		Target 2020	Result 2020
RPAS systems available	number of RPAS systems available for environmental protection (pollution and emissions)	8	13

RPAS monitoring	number of deployment days per year (pollution monitoring and emission monitoring)	180	440

5.3 COOPERATION AND INFORMATION RELATING TO POLLUTION PREPAREDNESS AND RESPONSE

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

Planned input		***Actual Input***
CA	*1,082,092*	***542,294***
PA	*1,197,492*	***684,239***
Staff	*4 AD*	***2 AD***

Multi-annual strategic objectives	
Sustainability	1. Support the development and implementation of relevant EU and international climate and environmental legislation
	2. Intensify pollution prevention activities by building Member State capacity and developing practical guidance and tools for the wider maritime cluster
	5. Prepare for response to new, evolving and diversified environmental challenges
Knowledge hub	36. Support innovation and development of new technologies
Service provider	29. Expand information services to analyse data and identify trends and risks to support safety, security and sustainability

Expected outcome 2020

Activities of the Agency support the preparedness structures and response capabilities of Member States with regard to marine pollution incidents, as well as at disseminating best practices and promoting the exchange of information between Member States, the Regional Agreements, IMO and other relevant international bodies.

The Agency aims to disclose as much relevant information as possible regarding chemicals and operational response to chemical spills in the marine environment to assist Member States dealing with spills involving hazardous and noxious substances.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

The Agency reinforced its information services in the field of Hazardous and Noxious Substances (HNS) supporting Member States in their decision-making process when dealing with chemical spills.

- The MAR-ICE (Marine Intervention in Chemical Emergencies) Service was expanded, providing Member States the possibility to request on-site expert assistance from the chemical industry at their command centre. 2020 saw two activations of the service for real incidents (Bulgaria, Finland).
- The MAR-CIS (Marine Chemical Information Sheets) database was updated.
- A new tool (BE-CHEM) was developed, to estimate the physical behaviour of chemical substances once released in the environment.

The knowledge sharing and the dissemination of information on national and regional developments and on EMSA's pollution response services continued through the Inter-Secretariat meeting with DG ECHO and the Regional Agreements Secretariats, and the Pollution Response Services (PRS) User Group and CTG MPPR (Consultative Technical Group for Marine Pollution Preparedness and Response) meetings, which were held as virtual meetings. Work under the CTG MPPR work programme continued with several virtual meetings of the various expert working groups, addressing the development of guidelines for oil spill sampling, guidelines for health and safety of oil spill responders, a curriculum regarding chemical spill response management and common operating procedures for international at-sea response operations, all actions of joint interest proposed by the Member States.

A training to Member States on the functionality and use of the Dispersant Usage Evaluation Tool (DUET) and an information session for Finnish experts on the MAR-ICE service activation procedures were also provided as virtual events, enhancing Member States' understanding on the use of EMSA's tools and services.

Objectives 2020	Achievement
Implementing the HNS Action Plan to ensure the proper operation, maintenance and development of the MAR-ICE service and the MAR-CIS database.	✓
Cooperate with coastal States and relevant regional cooperation arrangements in coordination with the Commission, in order to facilitate the exchange of best practices and develop added value projects.	✓
Provide technical assistance to coastal States regarding pollution preparedness and response to contribute to relevant work of technical bodies of the International Maritime Organization (IMO), and relevant Regional Agreements.	✓

Planned output 2020	Achievement / Actual output 2020
Implement the HNS Action Plan: ▪ Maintain the network of specialised chemical experts (MAR-ICE Network) and establish a MAR ICE level 2 by which Member States could receive the technical support from the chemical industry at their command centre. ▪ Maintain and update database/datasheets of chemical substances for marine pollution response (MAR-CIS). ▪ Maintain oil and chemical spills fate and trajectory modelling capabilities.	✓
Maintain and update marine pollution preparedness and response related information, studies, tools, reports and inventories. Maintain the Dispersant Usage Evaluation Tool (DUET) and the response calculator, as appropriate.	✓
Coordinate the PRS User Group, Inter-Secretariat and CTG MPPR meetings, workshops, and implement the CTG MPPR Rolling Work Programme. The envisaged events under the CTG MPPR include training courses on specific subjects such as maritime surveillance and pollution reporting, HNS and oil spill sampling.	✓
Based on the outcome of the “stress tests” conducted in 2019 and the ongoing work within the Regional Agreements to update their risk assessments and risk management capabilities, follow up with the Member States at regional level to determine how best EMSA can assist in closing the identified gaps.	✓
Support activities of the Commission, Regional Agreements, the IMO and other relevant bodies/organisations (including participation in the Arctic Council) where appropriate.	✓

Output Indicators		Target 2020	Result 2020
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 meetings and workshops	number of CTG MPPR/InterSec meetings and workshops	3	14[38]
Coordination of the CTG MPPR trainings	Number of CTG MPPR trainings	1	0[39]
Coordination of the PRS User Group Meeting	number of meetings	1	1
Development of decision support tools/eLearning courses	number of decision support tools	1	2

[38] Given the switch to the online format, more informal meetings were held.

[39] The CTG MPPR training planned for 2020 did not take place due to the COVID outbreak.

Horizontal activities

6.5 COMMUNICATION, MISSIONS AND EVENTS SUPPORT

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

Planned input		***Actual Input***
CA	*1,864,091*	***1,904,091***
PA	*1,864,091*	***1,788,315***
Staff	*3 AD, 3 AST, 7 CA*	***3 AD, 3 AST, 6 CA***

Multi-annual strategic objectives
→ To become a reliable source of information and statistics for the EU on maritime matters.

Expected result 2020
Activities should aim at giving public and interested parties objective, reliable and easily understandable information with regard to the Agency's work (Reg. 1406/2002/EC, Art. 4.2).

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

Communication

EMSA's communication activities aim to rapidly deliver objective, reliable and easy-to-understand information to the general public and any interested parties. EMSA's new website went live in December 2020, providing a new look and feel for the Agency's online presence, and aligning it with the strategic priorities of the five year plan. A full multi-lingual section was developed, making core information about EMSA available in the 24 languages of the EU. In addition, the five strategy was translated into 24 EU languages for the first time. In the new virtual environment, EMSA provided online and offline communication support for the Annual Coast Guard Event, bringing the conference to online audiences, with wider dissemination on social media. Video was extensively used in a variety of settings, including support for conferences and events, and then was cross-disseminated on EMSA's online channels (topics included the Annual Highlights video, as well as videos reflecting EMSA's study cycle – including Firesafe – the innovative IMS application, and The European Coast Guard activities). The regular publication cycle included main documents linked to EMSA's strategic outputs, including the Facts & Figures 2019 report, the Outlook 2020 report, etc.). In 2020, increased emphasis was put on data visualisation, to illustrate key strategic projects like RPAS, response network vessels and accident investigation outputs.

Missions and events support

Due to the COVID-19 outbreak very few missions of EMSA staff took place since March 2020. Most of the EMSA workshops in situ were replaced by virtual ones and, as a consequence, very few reimbursements of experts took place from Q2 onwards. Staff dealing with missions and expert reimbursements were therefore redeployed to other functions.

Objectives 2020	**Achievement**
Continue to implement the new communication strategy 2014-2020 aiming to build up effective communication practices.	✓
Increase EMSA's visibility in the host country.	✓
Make use of data visualisation to make our activities more easily understood.	✓
Continue supporting the organisation of events ensuring high quality standards and added value for Member States, industry and the Commission.	✓
Develop working practices and streamline procedures to allow for further efficiency gains in the field of missions & events management.	✓

Planned output 2020	**Achievement / Actual output 2020**
Prepare regular publications and completing/updating brochures and leaflets including the new EMSA general brochure.	✓

Continue to improve internal communication through the Agency's intranet.	✓
Enhance the communication role of EMSA's website through new features and functionalities in line with current developments. Continue implementing the new visual identity for EMSA.	✓
Deliver presentations at meetings, exhibitions and conferences.	✓
Support the organisation of events/meetings in the Agency.	✓
Ensure timely organisation and reimbursement of missions & participants to EMSA's events.	✓

Output Indicators		Target 2020	Results 2020
Publications	number of publications/leaflets/brochures produced per year	16	19
Events	total number of meetings/workshops organised by EMSA per year	80	85[40]
	total number of participants at EMSA meetings/workshops per year	2000	2046

[40] Virtual meetings assisted by the Events team.

6.1, 6.2, 6.3 AND 6.4 OVERHEAD/HORIZONTAL TASKS

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

Planned HR input [41]		***Actual HR input***
Management/bureau/horizontal tasks[42]	*12 AD, 8 AST, 1 CA*	***12 AD, 9 AST, 1 CA***
Human Resources, Protocol and Document Management	*3 AD, 5 AST, 7 CA*	***3 AD, 5 AST, 5 CA***
Legal and Financial Affairs, facilities and logistics	*6 AD, 6 AST*[43]*, 4 CA*	***6 AD, 5 AST, 4 CA***
Operations support (ICT)	*1 AD, 7 AST, 2 CA*	***1 AD, 8 AST, 2 CA***

Multi-annual strategic objectives

- → Continuously align EMSA with institutional standards and rules.
- → Obtain best value for money from the Agency's assets and from EU family joint resources (e.g. inter-institutional procurement procedures, inter-agency recruitments).).
- → Achieve efficiency gains, streamline organisational structures and build flexibility, agility.
- → Further develop effective, innovative and results oriented solutions.
- → Ensure good corporate governance and transparency.

Expected result 2020

The functions mentioned should further structure and facilitate the working practices and projects of the Agency to enable staff with the allocated resources to work towards meeting the objectives in an efficient and cost-effective manner in line with both the Financial and the Staff Regulations.

2020 HIGHLIGHTS, MILESTONES AND ADDED VALUE FOR STAKEHOLDERS:

Management team

The Agency's management team aims to deliver added value to EMSA's key stakeholders in full alignment with the EU political priorities and its objectives, with sound and resource-efficient management.

2020 was the first year of implementation of the Agency's 5-year Strategy 2020-2024 as adopted by the EMSA Administrative Board in November 2019.

It was also the first year of the new organisational structure of the Agency adapted to facilitate the implementation of the new strategic priorities. In 2020 the Executive Director was directly supported by four Heads of Department and the Head of the Executive Office.

The Agency continued to participate in the EU Agencies Network and its various sub-networks such as ICTAC (the Network of Heads of ICT of the European Agencies), the IALN (the Inter Agency Legal Network), the PDN (the Performance Development Network) and NAPO (the Network of Agency Procurement Officers) and contributed to the surveys and general information requests launched by the coordination of EU Agencies and other Agency-wide exercises.

[41] Financial resources not applicable here as already distributed across the activities.
[42] This number includes the Executive Director and her staff, Heads of Department and their staff, Heads of Horizontal Units as well as the ICC and accountancy functions.
[43] 1 AST for the European cooperation on coast guard functions (in planned and actual input).

Human resources and Protocol[44]

HR staff were involved in organising recruitments following the reorganisation of the Agency structure which entered into force in January 2020. Following the outbreak of COVID-19 extensive updates in procedures had to be developed and implemented in order to adapt to the new virtual reality (full process of remote recruitment, provision of remote trainings and other activities). Human Resources, in cooperation with the facilities and logistics team, engaged in organising new ways of working under the teleworking regime as well as in developing the policy regarding the different phases of the returning to the office (voluntarily office work, mandatory shifts).

The long-term objective of a paperless administration has been completed and the very few procedures that were still on paper have been digitalised (i.e. protocol requests).

The relations with the Protocol Authorities during this year of crisis were very close, in order to be able to adapt to national restrictions and requests during the pandemic.

Legal Financial and Facilities Support

Ex-ante verification of all budgetary and legal commitments and other financial operations was carried out, thus ensuring legal and financial assistance and advice. In 2020 more than 1,000 files were handled for verification. During the same period 79 procurement procedures and one donation procedure were initiated. Internal Rules, guidelines and templates were kept up-to-date and internal tools supporting administrative and financial processes have been further enhanced. New working guidelines on processing documents under Corvid circumstances were developed and implemented. In addition, helpdesk assistance and in-house trainings were provided.

The focus in the area of facilities and logistics was primarily to implement the reorganisation of the Agency in the premises, which was successfully completed. Following the outbreak of COVID-19, the main and continuous activity was to ensure a safe working environment in the premises taking into account the rapidly changing epidemiological situation.

Operations support (ICT)

ICT operations support provided reliable ICT service operations for EMSA's maritime and corporate applications and EMSA end-users.

It successfully ran a disaster recovery drill switching critical maritime applications from the primary Data Centre in Lisbon to the recovery Data Centre in Madrid. The applications operated in the recovery Data Centre without any performance degradation.

The year 2020 introduced a significant shift in the working patterns due to COVID-19. EMSA staff were transferred to the teleworking regime in 1 day, being fully supported by the necessary ICT tools and equipment. VPN connectivity worked for all EMSA staff without any downtime and the Service Desk operated via unified communication tools.

In addition, the core hyperconvergence computing platform in both Data Centres was upgraded to state of the art technology.

Personal Data Protection

During the course of the year the EMSA Administrative Board adopted 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

[44] Implementation of the Protocol on Privileges and Immunities signed with the Portuguese Authorities.

Maritime Safety Agency. Subsequently, the new EMSA Data Protection rules were developed and adopted by the Agency's Executive Director. A new Data Protection Coordination network (DCP) was established. The DCP network created a list of future actions to be taken in relation to Data Protection. Examples of such actions include the delivery of internal training to EMSA staff regarding the Regulation 2018/1725, the inclusion of Data Protection awareness as an element of EMSA newcomers training and the addition of a new chapter on Data Protection in the next version of the EMSA Procurement Rules.

During the course of 2020, EMSA was subject to four audits/information requests performed by the European Data Protection Service (EDPS).

1. The EDPS audited (remotely) the publicly accessible registers (of processing operations) under Article 31(5) of the Regulation. After a verification process and a reply to EDPS by the DPO, the Agency was moved by the EDPS into the category "(largely) compliant".
2. The EDPS performed an audit on the information provided to data subjects when they sign up to EUIs' newsletters and other subscriptions. The audit resulted in one finding which was rectified immediately.
3. EMSA provided information on the processing of personal data, which involves transfers to third countries with a particular emphasis to procurements and contracts.
4. The EDPS launched a survey related to COVID-19 – linked processing operations focused on three areas:
    - New processing operations implemented by EUIs as part of their return to work strategy;
    - IT tools or solutions implemented or enhanced by EUIs to ensure business continuity in times of telework;
    - New processing operations implemented by EUIs in charge of public health related tasks;

A considerable number of new Records of Processing activities were created in the Agency during 2020 and a number of questions related to Notifications were answered (52 in 2020). The number of Data Protection Impact assessments carried out in 2020 also saw a significant rise in comparison to year 2019 (0 in 2019 vs 5 in 2020).

Objectives 2020	Achievement
Monitor the implementation of the annual programme 2020 (Section III of the Single Programming Document 2020-2022, as amended).	✓
Implementation of the new EMSA 5-year Strategy, adopted in November 2019.	✓
Continue to develop quality management across the range of services provided by the Agency.	✓
Further implementation of requirements and principles emanating from the applicable Framework Financial Regulation, the Joint Statement of the European Parliament, the Council of the EU and the European Commission on decentralised agencies (Common Approach, Road-map).	✓
Development and Implementation of new Implementing Rules giving effect to the Staff Regulations.	✓
Job screening exercise with the aim of enabling the Agency to take sound decisions on resource allocation. The exercise will contribute to better reporting to stakeholders and increased transparency concerning the utilisation of jobs at EMSA and will facilitate redeployment.	✓
Simplify and streamline administrative and financial procedures in order to further improve efficiency and cost effectiveness.	✓
Continue the development of the document management archiving policy and streamline the use of electronic workflows throughout the Agency.	✓
Maintain good relations with the Portuguese Authorities to allow for a smooth implementation of the existing Protocol between EMSA and the Government of Portugal.	✓
Continuously improve the Agency's environmental performance.	✓
Ensure business continuity and advanced ICT services.	✓

Planned output 2020	Achievement / Actual output 2020
Management team	
Work programme, including staff and budget planning (Programming Document).	✓

Action Plan for Pollution Preparedness and Response.	✓
5-year Strategy implementation.	✓
Annual report (Consolidated Annual Activity Report) and accounts.	✓
Preparation of meetings of the Administrative Board, decisions, minutes.	✓
Regular monitoring of on-going projects.	✓
Quality Management (re-certification for Visits & Inspections and development across other services)	✓
IT Service Management System certification.	✓
Internal Control Framework.	✓
Monitoring and reporting on the implementation of the work programme and the budget.	✓
Organising and executing transfers.	✓
Budget follow-up and further development of budget planning and management tools.	✓
Human resources & Internal Support:	
Management of the establishment plan (new recruits, redeployment, turnover, etc.).	✓
Management of staff related budget.	✓
Preparation and Implementation of rules giving effect to the Staff Regulations.	✓
Implementation of rights and obligations of EMSA staff members.	✓
Improvement and updating of e-HR tools and the EMSA Central Register.	✓
Implementation and improvement of existing HR policies.	✓
Implementation of the Staff Development Policy.	✓
Implementation of the Learning & Development Policy.	✓
Staff Helpdesk on HR matters and communication on staff related issues.	✓
Implementation of the National Experts on Professional Training programme and traineeship policy.	✓
Implementation of the Protocol Agreement.	✓
Implementation of the EMSA Records Management Policy & Procedures.	✓
Legal Financial and Facilities Support	
Providing legal, financial and budgetary advice to the Executive Director and the Units.	✓
Legal verification of procurement procedures and legal commitments.	✓
Further development of EMSA E-procurement including a tool for contract management.	✓
Legal and financial verification of commitment and payments files.	✓
Preparing and implementing internal rules, guidelines, templates and procedures; development and maintenance of procurement, contract and budget management tools of the Agency.	✓

Maintaining, operating, and further improving EMSA's premises and infrastructure including safety, security and providing numerous support services.	✓
Planning and implementing measures for environmental improvement in all EMSA's activities	✓
Preparation of the Agency for registration within EU Eco-Management and Audit Scheme (EMAS).	✓
Operations support (ICT)	
Maintaining and enhancing a state-of-the-art Data Centres to host maritime applications.	✓
Providing advanced business continuity and ICT security services.	✓
Maintain the Business Continuity Facility.	✓
Providing 24/7 ICT Operations for hosting and running of maritime applications in-house and in the cloud.	✓
Providing technical expertise to support operational maritime applications.	✓
Providing technical support to the development and rollout of new maritime applications and major upgrades to existing ones.	✓
Providing Horizontal ICT Service Platforms for Maritime Applications.	✓
Providing solutions to share and exchange documents more efficiently and in a secured fashion with the Commission.	✓
Providing EMSA's Corporate Services Platforms (email, Electronic Document Management System, file & print, etc.) and associated Business Continuity Platforms and Services.	✓
Providing advanced ICT desktop, mobility and collaboration services to staff.	✓

Output Indicators		Target 2020	Result 2020
Audit	ECA recommendations implemented in time	as close as possible to 100%	100
	IAS recommendations implemented in time	as close as possible to 100%	100
Planning	Implementation of the Work Programme	as close as possible to full implementation of the AWP, 2020 as amended by written procedure 5/2020 of 20 August 2020	*Assessed through the CAAR2020*
Establishment plan execution rate	execution rate establishment plan	as close as possible to 100% and in any case above 95%	97.64
Budget execution rate	execution rate commitment appropriations	as close as possible to 100%, and in any case above 95%	98.89
	execution rate payment appropriations	as close as possible to 100%, and in any case above 95%	96.08

Part II – Management

2.1 Administrative Board

Meetings

EMSA's Administrative Board held three ordinary meetings in 2020. The March Administrative Board meeting was scheduled just a few days after the COVID-19 outbreak with travel restrictions already in place. In order to ensure the business continuity of the Agency, the Chairman and the Vice Chairman agreed that the deliberations of the meeting would be achieved through a one-week consultation process for the information points and by written procedure for mandatory agenda items.

The June and November Administrative Board meetings were successfully held online, and each 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.

1st year of implementation of the EMSA 5-year Strategy (2020-2024)

The EMSA 5-year Strategy 2020-2024 on which the Single Programming Document 2020-2022 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 strategic and operational achievements in each work area in 2020 are provided in Part I – Operational activities.

Chairmanship of the EMSA Administrative Board

In November 2020, the Administrative Board renewed by acclamation the chairmanship of the Chairman Mr Andreas Nordseth and the Deputy Chairman Mr Nicola Carlone of the EMSA Administrative Board for a second term of office for an additional three-year period (until 4 December 2023), as foreseen by the EMSA Founding Regulation.

The Chairman and the Deputy Chairman were recognised for their valuable service to the Agency and their efficient guidance.

New Senior Management appointments

In line with Article 16.4 of the Agency's Founding Regulation, the Administrative Board provided positive opinions on the appointments of the Head of Department 3 – Digital Services and Simplification and Head of Department 4 – Corporate Services, respectively by written procedures 3/2020 and 6/2020.

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.

Following the positive experience piloted in 2019 to streamline and enhance the programming and reporting processes by bringing the reporting exercise forward from June to March and moving the planning exercise from March to June, the Administrative Board adopted the Consolidated Annual Activity Report for 2019 by written procedure (March meeting) subject to the preliminary observations of the European Court of Auditors. The document was further updated following relevant alignments with the new Commission guidelines issued on 20 April 2020, requiring an additional adoption by the Administrative Board.

Request for technical assistance

A request for assistance from Romania, supported by Bulgaria, for the establishment of an EAS in the Black Sea, was approved by the Board in November 2020 with an impact on the annual work programme 2021.

Administrative Agreements

In 2020, the Administrative Board considered and approved the following draft administrative arrangements, service level agreements, memoranda of understanding and working arrangements, as foreseen by Article 10(2)(cc) of the Agency's Founding Regulation:

- draft amendment to the Cooperation Agreement between the European Commission, DG Climate Action (DG CLIMA) and EMSA for the support of the implementation of the EU MRV Regulation and relevant technical assistance;
- draft MoU between the European Maritime Safety Agency and the Riyadh Memorandum of Understanding (Riyadh MoU) on Port State Control about the provision of the EMSA RuleCheck / MaKCs to the members of the Riyadh MoU;
- draft MoU between the European Maritime Safety Agency and the Tokyo Memorandum of Understanding (Tokyo MoU) on Port State Control about the provision of the EMSA RuleCheck to the members of the Riyadh MoU;
- draft Implementation Addendum for the Cooperation Agreement between WMU and EMSA;
- draft Cooperation Arrangement between the EMSA and MAOC (N);
- draft Grant Agreement with DG MARE for CISE – Transitional Phase.
- draft GovSatCom - ENTRUSTED Consortium Agreement between EMSA and the GovSatCom CSA consortium members.

In addition, the Administrative Board took note of the planned extension for an undetermined period of the Tripartite Working Arrangement (TWA) on Coast Guard cooperation between EMSA, EFCA and Frontex established between the three agencies in 2017, in view of the continuation and deepening of this cooperation.

The Administrative Board also took note of the ESA-EMSA Cooperation Agreement that had been formally extended for an additional period of 5 years until 1 July 2025, as well as of the development of the new Copernicus Maritime Surveillance Agreement, expected to be submitted for the Administrative Board's consideration in 2021.

Written procedures

As in previous years, in 2020 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 amendments and endorsement and appointments of Heads of Departments.

Written procedures are only used when possible operational or administrative time constraints are not synchronised with the actual convening of Administrative Board meetings. As an important example, as specified above, a written procedure was used to adopt the mandatory agenda items in March when, due to the COVID-19 outbreak, the meeting could not take place in its usual form.

The Agency continues to thoroughly assess - on a case by case basis – the possibility to reduce the number of these procedures, as suggested by the Administrative Board.

2.2 Major events

New organisational structure and appointment of 2 Heads of Department

Closely related to the new EMSA Strategy 2020-2024 and announced by the end of 2019 taking into consideration the interests of the service and the best possible use of the existing resources but also staff mobility, the new organisational structure was effective as from 2020.

The outbreak of COVID-19

The outbreak of COVID-19 created an unprecedented situation and transformed lives of billions of people, their ways of interacting and working.

EMSA was able to switch to remote working over a very short time. All EMSA staff were provided with PCs and thanks to remote access work continued as planned.

The use of video conferencing for internal meetings, selection committees for recruitment and meetings with external stakeholders ramped up quickly in the daily life of our staff. In 2020, EMSA staff carried out 30,000 one-to-one Skype and Teams meetings, exchanged 400,000 chat messages, organised 18,000 meetings, for a total time in meetings and calls of 6,300,000 minutes.

The Agency also adjusted its working methods to ensure alternative forms of delivery of as many services as possible and developed new methods and tools that will continue to be useful in the future: live broadcast workshops and training, new eTraining modules, etc.

EMSA also developed new services to further support its key stakeholders in the context of the pandemic: a report providing figures on the impact of COVID-19 on shipping traffic, an inventory of the measures adopted by each EU Member State and EFTA country, as well as monitoring and information sharing on cruise vessels in and around the EU.

Furthermore, through a spontaneous initiative, both EMSA as an organisation and its staff set up a network to support colleagues should the need arise (buying groceries and pharmaceutical products, moral support, online classes, etc), and organised a fundraiser for hospital equipment as a gesture of solidarity with our host country and cooperation amongst staff. EMSA also set up structured assistance to its staff who may be affected by COVID-19.

Amendment of the EMSA 2020 budget and the amendment of the EMSA SPD 2020-2022

The Agency put in place a rapid response to the COVID-19 outbreak through an in-house analysis of the evolution of the pandemic and its impact on the EMSA Work Programme.

Upon information to the EMSA Administrative Board and agreement of the Commission to re-programme and re-allocate excess resources in Title 4 of 1,090,012 € in both payment and commitment appropriations to Titles 1 and 2, a first 2020 budget amendment was adopted by written procedure n°4/2020 on 29 July 2020.

The Agency further finetuned the estimated impact of COVID-19 on the execution of its budget for 2020 by factoring in assumptions in terms of activities and the budget implementation: latest developments in relation to the RPAS activities, hybrid meetings and trainings, update of the visits and inspections calendar, etc.

Therefore, a second 2020 budget amendment and the first amendment of the Single Programming Document 2020-2022, where some of the Agency's activities were reviewed, was adopted by written procedure 5/2020 on 20 August 2020. These changes were reflected and identified under the relevant activities in the Section III of the SPD 2020-2022 in the narrative, outputs and KPIs.

The total excess resulting from the reprogramming of activities due to the COVID-19 pandemic was estimated at 1,379,110 € in commitment appropriations and 1,602,088 € in payment appropriations which were returned to the European Commission in the framework of its Global Transfer Exercise.

2.3 Budgetary and financial management

Regarding the EU subsidy, the Agency executed 79,153,341€ in commitment appropriations (CA)[45], representing 98.89% of the total budget of the year, and 77,981,450€ in payment appropriations (PA)[46], amounting to 96.08% of the total budget when only counting C1 Funds[47] (appropriations voted in the current budget).

After considering automatic carry-overs of payment appropriations (C8 funds: appropriations carried over automatically), 1.78% of payment appropriations were cancelled, whereby the target of less than 5% cancellation set by the Commission (DG BUDG) was reached.

The budgetary structure of the Agency was presented in titles: Title 1 and 2 are for Administrative Expenditure and Title 3 and 4 are for Operational Expenditure and Anti-Pollution Measures respectively, 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 and 4 can have a multi-annual dimension, extending over more than one financial year. 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 31% of total commitment and 30% of total payment appropriations, respectively; 99% of commitment appropriations were committed[48] and 96% of payment appropriations were paid. Cooperation on Coast Guard Functions represented 16% of total commitment appropriations and 17% of payment appropriations, respectively; 98% of commitment appropriations were committed and 100% of payment appropriations were paid. 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 were 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 work programme objectives.

Effective and efficient internal controls and transparency were also in place to support sound financial management across the Agency. Each operation was subject to at least one ex-ante verification. During the course of the year there was no case where a supplier of EMSA charged the Agency a payment for late interest fees.

Throughout the year, 79 procurement procedures were initiated, and 49 contracts were signed (40.82% Open procedures, 6.12% Special Negotiated procedures and 53.06% Negotiated procedures (CPNEG & NEG 1-5)).

There were eight budget transfers in total, which were managed in line with the relevant rules (Article 26 & 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 is made in the case of transfers from one title to another, and therefore below the threshold above which Administrative Board approval is required.

[45] 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.

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

[47] These figures contain revenues from fees and charges amounting to 190,300€.

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

48,112,076€ of budgetary commitments associated with the EU subsidy were carried forward as C8 Funds. They were mostly related to the multi-annual operations of the Agency. 48% were paid (consumed), 44% remained as “open amount” (amount due, not yet paid) and 7% of the total has been de-committed (cancelled).

The Administrative Board adopted EMSA Amending Budgets (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 the Interoperability project, SAFEMED IV - EuroMed Maritime Safety Project, EU Funds for candidate and potential candidate countries, FRONTEX SLA, EFCA SLA, COPERNICUS, EQUASIS, THETIS MRV, LRIT and Miscellaneous Revenue; these funds could only be loaded once cash payment was received by the Agency in the bank account Refunds were recorded for the Maritime Labour Convention project.[49].

Some of the extra income was internal assigned revenue (C4 funds) relating to refunds, of which the Agency executed 91,196€ in CA, representing 54.99% of the total C4 funds of the year, and 24,000€ in PA, amounting to 26.32% of the total C4 funds. Furthermore, the Agency consumed C4 appropriations carried over from the previous year (C5 funds in the current year). Regarding C5 funds the Agency executed 17,899€ in CA, representing 100% of the total C5 funds of the year, and 24,155€ in PA, amounting to 100% 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. Of the 37,056,502€ of R0 appropriations available for consumption, 55.23% were cashed before 2020 and 44.77% in 2020; the Agency executed 30,774,265€ in CA, representing 83.05% of available appropriations, and 20,002,212€ in PA, amounting to 53.98% of appropriations available for consumption.

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

Pursuant to Article 41 of the Financial Regulation of the European Maritime Safety Agency, 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 other 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 control systems while upholding the principle of zero tolerance of fraud as well as to comply with EMSA system of controls set at EMSA 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 EUR 60,000. All Heads of Department delegated as authorising officers shall use the budget appropriation up to a maximum of EUR 200,000 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 notwithstanding Article 4.7 of the “Charter of tasks and responsibilities of authorising officers by delegation”.

[49] SAFEMED IV - EuroMed Maritime Safety Project and FRONTEX SLA were also affected, but on the balance cash receipts exceeded reimbursements.

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”. Each authorising officer by 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.

None of the authorising officers by delegation reported any weaknesses identified or reservations.

2.5 Human Resources management

2020 was a challenging year due to the COVID-19 outbreak. Many established procedures and practises had to be adapted to the new virtual reality. In the area of recruitment, the Agency moved to virtual interviews and online written tests, in the area of staff development, the Agency moved to online training and offered training possibilities targeting the new reality and ways of working.

HR, together with ICT, during February 2020 and before the lockdown in Portugal, ensured that all EMSA staff had received the relevant training to telework efficiently from home.

Following the reorganisation which took effect from 2020, a major wave of recruitment had been planned and the great majority of vacant positions were successfully filled. 33 calls for application (incl. for seconded national experts) were published. Also in the area of recruitment, a new policy on the identification and management of conflict of interests of members of selection boards was put in place.

Despite COVID-19, the traineeship and NEPT programme ran as normal with 12 trainees and 3 National Experts in Professional Training taken on board.

The internal communication area was given priority during 2020 and the Agency stayed closer than ever to each of its staff helping them to adapt the best they could to the circumstances and keeping them duly informed about the situation and restrictions in the host country. 2020 required much more interaction with the relevant counterparts in the Host Country in order to be duly informed and aligned with the situation and management of the crisis in Portugal.

In the area of career development, a new guide establishing levels of responsibilities was developed with the aim of setting standards to ensure a more harmonised approach during the appraisal exercise and subsequent reclassification/promotion exercise.

Further actions of the EMSA gender plan were implemented during 2020, i.e. an awareness campaign, participation at relevant conferences and one particular milestone was achieved, by EMSA becoming officially a member of the Women in Transport Platform and defining SMART objectives in this context.

As regards the legislative framework, three additional implementing rules entered into force at EMSA.

In the area of digitalisation, the last few administrative procedures which were not yet digital, i.e. requests related to the implementation of the Protocol, have been integrated into the ePersonal tool and are now fully electronic.

With regard to prevention of harassment, the Agency adopted and published a revised manual of procedures.

In the area of records management, an important milestone was achieved, the Administrative Board adopted internal rules for the application of Council Regulation (EU) 2015/496 of 17 March 2015 amending Regulation (ECC, Euratom) No 354/83. These rules include rules for the preservation and opening to the public of historical archives and on the protection of personal data contained therein.

2.6 Strategy for efficiency gains

Regarding efficiency gains, the Agency continuously aims and works to improve its procedures in order to enhance its efficiency and effectiveness and achieve the best possible use of its human and financial resources. In particular, during the course of 2020 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 new organisational structure in place from 1 January 2020 is a.o. aimed at increasing efficiency in overhead/horizontal functions.

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

The automatization of procedures aims to further reduce the administrative workload of certain staff members and allow them to concentrate on other important tasks in related areas with more added value. Following the earlier introduction of the Agency's document management system, ARES and the streamlining of HR and other administrative applications such as the e-procurement application, 2020 was again a year of "consolidation" and stability as only minor updates were done to these systems, like for example in the area of the implementation of the protocol with our host country.

- Creation of task forces to carry out specific projects:

The Agency strives to use the expertise present in-house to the greatest extent possible, through the creation of task forces involving relevant staff members to carry out specific projects. The implementation of tasks under the European cooperation on coast guard functions, for instance, which brings together staff and expertise from different parts of the Agency, is coordinated by a task force.

During the course of the year 8 internal task forces were set up by decision of the Executive Director. Examples of such task forces include the task force on Alternative Fuels for Maritime Transport, on EMSA's ICT Cloud Strategy or on the elaboration of statistics on the impact of COVID-19 pandemic on shipping traffic.

- 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 2020 annual job screening exercise was carried out at EMSA. Ultimately the purpose of screening is to bring down staffing levels in administrative support and coordination and to thus reallocate resources from 'overheads' to 'frontline' operational activities. Screening also improves transparency on how jobs are assigned and facilitates 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 many cooperation agreements in order to better coordinate their activities, avoid overlaps and achieve better use of their resources.

In the framework of the 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 to develop cooperation and synergies with a view to increasing effectiveness, efficiency and save costs given the geographical proximity of the agencies. EMSA launched procurements for catering, cafeteria services, cleaning and general maintenance services for the buildings under management of both Agencies. EMSA and EMCDDA created a charging station for electric cars that can be used by the staff of 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) has been 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 three times per year by these auditing bodies and their audits cover all identified audit risks. Finally, a number of specific programmes were audited by external audit firms or the European Commission (DG-DEFIS).

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 2020 were addressed and there were no pending actions that could have a negative influence on the risks linked to the Agency's activities in 2020. In particular, all action plans stemming from past audits were implemented within the agreed time frame: by 31 December 2020 all action plans, due by year-end, were implemented and all information regarding the completion of actions related to IAS audits was forwarded to IAS for review and formal closing.

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 of 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, during the course of 2019 the IAS established a new 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	▪ IT governance and portfolio management ▪ Operational oil pollution response services

	▪ CleanSeaNet and illegal discharges
Follow-up	▪ Continuous desk review of the recommendations reported as implemented ▪ On-the-spot follow up as required

Following the 2020 Internal Audit Service (IAS) Audit plan, and as agreed by the Agency, the audit on the IT governance and IT portfolio management was originally scheduled to be carried out in Lisbon from 29/06/2020 to 03/07/2020. As a result of the COVID-19 outbreak the audit was rescheduled to September 2020. The preliminary meetings for this audit took place, remotely, during the month of May 2020. Due to the ongoing public health risks and COVID-19 related work and travel restrictions and some organisational changes at EMSA it was then mutually decided that it would be more convenient to organise the on-the-spot fieldwork at a time when all staff involved in the audit could be present at EMSA premises. As a result, subject to the COVID-19 situation, the audit was rescheduled again and is now expected to take place during the course of 2021.

As regards the previous audits, the only remaining open action point with due date of 31/01/2020 was fully implemented within the agreed time frame and all information regarding the implementation was forwarded to IAS for review and formal closing. The IAS formally closed the audit recommendation. As a result, all audit recommendations stemming from IAS audits are formally closed.

2.7.2 ECA

Following its audit of the financial accounts for 2019 the European Court of Auditors issued the opinion that "the accounts of the Agency for the year ended 31 December 2019 present fairly, in all material respects, the financial position of the Agency at 31 December 2019, 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 four observations, none of which called the Court's opinion into question:

1. For one recruitment procedure, the selection board organised an additional written test, which was not mentioned in the vacancy notice. According to the Agency's rules for implementing the Staff Regulations, the type of tests used in a recruitment procedure must be specified in the vacancy notice. Furthermore, the preselection board for this procedure did not decide on the pass-marks required for candidates to progress to the next stage of the recruitment procedure before it evaluated the applications;

EMSA took the necessary action and now ensures that all future vacancy notices are more explicit with regard to the type of tests and that pass-marks required for candidates to progress to the next stage are decided upfront.

2. Members of selection boards for recruitment procedures in the Agency sign a declaration to the effect that they are not affected by any conflict of interest. They make this declaration at the very beginning of the procedure, before the vacancy notices have been published and before the candidates are known. According to the declaration, if board members discover during the selection process that a conflict of interest has arisen, they must declare this immediately and resign from the selection panel. In addition to confirmed conflicts of interest of this kind, the Staff Regulations also require selection board members to declare any personal interest, which could potentially impair their independence with regard to any given candidate. The ECA found that this rule had not always been followed;

EMSA reviewed its procedure and guidelines related to the identification and management of conflict of interests of Selection Committee members. The new procedure was implemented early 2020. The enforced procedure ensures a proper reporting and management of potential conflicts of interest with the aim to ensure a fair and transparent recruitment process.

3. EMSA has a framework contract with a temporary-work agency to provide temporary-agency workers (or interim workers). A specific legal framework applies to interim worker contracts. It imposes various obligations on temporary-work agencies and the bodies where they are deployed. Directive 2008/104/EC of the European Parliament and of the Council[50] requires that the basic employment conditions of temporary agency workers must be equal to or better than the conditions that would apply if they had been employed directly to perform the same job. ECA found that the remuneration of interim workers in the Agency was lower than the lowest possible remuneration that would be due to a contract agent directly employed by the Agency to perform the same task. However, since a case pending before the Court of Justice touches upon these matters, and since the ruling, when it comes, may have an impact on the Court's position as regards the use of interim workers by the Agency, ECA refrained from making observations on the regularity of the Agency's approach concerning this matter, including follow-up of observations from previous years, until the ruling has been issued;

Acknowledging the concerns of the Court, EMSA terminated the above-mentioned contract in 2019. A new procurement procedure was launched in December 2019 following consultation with an expert in Portuguese labour law. The new contract was signed in May 2020.

4. The Financial Regulation states that EU bodies must make payments within prescribed timeframes. In 2019, the Agency frequently failed to do so. ECA found that it had paid late in 18 % of the cases.

EMSA took measures to avoid a similar situation during the course of this year. The delay of payments is followed-up monthly. The final figure on late payments shows a decrease of the number of payments out of the prescribed timeframes: 11 % compared to 18 % in 2019. The figures of 11% includes the backlog of late payments carried over from 2019. Without this backlog the total number of late payments would have been 3%.

As indicated above, for each of these observations an action plan was developed and by the end of 2020, all actions to address the ECA's observations were fully implemented. There are no outstanding actions to be taken in relation to the comments from the Court.

The full Report on the annual accounts of the European Maritime Safety Agency (EMSA) for the financial year 2019, together with the Agency's reply can be consulted on the ECA's website.[51]

In accordance with Article 104 of the Agency's Financial Regulation, the audit on the Agency's financial accounts 2020 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 (31.250,00 € covering the audit of the Accounts 2020 and 2021) will be borne by the Agency.

2.7.3 QMS and other Audits

The annual verification audit of the V&I QMS was successfully performed without any non-conformity and certification was re-confirmed for another year. Due to the COVID-19 situation and travel restrictions, the audit was carried out remotely. In May 2020, the Agency commenced the implementation of EMSA QMS to cover all activities of the Agency. This was

[50] OJ L 327, 5.12.2008, p. 9.

[51] https://www.eca.europa.eu/Lists/ECADocuments/EMSA_2019/EMSA_2019_EN.pdf

supported by two dedicated training sessions performed in October and November 2020. Certification of EMSA QMS is planned for the end of 2021.

In October, the Agency has also started a new project aiming to develop and implement an Information Security Management System (ISMS) for EMSA ICT-based services in compliance with the requirements of ISO/IEC 27001:2013 international standard that sets out the specification for an information security management system. The effective implementation is planned for 2021.

During the course of April 2020 the external audit firm, Baker Tilly Belgium conducted two audits[52] related to the reported costs with regards to the:

- Earth observation services provided in 2019 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 2019 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.

In addition to the above-mentioned audits, during the course of October 2020, DG-DEFIS (remotely) audited the costs presented in the Annual Implementation Report (AIR) for the Delegation Agreement on the Implementation of the Maritime Surveillance component of the Copernicus Security Service that EMSA submitted to the Commission (DG-DEFIS). The audit did not result in material corrections of the reported costs[53].

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. Consequently, this information is provided to the Administrative Board.

At the end of 2020, all audit recommendations issued by 31/12/2020 with an action implementation date of 31/12/2020 and earlier had been implemented.

[52] Due to the COVID-19 related travel restrictions the audit was conducted remotely.

[53] A correction of 3.937,50 EUR on a total of 9.378.446,59 EUR originally declared costs was applied.

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

During the course of 2020 there were no recommendations related to OLAF investigations to be 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 2018[54], 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 the 'Action Plan for Gender Balance at EMSA', EMSA informed the European Parliament that it adopted an Action Plan for Gender Balance wherein three main goals were identified:

- Promotion of values of non-discrimination by gender;
- Equal Opportunities in attracting and recruiting staff;
- Retaining women.

Since the adoption of this plan, EMSA has implemented a number of concrete actions related to the three identified objectives. Examples of such actions include:

- Signature of the "Declaration to ensure equal opportunities for women and men in the transport sector" as a sign of our commitment in 11/2018;
- EMSA promoted a video "EMSA women in shipping" displayed on the Agency intranet and website during the months of April, May and June 2019; The aim if this video is to attract more women in the shipping sector;
- EMSA delivered training about unconscious bias for frequent panel members and managers;
- EMSA aims to have a gender balanced composition of the selection panels for recruitment procedures;
- EMSA developed a favourable framework within the existing provisions of the Staff regulations and CEOS such as teleworking, part-time, parental leave, etc, to promote a better work-life balance for both male and female participation.

To further promote gender equality, especially in the transport and maritime sector, EMSA regularly participated in specific events.

EMSA Administrative Board Members received a copy of the EMSA Action Plan for Gender Balance and the EU Strategic Engagement for Gender on 03/2019.

EMSA informed the European Parliament about the "Greening EMSA" project that aims to introduce environmental management at the Agency as described in section 2.10. of this Consolidated Annual Activity Report.

Finally, the Agency also highlighted its close cooperation with other Union agencies such as with the European Fisheries Control Agency and the European Border and Coast Guard Agency for what concerns the European coastguard function as described earlier in the Consolidated Annual Activity Report. It was mentioned to the European Parliament that the Agency also fostered a broader cooperation with other Union agencies as EMSA also cooperates with the European Union Agency

[54] The European Parliament decision of 13 May 2020 on discharge in respect of the implementation of the budget of the European Maritime Safety Agency for the financial year 2018 (2019/2076(DEC)) and the European parliament decision of 13 May on the closure of the accounts of the European Maritime Safety Agency for the financial year 2018 (2019/2076(DEC))

for Law Enforcement Cooperation (Europol) and an operation was set-up for Europol to include maritime information in their investigations. EMSA also signed a MoU with EASA to promote cooperation in view of the upcoming EASA regulation on unmanned flights in force from July 2020 onwards.

In the administrative and logistical areas the European Parliament was informed that EMSA and the EMCDDA continued to work closely to develop cooperation and synergies with a view to increasing effectiveness, efficiency and save costs given the geographical proximity of the agencies and that during the course of 2019 EMSA signed a Service Level Agreement with EFCA regarding the set-up of a back-up mechanism for the accounting function in both Agencies.

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 2020, the following greening activities and projects have been carried out:

- Installation of charging stations for electrical cars

As part of the greening campaign, the Agency has installed charging stations for electric cars. Charging of vehicles is free of cost for EMSA staff.

- Photovoltaic solar panels on the roof of EMSA building

EMSA successfully awarded a contract for the installation of photovoltaic solar panels on the roof of the EMSA building.

- Further reduction of paper by digitalization

The Agency has been gradually introducing new electronic workflows to reduce the consumption of paper. Following the outbreak of COVID-19, the Agency has moved to ‘paperless office’ and has undertaken a project to implement qualified E-signatures in the Agency. This would permit EMSA to fully operate in a paperless environment.

- Greening EMSA stationery catalogue and EMSA corporate gifts

The Agency adopted and implemented a policy of purchasing green stationary materials as well as green EMSA corporate gifts, eliminating plastic and single-use items as much as possible.

- Minimising plastics

EMSA further reduced the use of plastic by minimising the use of plastic items and packaging in EMSA’s cafeteria and EMSA’s coffee and vending machines.

- New flooring from recycled material

EMSA replaced floorings (corridors, meeting rooms) with carpets using new flooring solutions with environmentally certified materials. Carpets made of 100% regenerated nylon thread, derived from recovered fishing nets and other waste were purchased and installed at the Agency’s office.

- Replacement of lightbulbs by LEDs (garage areas)

Following replacement of lightbulbs by LEDs in common areas, EMSA has replaced those in the garage as well.

- Purchase of e-bikes and annual preventive and corrective maintenance of EMSA bicycles

EMSA made available bicycles for personal use by EMSA staff. In 2020 EMSA’s bike fleet has been enhanced by the purchase of two e-bikes. This measure intends to promote sustainable transportation options and healthy activities among staff.

2.11 Assessment by management

The Agency's operational and administrative activities in 2020 were carried out in accordance with the amended 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.

Consequent to the adoption by the Administrative Board of the new 5-year strategy 2020-2024, by the end of 2019 a new organisational structure, taking effect on 1 January 2020, was implemented in order to ensure the best possible use of the existing resources for the successful implementation of this new strategy.

The outbreak of the Coronavirus has influenced the life of billions of people around the world including in the EU and our institutions and authorities have experienced and are experiencing an unprecedented situation which has changed the way people live, interact and work. EMSA is no exception to that and like all other EU bodies the management was forced to adjust to this new situation by assessing and adapting its working methods to continue providing its stakeholders with the range and quality of services they are used to.

EMSA was able to switch to remote working over a very short time. All EMSA staff were provided with PCs and thanks to remote access work continued as planned.

During the course of 2020, mitigating measures were put 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.

As a result of this continuous assessment, of which the results were presented to the Administrative Board in June and November, the budget and work programme 2020 were adapted through two amendments to the EMSA Budget 2020 and a corresponding amendment to the Single Programming Document 2020-2022.

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 the risks, assign ownership and finally to implement these actions and controls and 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 for Visits & Inspections. As part of the audit of this Quality Management System (see 2.7.3), the Risk Process was fully audited (December 2020), and no non-conformities were found.

In accordance with the new Risk Management Framework the risk register was fully updated and fine-tuned in 2020. During this exercise special attention was given to all potential fraud-related risks. Following the outbreak of the COVID-19 pandemic a number of new identified risks 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 2020 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 which was adopted by its Administrative Board. EMSA's strategy is based on the methodology and guidance for anti-fraud strategy presented by OLAF as well as on the Anti-Fraud Strategy of DG MOVE/SRD of the European Commission. It provides a 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);
- Setting the Agency's objectives;
- 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 2020 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.

In preparation for the 2021-2027 MFF, the European 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 this new European Commission document. During the course of 2020 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, is expected to be adopted by the Administrative Board in March 2021.

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 Commissions 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.

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 18 of such exceptions were registered in 2020 (vs.12 in 2019), of which 14 ex-ante (approval for a future foreseeable deviation) and 4 ex-post (approval after the deviation had occurred) exceptions.

The increase in the number of exceptions is a direct result of the COVID-19 pandemic; in order to deal with the impact of this pandemic a total of 11 deviations to existing procedures were approved. Examples of such deviations include the deviation of the maximum number of teleworking days allowed to enable staff to work at home, in line with measures and recommendations from the Portuguese authorities, the extended use of electronic signatures (signature stamps) and the acceptance of invoices received by email.

Besides the COVID-19 related exceptions, other areas in which exceptions were reported mainly concerned payments. Four a-posteriori commitments (vs. three last year) varying between 109,000.00 € and 474 € were recorded.

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 2020 are outlined below.

Monitoring and reporting – budget implementation

The monthly report on budget, procurement and financial management mentioned above 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 October. The third and closing exercise showed a high level of implementation of the Work Programme 2020.

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 2020 (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 2020 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 ISO[55] 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. The annual verification audit of the V&I QMS was successfully performed without any non-conformity and certification was re-confirmed for another year.

In May 2020, the Agency commenced the implementation of EMSA QMS to cover all activities of the Agency. Certification of EMSA QMS is planned for the end of 2021.

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.

[55] 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, 9 February 2021

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, 19 February 2021

Annexes

European Maritime Safety Agency

Annex I. Core business statistics

EMSA Key Performance Indicators 2020[56]

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
2100 UNION MARITIME INFORMATION AND EXCHANGE SYSTEM						
IMS	1	percentage per year availability to Member States	99	n/a	99.75	Nagios IT infrastructure monitoring system
	2	percentage per year availability to EUNAVFOR Atalanta	99	n/a	99.75	Nagios IT infrastructure monitoring system
	3	percentage per year availability to IMS mobile application users	99	n/a	99.78	Nagios IT infrastructure monitoring system
SAT-AIS	4	global data stream availability	99	n/a	99.93	MSS status reports
RPAS	5	number of RPAS available for deployment for multipurpose operations	4	n/a	6	Internal: project and contract monitoring
	6	number of Deployment Days per year	300	n/a	944	Reporting from RPAS operations
	7	RPAS DC availability	95	n/a	99	Contractor

[56] The SPD 2020-2022 was amended by written procedure no 5/2020 adopted by the Administrative Board on 20 August 2020 with an impact on some of the performance targets 2020, identified in the column 'revised'.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
SSN: Service Operations	8	percentage per year availability of central SafeSeaNet system	99	n/a	99.57	JIRA ticketing system
	9	hours maximum continuous downtime of central SafeSeaNet system	max 12h	n/a	07h:00min	JIRA ticketing system
SSN: reporting performance	10	percentage of notifications processed in time in accordance with SafeSeaNet IFCD requirements	99	n/a	100	SSN Database
	11	percentage of responses to Member States' requests delivered in accordance with SafeSeaNet IFCD (time) requirements	99	n/a	100	SSN Database
7901 INTEROPERABILITY PROJECT						
Pilot project and study reports	12	Outcome and results of pilot projects and studies executed in cooperation with the Commission, Member States and Industry	4	3	3[57]	Internal
7210 EFCA						
IMS	13	percentage per year availability to EFCA	99	n/a	99.74	Nagios IT infrastructure monitoring system

[57] In line with the revised project plan agreed with Interoperability project's steering Committee and communicated to DG MARE on 7 Sept 2020.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
7210 FRONTEX						
	14	percentage per year availability to	99	n/a	99.83	Nagios IT infrastructure
	15	minimum number of exercises EMSA participates in	2	n/a	2	Internal according to the EMSA Frontex SLA.
2200 EU LONG RANGE IDENTIFICATION AND TRACKING (LRIT) COOPERATIVE DATA CENTRE (CDC) AND LRIT INTERNATIONAL DATA EXCHANGE (IDE)						
System Operational	16	percentage per month availability EU LRIT Data Centre	99	n/a	99.89	EU CDC
	17	hours maximum continuous downtime	max 4h	n/a	00h37min	EU CDC
EU CDC reporting performance	18	percentage position reports delivered in accordance with IMO requirements (periodic reports: 15 min; polls: 30 min)	99	n/a	99.57	EU CDC
Web user interface	19	percentage per year availability to users	99	n/a	99.83	Nagios
	20	percentage per year availability of LRIT IDE in accordance with IMO	99.9	n/a	99.68[59]	Statistics based on data extracted from the IDE DB

[58] Discussions on the hosting of the LRIT-IDE are on-going. 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. After the completion of the hand-over process these indicators will be deleted.

[59] Below the target due to the failover exercise to and for the Disaster Recovery (DR) site, operated by the USCG, 17-19 Nov. During the exercise the DR LRIT IDE did not deliver the service as expected due to configuration issues in the DR network infrastructure.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
LRIT-IDE System operational	21	hours maximum continuous downtime of LRIT IDE	max 4h	n/a	6h[60]	Statistics based on data extracted from the IDE DB
2300 THETIS						
System Operational	22	availability in percentage THETIS	96	n/a	99.50	Nagios IT infrastructure
	23	hours maximum continuous downtime	max 6h	n/a	3h:41m:30s	Nagios IT infrastructure
Helpdesk Service	24	percentage of requests closed in less than 5 days THETIS Helpdesk	75	n/a	97.80	JIRA ticketing system.
7710 THETIS MRV						
THETIS MRV	25	timely delivery of tasks foreseen by the cooperation Agreement	THETIS-MRV operational.	n/a	yes	Nagios IT infrastructure monitoring system.
	26	timely delivery of tasks foreseen by the cooperation Agreement	System to provide the necessary data to support the publication of information foreseen by the MRV Regulation.	n/a	yes	Nagios IT infrastructure monitoring system.

[60] See above.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
2400 MARITIME SUPPORT SERVICES						
MSS	27	average time in hours for feedback or resolution of issues relating to emergencies, incidents in maritime applications or urgent helpdesk requests	<2h	n/a	6.8 minutes	Ticketing tool (JIRA)
	28	average time in hours for feedback or resolution of issues relating to non-urgent helpdesk requests or scheduled interventions	<8h	n/a	12.3 minutes	Ticketing tool (JIRA)
	29	reporting on the SafeSeaNet implementation and data quality (overall and per Member State)	20 Reports	n/a	23 Reports	ARES records
7902 CISE TRANSITIONAL PHASE						
CISE nodes	30	CISE Nodes	11	n/a	11	

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
7500 COPERNICUS						

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
Copernicus Maritime Surveillance service Earth observation (EO) image delivery	31	percentage per year EO image delivery ratio	90	n/a	94	Earth Observation Data Centre Database
Number of user organisations registered	32	number of Member States National Administrations, EU institutions and international organisations using the service	40	n/a	50	Copernicus User registration forms
3100 CLASSIFICATION SOCIETIES						
Inspections	33	number of RO inspections per year	16-20	7-9	5[61]	Internal
Reports	34	number of reports per year	16-20	8	7[62]	Internal
Draft assessment reports	35	number of draft assessment reports per year	5-7	5	5	Internal
3200 STCW						
	36	number of inspections and visits per year	7-9	5-7	6[63]	Internal

[61] RO inspections were suspended from March due to the COVID-19 pandemic. From September, a campaign of remote inspections focused on the measures adopted by ROs in response to the pandemic.

[62] The suspension of RO inspections from March to September due to the COVID-19 pandemic meant there were fewer reports to send out.

[63] STCW visits and inspections suspended from March due to COVID-19 restrictions. Visits and inspections were carried out remotely from September.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
Inspections and visits	37	percentage of visit notifications sent to Member States with at least three months' notice	95	n/a	100	Internal
Reports	38	number of reports per year	7-9	4	3[64]	Internal
	39	percentage of draft reports submitted to the visited Member State or third country within 90 days from the end of the visit/inspection	95	n/a	100	Internal
STCW Information System	40	percentage per year availability STCW	96	n/a	99.17	Nagios IT infrastructure monitoring system
3300 VISITS TO MEMBER STATES TO MONITOR THE IMPLEMENTATION OF UNION LAW						
Visits	41	number of visits per year	22-27	15-20	17[65]	Internal
	42	percentage of visit notifications sent to Member States with at least three months' notice	95	n/a	100[66]	Internal

[64] STCW visits and inspections suspended from March to September 2020 due to COVID-19 restrictions so fewer reports to be sent out.
[65] Visits were suspended from March due to the COVID-19 pandemic. They restarted in September, with some visits being carried out remotely.
[66] To reduce the risk of having to change the visit dates due to COVID-19, the deadline was reduced to two months for visits from Q3. The KPI is reported on that basis.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
Reports	43	number of reports per year	19-24	12-14	12[67]	Internal
	44	percentage of draft reports submitted to the visited Member State within 90 days from end of visit	95	n/a	100	Internal
3400 MARITIME SECURITY						
Inspections	45	number of missions per year	15-18	n/a	8[68]	Internal
Reports	46	number of reports per year	35	n/a	7[69]	Internal
	47	percentage of inspection reports concluded within the deadline agreed with the European Commission	95	n/a	100	Internal
3500 HORIZONTAL ANALYSIS AND RESEARCH						

[67] Visits suspended from March to September 2020 due to COVID-19 restrictions so fewer reports to be sent out.
[68] Considering the evolution of the COVID-19 crisis, DG MOVE initiated remote MarSec inspections as from October 2020.
[69] With the new approach of "remote" inspections the reporting system evolved. By now a single report is issued for the entire inspection.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
Analyses on the basis of full or part cycles or series of visits and inspections	48	number of horizontal analyses per year	1-2	n/a	1	Internal
4200 ACCIDENT INVESTIGATION						
EMCIP mtgs	49	number of EMCIP meetings per year	2	n/a	2	Internal
PCF mtgs	50	number of PCF meetings per year	1	n/a	2	Internal
New EMCIP	51	Percentage per year availability (New EMCIP)	98	n/a	98.30	Nagios IT infrastructure monitoring system
4300 TRAINING, COOPERATION AND CAPACITY BUILDING						
Training for MSs	52	number of MS training sessions per year	up to 11	Including live broadcasting	24	Internal
	53	number of MS experts attending per year	320	n/a	627	Internal
	54	number of AC training sessions per year	up to 6	n/a	8	Internal

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
Trainings for enlarg. countries	55	number of AC experts attending per year	50	n/a	37[70]	Internal
Customer satisf.	56	level of customer satisfaction	>85%	n/a	>85%	Internal
Prof. Schemes	57	Number of schemes	Up to 2	n/a	1[71]	Internal
4400 MARINE EQUIPMENT AND SHIP SAFETY STANDARDS (including IMO)						
MarED DB	58	percentage per year availability of MarED DB	95	n/a	99.23	Azure Cloud Availability Test Report
4500 SHIP INSPECTION SUPPORT						
EQUASIS	59	percentage per year availability (EQUASIS)	99.5	n/a	99.92	Technical Unit (SDSI, France)
	60	number of users per month	32,000	n/a	34,288	Technical Unit (SDSI, France)
	61	number of contributing members	9-10	n/a	10	
RuleCheck	62	percentage per year availability	85	n/a	99.75	Nagios IT infrastructure monitoring system

[70] There have been fewer participants in trainings than expected due to the COVID-19 pandemic.

[71] Despite that fact that framework contract including these professional schemes was awarded in Q4 and its implementation started in December, an online course for FS Inspectors, which will be part of the scheme was developed and delivered in 2020.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
	63	days maximum continuous downtime	9 days	n/a	0d:0h:15m:0s	Nagios IT infrastructure monitoring system
	64	percentage of requests closed in less than 9 days	75	n/a	100	JIRA ticketing system.
MaKCs	65	percentage per year availability	85	n/a	99.85	Nagios IT infrastructure monitoring system
	66	days maximum continuous downtime	9 days	n/a	0d:7h:59m:45s	Nagios IT infrastructure monitoring system
MaKCs Helpdesk	67	percentage of requests closed in less than 9 days	75	n/a	99.55	JIRA ticketing system.
7100 SAFEMED IV, EuroMed Maritime Safety Project						
Implementation of SAFEMED IV	68	number of training sessions per year	Up to 5	n/a	7	Internal
	69	number of activities per year	up to 6	n/a	13.5	Internal
	70	number of ENP experts attending per	90	n/a	115	Internal
	71	level of customer satisfaction	>85%	n/a	>85%	Internal
7400 Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions (BC Sea)						
Implementation of BC Sea Regions project	72	number of training sessions per year	Up to 5	n/a	10	Internal
	73	number of activities per year	up to 6	n/a	11.25	Internal
	74	number of ENP experts attending per	70	n/a	207	Internal
	75	level of customer satisfaction	>85%	n/a	>85%	Internal

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
5100 OPERATIONAL POLLUTION RESPONSE SERVICES						
Stand-by Oil Spill Response Vessel Network	76	number of fully equipped vessels for mechanical recovery	17	n/a	17	Internal
	77	number of fully equipped vessels for dispersant application	6	n/a	6	Internal
	78	number of vessels equipped with RPAS	8	n/a	8	Internal project and contract monitoring.
New vessels pre-fitting	79	number of newly contracted vessels pre-fitted	3	n/a	4	Internal
EAS	80	number of EAS stockpiles	3	4	4	Internal
Vessel/eq/replac/adapt/upgrade)	81	number of projects completed per year (vessel/equip replac/adapt/upgrade)	5	n/a	6	Internal
Vessel/Equipment drills and exercises	82	number of Vessel drills (acceptance drills and quarterly drills) per year	68	n/a	72	Internal
	83	number of operational exercises per year	10	6	5[72]	Internal

[72] Due to COVID-19, a number of exercises were cancelled or re-scheduled for 2021.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
	84	number of Equipment Assistance Service (EAS) drills	16	n/a	26	Internal
	85	number of notification exercises per year	12	6	5[73]	Internal
Training on use of PRS	86	number of seminars and “hands-on” training sessions	2	n/a	1[74]	Internal
Response to requests for vessel/equipment services	87	mobilisation time in hours (Response to requests for vessel/equipment services)	24	n/a	24	Internal
Dispersant stockpiles	88	number of dispersant stockpiles	6	n/a	8	Internal
	89	minimum quantity of dispersants available at any time	1600 tonnes	n/a	1600 tonnes	Internal
5200 POLLUTION SURVEILLANCES						
CSN service EO Image delivery	90	percentage per year EO image delivery ratio	90	n/a	98	Earth Observation Data Centre Database

[73] See above.

[74] Lack of participants due to COVID-19 led to one training being cancelled.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
Assistance for accidental spills	91	percentage response rate to assistance requests	100	n/a	100	Contingency Plan activations / EO emergency logs
Participation in oil spill response exercises	92	percentage response rate to requests for participation in oil spill response exercises.	80	n/a	100	EO exercise logs
EODC availability	93	EODC availability (interface or alert reports distribution) for scheduled acquisitions of the CleanSeaNet Service	97.5	n/a	99	Earth Observation Data Centre Database
RPAS system available	94	number of RPAS systems available for environmental protection (pollution and emissions)	8	n/a	13	Internal project and contract monitoring.
RPAS monitoring	95	number of deployment days per year (pollution monitoring and emission monitoring)	180	n/a	440	Reporting from RPAS operations.
5300 COOPERATION AND INFORMATION RELATING TO POLLUTION PREPAREDNESS AND RESPONSE						
Response to requests for assistance to MAR-ICE	96	percentage of responses within 2 hrs.	>75	n/a	100	Internal
	97	percentage of responses within 4 hrs.	<25	n/a	0	Internal
Developing datasheets	98	number of datasheets produced/revised	25	n/a	25	Internal

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
Coord. of the CTG MPPR meetings and workshops	99	number of CTG MPPR/InterSec meetings and workshops	3	n/a	14[75]	Internal
Coord. of the CTG MPPR trainings	100	number of CTG MPPR trainings	1	n/a	0[76]	Internal
Coord. of the PRS User Group Meeting	101	number of PRS User Group meetings	1	n/a	1	Internal
Development of decision support tools/eLearning courses	102	number of decision support tools	1	n/a	2	Internal
6500 COMMUNICATION, MISSIONS AND EVENTS SUPPORT						
Publications	103	number of publications/leaflets/brochures produced per year	16	n/a	19	Internal
Events support	104	number of meetings/workshops organised by EMSA per year	80	n/a	85[77]	Internal

[75] Given the switch to the online format, more informal meetings were held.
[76] The CTG MPPR training planned for 2020 did not take place due to the COVID-19 outbreak.
[77] Virtual meetings assisted by the Events team.

Activity name	n°	Indicator	Target (initial)	Target (revised)	Result	Source of data
	105	number of participants at EMSA meetings/workshops per year	2000	n/a	2046	Internal
6100, 6200, 6300 AND 6400 OVERHEAD/HORIZONTAL TASKS						
Audits	106	ECA recommendations implemented in time	as close as possible to 100%	n/a	100	Internal
	107	IAS recommendations implemented in time	as close as possible to 100%	n/a	100	Internal
Planning	108	implementation of the Work Programme	as close as possible to full implementation	SPD 2020-2022, as amended by written procedure 5/2020 of 20 August 2020	*Assessed through the CAAR2020*	Internal
Establishment Plan	109	execution rate establishment plan	as close as possible to 100% and in any case above 95%	n/a	97.64	Internal
Budget	110	execution rate commitment appropriations	as close as possible to 100% and in any case above 95%	n/a	98.89	Internal
	111	execution rate payment appropriations	as close as possible to 100% and in any case above 95%	n/a	96.08	Internal

Operational Agreements active in 2020

Contractor	Subject	Start Date	End Date
CEDRE - CEFIC	MAR-ICE Network	17/10/2014	16/10/2022
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 Port State Control and relevant technical Assistance	30/03/2016	29/03/2020
DG ECHO	Cooperation in the framework of maritime emergencies, including marine pollution preparedness, monitoring and response	13/11/2014	no end date
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	08/03/2018	07/09/2020
DG GROW	Implementation of the maritime surveillance component of the Copernicus security service	03/12/2015	31/12/2026
DG MOVE	Provision by EMSA of technical assistance for maritime security 1	29/10/2013	no end date
DG NEAR	Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions	01/11/2016	28/03/2021
DG NEAR	SAFEMED IV, EuroMed Maritime Safety Project	01/01/2017	21/03/2021
DG NEAR	Grant Contract – Preparatory measures for the participation of IPA II beneficiaries in EU Agencies	01/05/2018	30/04/2020
DG MARE	Interoperability between industry and competent authorities in the EMSW environment under the CISE Process	19/09/2018	18/09/2021
DG MARE	CISE Operations – Setting up and enabling the transition phase to CISE operations	17/04/2019	16/10/2021
DG MARE	CISE Transition – Common Information Sharing Environment (CISE) transition	08/12/2020	07/12/2023
EASA	Cooperation agreement with EASA regarding the establishment of unmanned/remotely piloted aircraft services by EMSA	14/06/2019	no end date
EFCA - European Fisheries Control Agency	SLA between EFCA and EMSA MARSURV service	17/12/2012	no end date

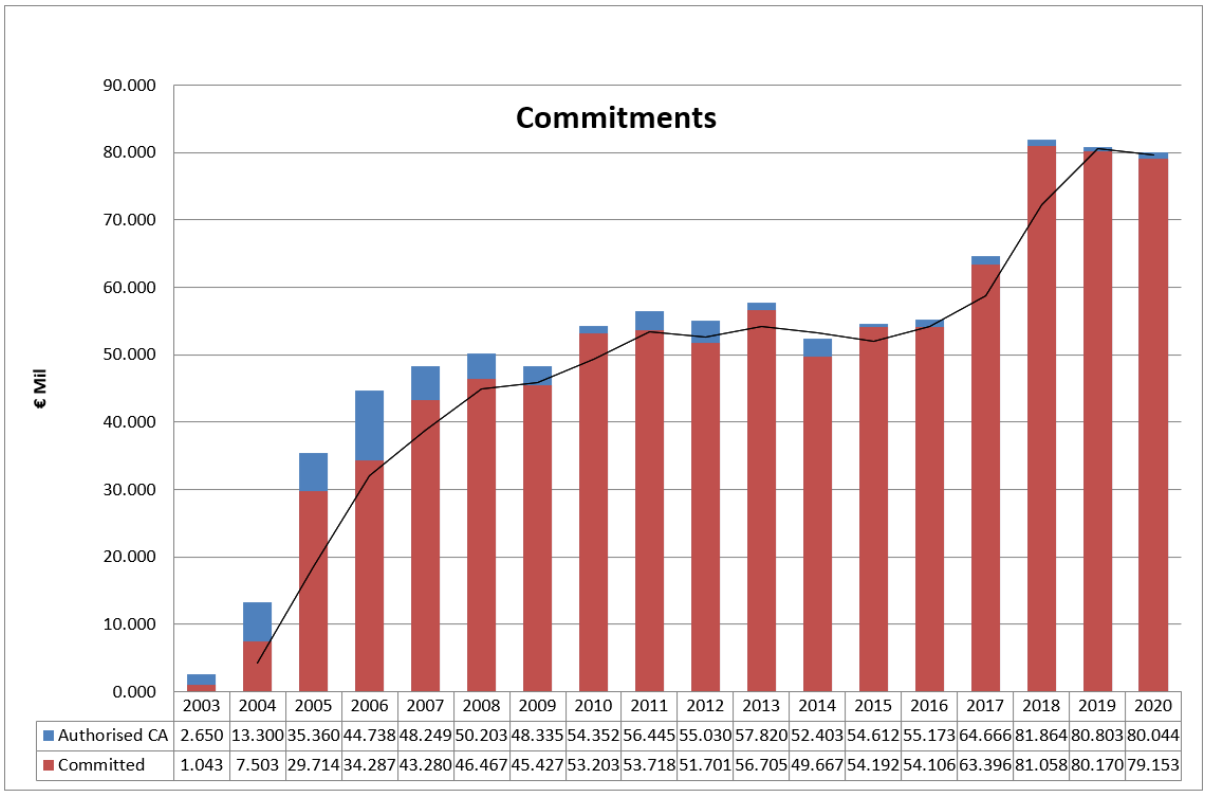
Contractor	Subject	Start Date	End Date
EQUASIS members	MOU on the establishment of the Equasis information system	17/05/2000	no end date
ESA - European Space Agency	Agreement concerning cooperation for the use of space based systems and data in support of maritime activities	02/07/2010	01/07/2025
ESA - European Space Agency	SAT-IAS Data Processing Centre (DPC) Block 2 software	18/02/2015	no end date
EUNAVFOR - Athena Atalanta	Delivery of an integrated maritime monitoring service	06/04/2011	no end date
EUROCONTROL	Navigation Safety For RPAS	13/12/2016	no end date
EUROPOL	Cooperation between the European Maritime Safety Agency and the European Union Agency for Law Enforcement Cooperation	18/12/2018	no end date
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
European Free Trade Association Surveillance Authority	Provision by EMSA of technical assistance for maritime security 2	05/02/2014	no end date
FRONTEX	Service Level Agreement between the European Agency for the Management of Operational Cooperation at the External Borders of the Member States of the European Union (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	01/05/2016	no end date
FRONTEX and EFCA	TWA Interagency cooperation between Frontex, EFCA and EMSA on coast guard functions	17/03/2017	17/03/2021
International Mobile Satellite Organization	IMSO AUDIT – LRIT-IDE	27/05/2009	no end date

Contractor	Subject	Start Date	End Date
International Mobile Satellite Organization	IMSO AUDIT – LRIT-DC	27/05/2009	no end date
Interspill LTD	Interspill Series of Conferences and Exhibitions - Memorandum of Understanding	13/12/2016	no end date
IMO	Agreement between IMO and EMSA for the provision of financial support for the participation from developing countries to the International Workshop on Maritime Labour Convention, 2006	15/11/2019	30/04/2020
Italian Coast Guard - Comando Gen.del Corpo delle Capitanerie di Porto	SLA for maintenance and operation of AIS Regional Server	22/10/2015	no end date
Italian Coast Guard - Comando Gen.del Corpo delle Capitanerie di Porto	Mediterranean Regional SSN Server	22/10/2015	28/02/2021
MAOC - Maritime Analysis and Operations Centre	Operational assistance and training	17/12/2020	no end date
Ministry of the Sea, Transport and Infrastructure of Croatia	Administrative agreement for the temporary transfer of equipment to Croatia	03/07/2019	no end date
Norwegian Coastal Administration	SLA EMSA and NCA for hosting, maintenance and operation of North Atlantic, North Sea and HELCOM AIS Regional Servers and SSN	20/12/2016	no end date
Norwegian Coastal Administration	SLA for maintenance and operation of AIS Regional Servers	01/03/2019	28/02/2021
Paris MoU	Conditions of Use for and Level of access to the THETIS Information Systems for PSC	01/01/2011	no end date
République Française	Hosting & Development of Equasis	27/02/2009	no end date

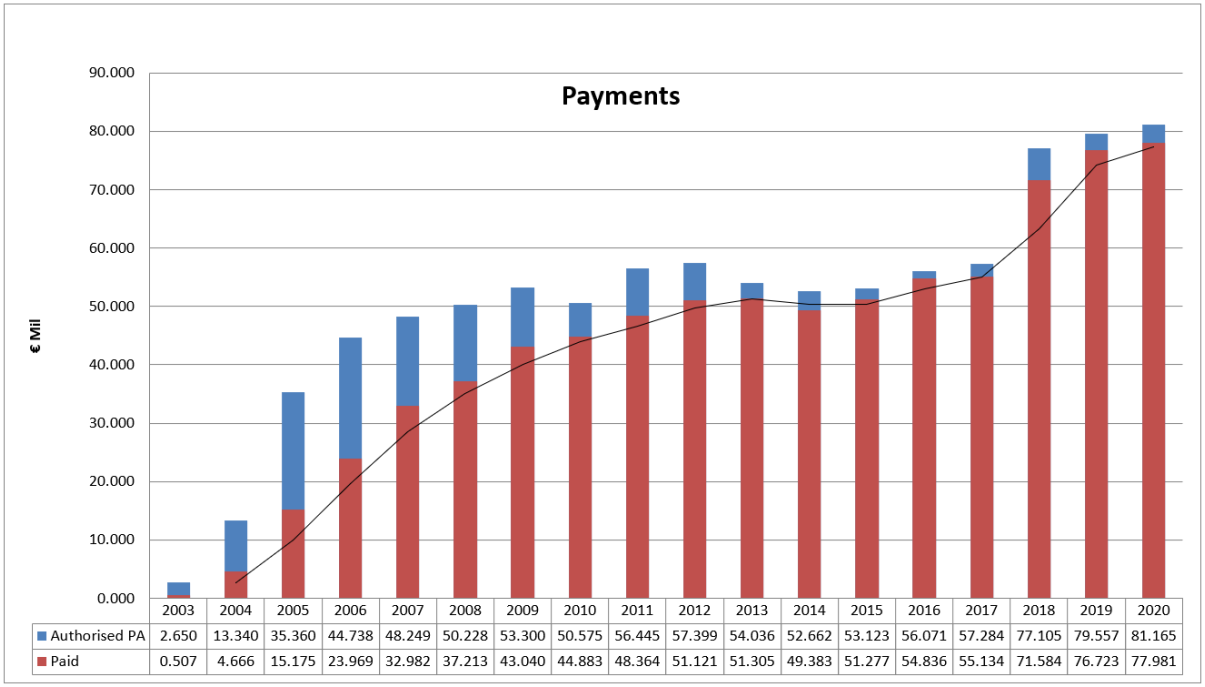
Contractor	Subject	Start Date	End Date
Riyadh MoU	MoU with Riyadh MoU about the provision of the EMSA RuleCheck and MaKCs to the members of the Riyadh MOU	10/12/2020	09/12/2024
Tokyo MoU	Provision of access to EMSA RuleCheck for Port State Control Officers from the Asia-Pacific Region.	22/09/2020	21/09/2024
World Maritime University	Implementation Addendum for the Cooperation Agreement between WMU and EMSA	26/06/2020	4 non-consecutive weeks during 2020

Annex II. Statistics on financial management

Evolution of budget execution

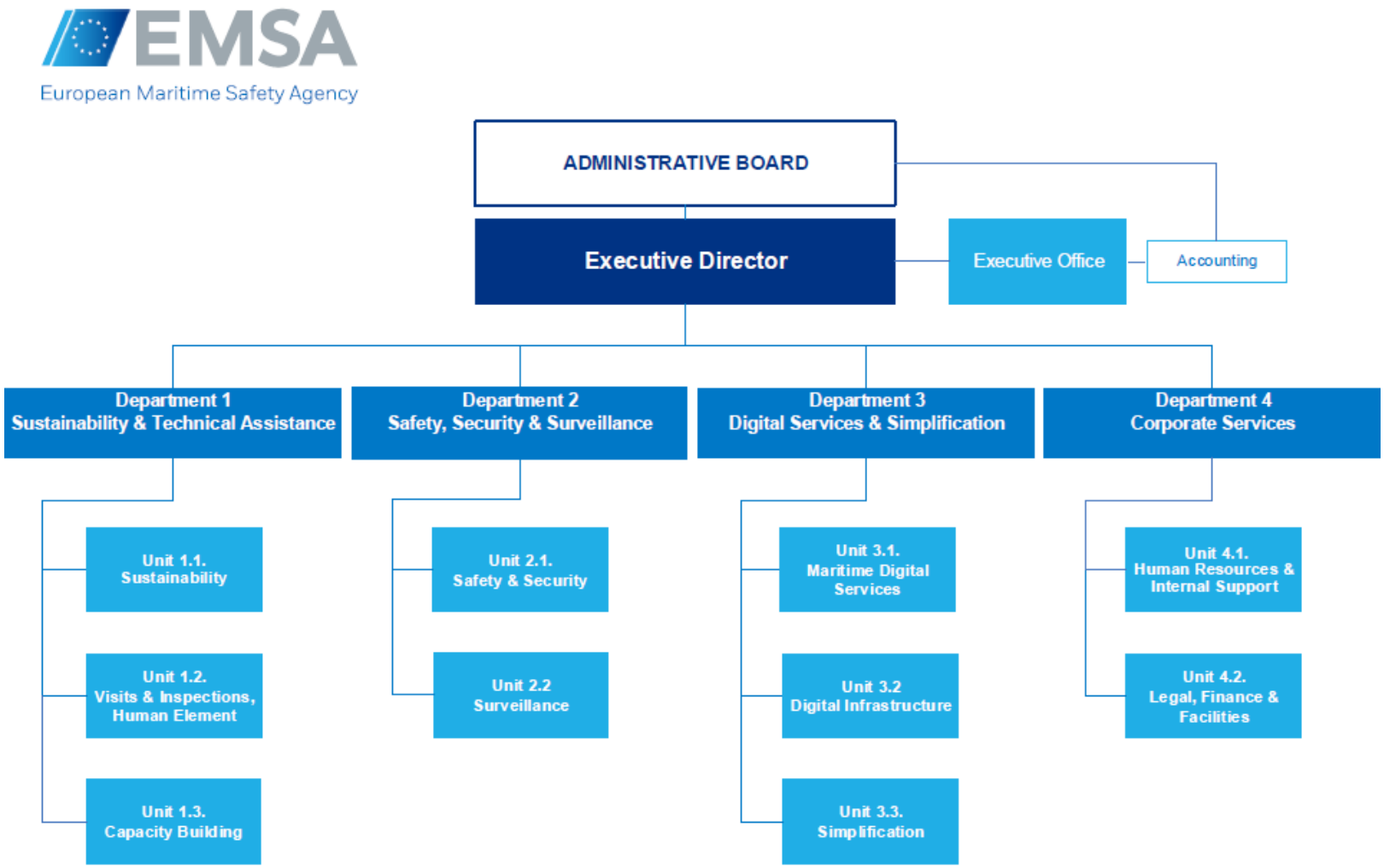


	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Authorised CA	2.650	13.300	35.360	44.738	48.249	50.203	48.335	54.352	56.445	55.030	57.820	52.403	54.612	55.173	64.666	81.864	80.803	80.044
Committed	1.043	7.503	29.714	34.287	43.280	46.467	45.427	53.203	53.718	51.701	56.705	49.667	54.192	54.106	63.396	81.058	80.170	79.153



	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Authorised PA	2.650	13.340	35.360	44.738	48.249	50.228	53.300	50.575	56.445	57.399	54.036	52.662	53.123	56.071	57.284	77.105	79.557	81.165
Paid	0.507	4.666	15.175	23.969	32.982	37.213	43.040	44.883	48.364	51.121	51.305	49.383	51.277	54.836	55.134	71.584	76.723	77.981

Annex III. Organisational chart



January 2020

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

Establishment plan 2020

Function Group and Grade	2019 Authorised		2020 Authorised		2020 Filled*	
	Permanent	Temporary	Permanent	Temporary	Permanent	Temporary
AD15		1		1		
AD14		2		2		3
AD13	1	4	1	4	1	2
AD12	1	10	1	10		10
AD11		17		17	1	12
AD12	1	10	1	10		9
AD11		17		17	1	13
AD10	1	16	1	20		25
AD9		33		40		34
AD8		27		31	1	23
AD7		24		18		13
AD6		10		3		14
AD5		5		3		10
Total AD	**3**	**149**	**3**	**149**	**3**	**146**
AST11						
AST10		1		1		
AST9						1
AST8		1		3		2
AST7		6		8		8
AST6		17		20		15
AST5		20		18		19
AST4		12		10		9
AST3		3				2
AST2						1
AST1						1
Total AST		**60**		**60**		**58**
Total	3	209	3	209	3	204
Grand Total	**212**		**212**		**207**	

* Including one TA AD8 job offer sent and accepted.

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)
Head of Department	TA (level 2)	AD12 During 2020 there was one external recruitment (grade of recruitment AD12)	Operational
Head of Unit	TA (level 3)	AD9, AD10, AD11 or AD12, related to the mandate and dimension of the Unit During 2020 there was one external recruitment (grade of recruitment AD10)	Operational

Head of Sector	TA (level 4)	AD8	Administration Operational
Senior Project Officer	TA	AD8 During 2020 there was one external recruitment (grade of recruitment AD8)	Coordination
Project Officer	TA	AD6 or AD7 depends on the functions that are allocated During 2020 there were five external recruitments (grade of recruitment AD6 and AD7)	Operational
Junior Officer	TA	AD5	Administration / Operational / Neutral / Coordination
Senior Assistant	TA	AST4 During 2020 there were two external recruitments (grade of recruitment AST4	Administration
Head of Corporate Services	TA	AD12 During 2020 there was one internal recruitment (grade of recruitment AD12)	Administration
Head of Human Resources and Internal Support	TA	AD10	Administration
Head of Legal, Finance and FAL	TA	AD9	Coordination / Operational / Neutral
Head of Operations Support (ICT)	TA	AD10	Administration / Operational
Administrative Assistant	CA	FGII	Administration / Operational / Neutral Coordination
Mail Clerk	CA	FGI	Administration
Webmaster -Editor	TA	AST3	Administration / Coordination
Data Protection Officer	TA	AD8	Operational / Coordination
Accounting Officer	TA	AD8	Neutral
Internal Control Coordinator	TA	AD8	Administration
Assistant to the Executive Director	TA	AST2	Operational

Number of days of leave authorised to each grade under the flexitime and compensatory* leave schemes in 2020

GRADE	Authorised flexitime leave
AD	
5	35
6	8.5
7	40
8	24.5
9	21
10	16
11	10.5
12	9
14	0
AST	
1	2
3	9
4	5.5
5	18
6	13
7	5
FG I	
3	0.5
FG II	
5	5.5
6	0.5
7	3.5
FG III	
9	0.5
10	1
11	0.5
12	0.5
FG IV	
14	2.5
15	8.5
SNE	
SNE	15.5
TOTAL	**256**

* EMSA does not have compensatory leave.

Results of the screening exercise

Job type (sub) category	Year N (%)	Year N-1 (%)
Administrative support and Coordination	**19.66%**	**19.50%**
Administrative support	14.80%	15.23%
Coordination	4.86%	4.27%
Operational	**71.98%**	**71.60%**
Top Level Operational Coordination	2.85%	2.13%
Programme Management & Implementation	55.59%	54.10%
Evaluation & Impact assessment	9.29%	11.24%
General Operational	4.25%	4.13%
Neutral	**8.36%**	**8.90%**
Finance/Control	8.36%	8.90%
Linguistics	0%	0%

Implementing rules adopted in 2020

- Adoption by analogy of Commission Decision C(2020)1559 of 16/03/2020 amending Decision C(2013)9051 of 16 December 2013 on leave;
- Adoption by analogy of the Commission Decision C(2019) 6855 of 4 October 2019 on procedures for dealing with professional incompetence;
- Adoption by analogy of Commission Decision C(2019)7822 of 30/10/2019 amending Commission Decision C(2004) 1318 of 7 April 2004 on the duties of Commission drivers;

Annex V. Human and financial resources by activity[78]

Planned and Actual Resources		Planned Human Resources MANPOWER					Actual Human Resources MANPOWER					Planned Financial Resources		Actual Financial Resources		Variance planned/actual	
		Temporary Agents		SNE	CA	TOTAL	Temporary Agents		SNE	CA	TOTAL	Total allocated costs Commitment	Total allocated costs Payments	Total allocated costs Commitment	Total allocated costs Payments	CA	PA
	ACTIVITIES	AD	AST				AD	AST									
2100	Union maritime information and exchange system (integrated maritime services; SafeSeaNet; improving internal market and maritime transport efficiency)	37	13	3	1	**54**	37	11		1	**49**	25,915,429	27,400,755	24,950,481	25,791,932	-3.72%	-5.87%
2200	EU LRIT Cooperative Data Centre and LRIT International Data Exchange	7	7	0	0	**14**	5	7			**12**	3,899,116	3,862,906	3,645,835	3,315,489	-6.50%	-14.17%
2300	THETIS Information System	4	1	0	0	**5**	3	1			**4**	1,912,354	2,186,685	2,291,688	2,335,532	19.84%	6.81%
2400	Maritime support Services	3	0	4	4	**11**	3		3	4	**10**	1,447,379	1,447,379	1,441,269	1,341,974	-0.42%	-7.28%
3100	Classification Societies	10	1	1	0	**12**	9		1	1	**11**	2,191,734	2,167,734	2,023,693	1,934,436	-7.67%	-10.76%
3200	STCW	6	2	1	0	**9**	6	2	1		**9**	1,726,613	1,933,683	1,713,780	1,678,259	-0.74%	-13.21%
3300	Visits to Member States to monitor the implementation of Union Law	5	3	1	0	**9**	5	3	1		**9**	1,484,055	1,484,055	1,541,469	1,480,968	3.87%	-0.21%
3400	Maritime Security	3	0	1	1	**5**	4		1		**5**	828,447	830,533	931,020	882,364	12.38%	6.24%
3500	Horizontal analysis and research	3	0	0	0	**3**	2				**2**	556,195	568,195	392,884	374,242	-29.36%	-34.13%
4100	Port State Control	2	0	0	0	**2**	1				**1**	407,160	408,724	196,321	189,233	-51.78%	-53.70%
4200	Accident investigation	3	0	1	0	**4**	3		1		**4**	877,771	869,539	854,689	831,008	-2.63%	-4.43%
4300	Training, cooperation and capacity building	6	1	1	1	**9**	7	1	2	1	**11**	2,517,981	2,508,890	2,915,576	2,670,699	15.79%	6.45%
4400	Marine equipment and ship safety standards (including IMO)	8	1	1	0	**10**	8		1		**9**	2,277,200	2,463,436	2,061,604	2,404,378	-9.47%	-2.40%
4500	Enforcement and capacity building tools	5	0	2	0	**7**	6		1		**7**	1,740,961	1,720,241	1,702,418	1,706,672	-2.21%	-0.79%
4600	Prevention of pollution by ships	5	0	1	0	**6**	8	1	1		**10**	1,247,148	1,223,048	2,003,889	1,806,967	60.68%	47.74%
6500	Communication, Missions & Events support	3	3	0	7	**13**	3	3		6	**12**	1,864,091	1,864,091	1,904,091	1,788,315	2.15%	-4.07%
5100	Operational Pollution Response Services	10	2	1	2	**15**	10	2	1	2	**15**	20,004,067	18,949,174	19,790,671	18,550,375	-1.07%	-2.10%
5200	Pollution Surveillance (CleanSeaNet and illegal discharges; Remotely Piloted Aircraft Services)	6	0	0	0	**6**	5				**5**	8,198,139	8,212,632	8,249,669	8,214,368	0.63%	0.02%
5300	Cooperation and information relating to pollution preparedness and response	4	0	0	0	**4**	2				**2**	1,082,092	1,197,492	542,294	684,239	-49.88%	-42.86%
6100	Management/bureau/horizontal tasks	12	8	0	1	**21**	12	9		1	**22**						
6200	Human Resources, Protocol and Document Management	3	5	0	7	**15**	3	5		5	**13**						
6300	Legal and Financial Affairs, facilities and logistics	6	6	0	4	**16**	6	5		4	**15**						
6400	Operations support (ICT)	1	7	0	2	**10**	1	8		2	**11**						
n/a	Copernicus contract agents financed by the EMSA subsidy	0	0	0	3	**3**				3	**3**						
SUBTOTALS		**152**	**60**	**18**	**33**		149	58	14	30							
TOTAL		**212**		**51**		**263**	**207**		**44**		**251**	**80,177,932**	**81,299,192**	**79,153,341**	**77,981,450**	**-1.28%**	**-4.08%**

Planned and Actual Resources	Planned Human Resources		Actual Human Resources		Planned Financial Resources		Actual Financial Resources	
PROJECT FINANCED ACITIVITIES	END	CA	END	CA	Commitments	Payments	Committed	Paid
07100 SAFEMED IV EuroMed Maritime Safety Project	0.5	2	0.5	1	p.m.	p.m.	1,178,900	731,108
07200 FRONTEX SLA		9		9	p.m.	p.m.	8,830,726	5,681,829
07210 EFCA SLA					p.m.	p.m.	80,991	86,783
07300 CSN GREENLAND					p.m.	p.m.	500	488
07310 CSN Dutch Islands					p.m.	p.m.	94	47
07400 BCSea Maritime Safety, Security and Environmental Protection in B&CS Regions	0.5	2	0.5	2	p.m.	p.m.	1,063,797	580,261
07500 COPERNICUS		(3 CA covered by EMSA subsidy)		(3 CA covered by EMSA subsidy)	p.m.	p.m.	15,721,398	10,892,276
07600 EQUASIS (R0 Funds)					p.m.	p.m.	604,615	399,674
07700 THETIS EU					p.m.	p.m.	101,066	32,937
07710 THETIS MRV					p.m.	p.m.	154,908	61,414
7800 EC Funds for candidate and potential candidate countries					p.m.	p.m.	52,113	50,494
7901 Interoperability project					p.m.	p.m.	1,689,301	848,718
07902 CISE Transitional Phase		5		4	p.m.	p.m.	1,262,350	608,080
09010 Maritime Labour Convention					p.m.	p.m.	33,507	28,100
Total Project Financed Activities	**1**	**18**	**1**	**16**			**30,774,265**	**20,002,212**
Grand total Contract Agents/SNEs (Operational + PFA)	**19**	**51**	**15**	**46**				
Grand Total Financial Resources							**109,927,605**	**97,983,661**

[78] Actual Financial Resources equal the execution at year-end for fund source C1. Therefore, the conference centre rental revenue (fund source C4) is excluded in the actual ABB calculation for the CAAR.

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

	General information				Financial and HR impact				
	Date of signature	Duration	Counterpart	Short Description		2019		2020	
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	1,113,598.90	1,113,598.90	731,108.24	731,108.24
					Number of CA	2		1	
					Number of SNE[79]	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	1,177,440.74	1,177,440.74	580,261.15	580,21.15
					Number of CA	2		2	
					Number of SNE[80]	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	50,225.40	50,225.40	48,612.65	48,612.65
					Number of CA	-		-	
					Number of SNE	-		-	
Interoperability project	September 2018	September 2021	DG MARE	Promotion of interoperability between industry and competent authorities in the European Maritime Single Window (EMSW) environment under the CISE Process	Amount	192,821.79	192,821.79	1,035,571.55	1,035,571.55
					Number of CA	-		-	
					Number of SNE	-		-	
CISE Transitional Phase	April 2019	October 2021	DG MARE	Ad-hoc Grant agreement for the implementation of the action "Setting up and enabling the transitional phase to CISE Operations"	Amount	80,708.32	80,708.32	824,703.73	824,703.73
					Number of CA	4		4	
					Number of SNE	-		-	

[79] SAFEMED IV and Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions will share 1 SNE.
[80] SAFEMED IV and Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions will share 1 SNE.

	General information				Financial and HR impact				
	Date of signature	Duration	Counterpart	Short Description		2019		2020	
Grant agreements						CA	PA	CA	PA
CISE Transitional Phase II[81]	December 2020	December 2023	DG MARE	Grant Agreement for "Common Information Sharing Environment (CISE)" transitional Phase II	Amount	-	-	0.00	0.00
					Number of CA	-		-	
					Number of SNE	-		-	
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
					Number of CA	-		-	
					Number of SNE	-		-	
Delegation agreement						CA	PA		CA
Copernicus Maritime Surveillance	December 2015	December 2021	DG DEFIS	Implementation of Copernicus Maritime Surveillance Services	Amount	9,374,509.09	9,374,509.09	11,037,237.94	11,037,237.94
					Number of CA[82]	(3)		(3)	
					Number of SNE	-		-	
Cooperation agreements						CA	PA		CA
THETIS-EU	March 2018	Sept. 2020	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	32,605.62	32,605.62	33,052.79	33,052.79
					Number of CA	-		-	
					Number of SNE	-		-	
THETIS-MRV	March 2016	March 2020	DG CLIMA	Support for the implementation of Regulation on the monitoring, reporting and verification of emissions of carbon dioxide, from maritime	Amount	21,290.00	21,290.00	61,592.10	61,592.10
					Number of CA	-		-	

[81] Grant Agreement was signed on 7/12/2020. No pre-financing has yet been received and the 1 CA + 3 SNEs are foreseen to be recruited for 2021.

[82] 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.

				transport and amending Directive 2009/16/EC on PSC and relevant technical Assistance	Number of SNE	-		-	
Other project financed actions[83]						**CA**	**PA**	**CA**	**PA**
	General information				**Financial and HR impact**				
	Date of signature	**Duration**	**Counterpart**	**Short Description**		**2019**		**2020**	
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	8,226,802.58	8,226,802.58	5,246,565.80	5,246,565.80
					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
					Number of CA	-		-	
					Number of SNE	-		-	
EQUASIS	May 2000	Indefinite	EQUASIS members	MOU on the establishment of the Equasis information system	Amount	487,261.00	487,261.00	399,673.98	399,673.98
					Number of CA	-		-	
					Number of SNE	-		-	
						CA	**PA**	**CA**	**PA**
Total					**Amount**	**20,757,263.40**	**20,757,263.40**	**20,088,487.98**	**20,088,487.98**
					Number of CA	**17 (+3 CA for Copernicus included in the EMSA subsidy)**		**16 (+3 CA for Copernicus included in the EMSA subsidy)**	
					Number of SNE	**1**		**1**	

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

Annex VIII. Draft annual accounts

Economic outturn account

	2020	2019
Revenues from administrative operations	19,404,646	20,602,350
Other operating revenue	80,294,974	77,909,792
TOTAL OPERATING REVENUE	**99,699,620**	**98,512,142**
Administrative expenses	-43,885,932	-39,221,844
All Staff expenses	-24,660,709	-22,902,814
Fixed asset related expenses	-7,891,848	-8,616,831
Other administrative expenses	-11,193,375	-7,702,199
Operational expenses	-54,146,835	-57,307,647
TOTAL OPERATING EXPENSES	**-98,032,767**	**-96,529,491**
SURPLUS/(DEFICIT) FROM OPERATING ACTIVITIES	**1,666,853**	**1,982,651**
Financial revenues	0	0
Financial expenses	-162,993	-2,011
SURPLUS/ (DEFICIT) FROM NON OPERATING ACTIVITIES	**-162,993**	**-2,011**
ECONOMIC RESULT OF THE YEAR	**1,503,860**	**1,980,640**

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)

	2020	2019
NON CURRENT ASSETS	34,876,958	36,416,625
Intangible fixed assets	13,334,418	11,609,624
Tangible fixed assets	21,252,403	24,516,865
Long-term pre-financing	290,136	290,136
Long-term receivables		
CURRENT ASSETS		
Inventories	4,473,476	4,485,916
Short-term pre-financing	3,136,002	1,241,107
Short-term receivables	2,913,365	3,504,089
Cash and cash equivalents	21,005,257	23,916,818
TOTAL ASSETS	**66,405,058**	**69,564,555**
NET ASSET	44,530,678	43,026,818
NON-CURRENT LIABILITIES	105,510	105,510
Provisions for risks and charges	0	0
Other long-term liabilities	105,510	105,510
CURRENT LIABILITIES	21,768,870	26,432,226
Provisions for risks and charges	2,500	0
Accounts payable	21,766,370	26,432,226
TOTAL LIABILITIES	**66,405,058**	**69,564,555**

Annex IX. EMSA's report on the multi-annual funding of the Agency's pollution preparedness and response as laid down in Regulation (EU) No 911/2014.

Annex IX - EMSA's Report on the Multi-Annual Funding of the Agency's pollution preparedness and response activities as laid down in Regulation (EU) No 911/2014.

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Chapter 1: Report Objective and Executive Summary

Regulation (EU) No 911/2014 of the European Parliament and of the Council of 23 July 2014 on multi-annual funding for the actions of the European Maritime Safety Agency in the field of response to marine pollution caused by ships and oil and gas installations states, that “In accordance with Regulation (EC) No 1406/2002, the Agency should report on the financial execution of the multi-annual funding of the Agency in its annual report.” This report is presented here.

The activities of the Agency in the field of marine pollution preparedness, detection and response caused by ships and oil and gas installations are focused on providing operational assistance and information to Member States. The main services are:

- The provision of additional response capacity through the Network of Stand-by Oil Spill Response Vessels, the Equipment Assistance Service (EAS) and the associated dispersant stockpiles, these services being adapted to also address spills from offshore oil and gas installations;
- CleanSeaNet: the satellite-based oil spill and vessel detection and monitoring service;
- The Remotely Piloted Aircraft Systems (RPAS) capacity for detection, identification and monitoring of pollution at sea and from vessel’s air emission;
- The MAR-ICE (Marine-Intervention in Chemical Emergencies) Information Service in case of chemical spills at sea;
- Cooperation and coordination with the EU Commission, EU Member States, EFTA/EEA Coastal Countries, Candidate Countries, Acceding Countries, Regional Agreements and other relevant international organisations such as the International Maritime Organization (IMO);
- The provision of information through publications and workshops.

The Pollution Response Services managed by EMSA were maintained and fully operational throughout the year permanently ready to assist despite the difficult circumstances and restrictions imposed by the COVID-19 pandemic. At the end of 2020, EMSA maintained 17 Stand-by oil spill response vessels and four Equipment Assistance Service (EAS) arrangements, complemented with eight dispersant stockpiles.

Three vessels contracted at the end of 2019, to replace the response capacity for the Adriatic Sea, Western and Central Mediterranean Sea, successfully completed the preparation phase and entered into operational service in mid-2020. In addition, one vessel from a running contract in the Atlantic North area was replaced.

Following a public procurement, three vessel contracts to replace the response capacity for the Southern Atlantic coast, Western and Central Mediterranean Sea were awarded. The three newly contracted vessels will become operational by the end of 2021. In addition, the contracts covering the Baltic Sea, the Canary Islands and Madeira were renewed for an additional 4-year period.

The Equipment Assistance Service (EAS) arrangements contracted at the end of 2019 for the Baltic Sea and the North Sea became operational. Besides, the procurement to replace the EAS Southern Europe was successfully completed. The new stockpile will be operational by mid-2021.

In order to ensure a high level of preparedness 72 quarterly and acceptance drills were conducted on board of EMSA contracted vessels. Moreover, 26 Equipment Condition Tests (ECTs) were completed by EAS contractors.

Regarding technical improvements, light-weight RPAS were installed on board of four additional oil spill response vessels, having now RPAS available on eight vessels in total. In addition, the response capacity on board of two vessels was improved by installation of a high-capacity skimmer and through the replacement of the boom system. Besides, the response toolbox for the response in ice, two state-of-the-art arctic skimmers were delivered to the EAS Northern Baltic Sea.

Due to COVID-19, a number of operational activities organised by Member States and Regional Agreements[1] had to be cancelled or rescheduled to 2021. Yet, EMSA participated in three exercises with Member States, which included the deployment of four vessels, one EAS system and two lightweight RPAS.

CleanSeaNet, the satellite oil pollution and vessel detection monitoring service, provided daily monitoring over European waters to detect and deter marine pollution. In 2020 almost 8000 satellite images were delivered to Member States, with a record monitoring of 1.5 billion km2. In addition, CleanSeaNet also supported twelve accident or incident emergency requests, as well as periodic operations or exercises such the 'Tour d'Horizon'[2] aerial operations. In 2020, EMSA deployed a new tool that enables the Agency to efficiently calculate and visualize all relevant CleanSeaNet statistics for reporting.

The expert information and advice service provided by the MAR-ICE (Marine-Intervention in Chemical Emergencies) Network during hazardous and noxious substance (HNS) spills was formally extended to also provide on-site expertise on chemical substances by available chemical companies (at the requesting country's command post), in addition to the remotely provided service. The service was activated on four occasions, twice of which for real incidents. In addition, 25 MAR-CIS (Marine Chemical Information Sheets) datasheets were fully revised and a new BE-CHEM tool (BEhaviour of CHEmicals tool) was developed, to estimate the physical behaviour of chemical substances once released in the environment

The annual Inter-Secretariat meeting with Regional Agreement Secretariats was held in February 2020, while the Pollution Response Services User Group (PRS-UG) and Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR) meetings with Member States, were held back-to-back in October 2020 as virtual events. The various working groups comprised of Member States experts and established under the CTG MPPR work programme met several times online and continued their work on drafting guidance documents on topics of common interest identified by the Member States, such as health and safety of responders and oil spill sampling.

Finally discussions were held within the framework of the EMSA Administrative Board on the options available to enhance the toolbox offered by the Agency taking into consideration emerging challenges and needs. The outcome of such discussions will be taken into consideration when planning activities in the years to come.

Funding of Actions

The Budgetary Authorities provided EMSA with 25,009,988€ (26,100,000€ originally budgeted under MAF and 1,090,012€ moved to administrative budget titles via budget amendment) in commitment appropriations and 24,084,988€ (25,175,000€ originally budgeted under MAF and 1,090,012€ moved to administrative budget titles via budget amendment) in payment appropriations for its pollution preparedness and response task. In terms of budget execution 98.49% was achieved for commitments and 98.47% for payments.

[1] 'Regional Agreements' refer to the agreements signed by countries around a particular sea area to plan for pollution preparedness and coordinate responses in case of a large-scale marine pollution incident. The EU has an official role in some, but not all, of these. Regional Agreements have been developed for all the sea areas along the European coastline: the North Sea (Bonn Agreement), the Baltic Sea (HELCOM), the Mediterranean (the Barcelona Convention), the Black Sea (Bucharest Convention for which EMSA has observer status), and the North East Atlantic (Lisbon Agreement).

[2] The Bonn Agreement Contracting Parties have adopted a plan for all coastal states to conduct periodic and random surveillance flights for the detection of spillages in the offshore oil and gas industry areas in the North Sea. Irrespective of the main aim, all other suspected polluters are also to be identified and reported. These surveillance flights are entitled 'Tour d'Horizon Flights'.

The table below provides an overall summary of commitments and payments:

€	Commitments	Payments
TOTAL allocation	25,009,988	24,084,988
TOTAL utilisation	24,631,704 (98.49%)	23,716,896 (98.47%)

Table 1 Overall summary of commitment and payment appropriations (Source ABAC Workflow)

Chapter 2: Introduction

Following the sinking of the oil tanker *Prestige*, the Agency was given, in 2004, additional tasks in the field of marine pollution preparedness and response. The initial framework for such activities was described in the Action Plan for Oil Pollution Preparedness and Response[3] and the Action Plan for Hazardous and Noxious Substances Pollution Preparedness and Response[4]. With the adoption of Directive 2005/35/EC as amended on ship-sourced pollution[5], the task of monitoring spills was elaborated and incorporated into the Action Plan. Furthermore, following the *Macondo* incident and with the entry into force of Regulation (EU) No 100/2013, amending the Founding Regulation (EC) No 1406/2002, EMSA's mandate for operational assistance was enlarged to also include response to marine pollution caused by oil and gas installations. The framework for this new task was described in the Action Plan for Response to Marine Pollution from Oil and Gas Installations[6]. The activities identified and defined in the Action Plans are updated annually and approved by EMSA's Administrative Board as part of the annual Work Programme. The Agency's activities build upon existing cooperation frameworks and the mandate of Regional Agreements.

Regulation (EU) No 911/2014 reserves a financial envelope for the implementation of these tasks for the duration of the current 2014-2020 Financial Perspectives[7]. The financial execution of the Multi-annual Funding (MAF) framework program should be reported as part of the Agency's annual report. This is the fifth time the MAF reporting is included as an Annex in the Consolidated Annual Activity Report (CAAR) detailing the Agency's pollution preparedness and response. EMSA's activities under this umbrella are presented, and described in more detail in three categories:

- Operational Assistance;
- Cooperation and Coordination;
- Information.

[3] EMSA Action Plan for Oil Pollution Preparedness and Response as adopted by the Agency's Administrative Board in October 2004. It can be downloaded from the EMSA website: www.emsa.europa.eu

[4] EMSA Action Plan for HNS Pollution Preparedness and Response as adopted by the Agency's Administrative Board in Jun 2007. It can be downloaded from the EMSA website: www.emsa.europa.eu

[5] Directive 2009/123/EC of 21 October 2009 amending Directive 2005/35/EC on ship-source pollution and on the introduction of penalties for infringements (OJ L280, 27/10/09).

[6] EMSA Action Plan for Response to Marine Pollution from Oil and Gas Installations as adopted by the Agency's Administrative Board in November 2013. It can be downloaded from the EMSA website: www.emsa.europa.eu

[7] A financial perspective is a seven-year spending framework of the European Union.

Chapter 3: Operational Assistance

EMSA provides six main operational assistance services to coastal States with regard to marine pollution preparedness and response:

- The network of Stand-by oil spill response vessels;
- The Equipment Assistance Service (EAS);
- Dispersant stockpiles, associated with the vessel and EAS arrangements;
- CleanSeaNet (CSN), the satellite-based oil spill and vessel monitoring and detection service;
- Remote Piloted Aircraft systems to complement the CSN service for monitoring and detection and to increase efficiency of response operations; and
- Pollution response expertise to provide operational and technical assistance for oil and HNS incidents.

3.1 Vessel Network, Equipment Assistance Service and Dispersants

Mindful of the principle of 'subsidiarity' and the roles and responsibilities of Member States, this operational service is intended as a 'logical part' of the marine pollution response mechanism options available to coastal States requesting support, i.e. it should 'top-up' the national response capacity of the affected Member State. It is clear that Member States have the primary responsibility regarding response to pollution incidents in their waters. Consequently, the State requesting assistance will have the EMSA resources at its disposal under its operational control. Assistance will be channelled to requesting States through the Emergency Response Coordination Centre (ERCC) of the European Commission in Brussels.[8]

At the end of 2020, 17 Stand-by oil spill response vessels and four EAS arrangements were available for mobilisation. These services are available for responding to oil spills at sea caused by ships as well as by oil and gas installations at the request of a coastal State[9], a Private Entity[10], and/or the European Commission.

Associated activities included maintaining the service level for operational contracts, primarily through:

- Monitoring and evaluating vessel/equipment readiness and crew performance during quarterly drills and equipment condition tests (ECTs);
- Participation of the contracted vessels/EAS systems in operational at-sea exercises organised in cooperation with EU Member States and/or Regional Agreements;
- Identifying and implementing appropriate technical improvements to the vessel network and EAS arrangements and developing projects to upgrade the management of the service as a whole.

3.1.1 Network of Stand-by Oil Spill Response Vessels and Equipment Assistance Service

Vessel Network

The network of stand-by oil spill response vessels has been built up and maintained through annual procurement procedures starting in 2005. The current network provides at-sea oil recovery services from vessels based in all

[8] The Emergency Response Coordination Centre (ERCC) is the heart of the Community Mechanism for Civil Protection. It is operated by DG Humanitarian Aid & Civil Protection (DG ECHO) of the European Commission and accessible 24 hours a day. It plays key coordination role during emergencies.

[9] EU Member States, EU Candidate States, Norway and Iceland as well as those third countries sharing a regional sea basin with the European Union (Regulation (EU) 100/2013).

[10] Private Entity means the ship owner or oil and gas installation operator controlling the activity causing the marine pollution or the imminent threat of it. The Private Entity is responsible for the oil spill cleaning operations.

the regional seas of Europe. It should be noted that in case of an incident of extreme magnitude all vessels are at the disposal of all Member States regardless of their actual area of operation.

All 17 vessels of the network are equipped with two systems for mechanical recovery of oil (i.e. sweeping arms, boom and skimmer), supported with radar-based systems for the detection of oil slicks. In addition:

- Six vessel arrangements are also equipped for seaborne dispersant application with associated dispersant stockpiles of 200 tonnes each, in Sines (Portugal), Las Palmas (Spain), Rijeka (Croatia), Limassol (Cyprus) and Varna (Bulgaria) and of 178 tonnes in Valletta (Malta)
- Eight vessels based in Malmo (Sweden), Brest (France), Vigo (Spain), Las Palmas (Spain), Piraeus (Greece), Limassol (Cyprus), Varna (Bulgaria) and Constanta (Romania) are equipped with lightweight RPAS quadcopters to support response operations.

Moreover, of the 17 operational contracted vessels ten were certified for recovery of oil with flashpoints < 60°C. All the contracted vessels based in areas with the presence of oil and gas installations are now certified for recovery of oil with flashpoints < 60°C.

The map in Figure 1 shows the distribution of vessels and equipment stockpiles around Europe. More technical and operational specifications of all the contracted services are available on the Agency website www.emsa.europa.eu.

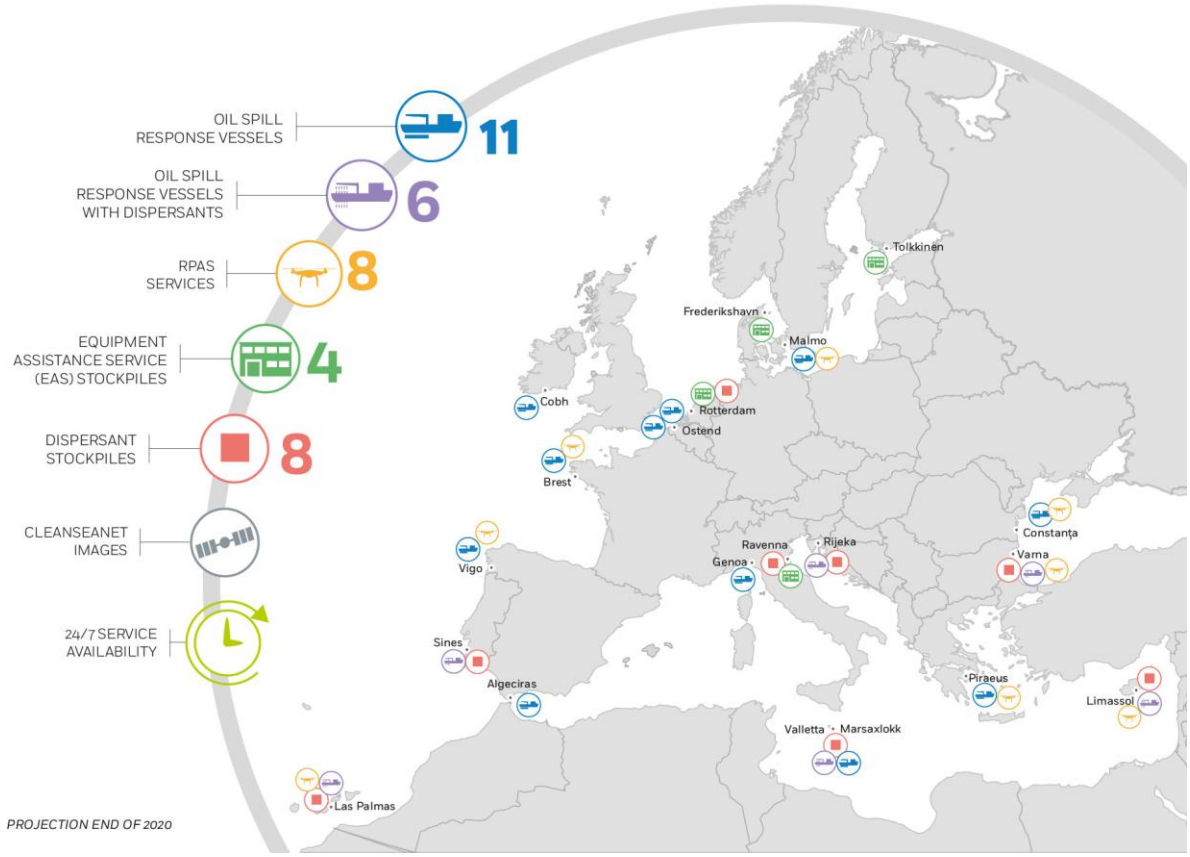

Figure 1 Distribution of EMSA's contracted vessels and EAS arrangements at the end of 2020

There were three main activities in relation to the vessel network in 2020, namely:

- The entry into service of the new vessel arrangements contracted at the end of 2019 to replace the response capacity for the Adriatic Sea, West and Central Mediterranean Sea. The tankers *Kijac*, based in Rijeka (Croatia), *Monte Anaga*, based in Algeciras (Spain) and *Adelia*, based in Valletta (Malta), successfully completed the Preparatory Phase and enter into operational service in mid-2020.

- Three vessel contracts covering the Southern Atlantic coast, Central and Western Mediterranean Sea will expire without the possibility of further renewal in 2021. Accordingly, a procedure following publication of a Contract Notice in the Official Journal of the European Union to replace the response capacity in those three areas was launched and successfully concluded. As a result, new contracts were awarded.

- Contract renewal of the response arrangements for the Southern Baltic, vessel *Norden*, based in Malmo (Sweden), and of the arrangement for the Canary Islands and Madeira, vessel *Mencey*, based in Las Palmas (Spain), were renewed for an additional 4-year period.

Equipment Assistance Service (EAS)

At the end of 2020, EMSA maintained four operational arrangements: EAS Northern Baltic Sea, EAS Baltic Sea, EAS North Sea and EAS Southern Europe. The EAS stockpiles comprise specialised equipment, available for mobilisation at short notice, for Vessels of Opportunity (VOO) of the Member States. In addition, the EAS North Sea and EAS Southern Europe are complemented with dispersant stockpiles of 200 tonnes each and portable spraying systems.

The main activities implemented in 2020 in relation with the EAS were:

- Bringing into operational service the new EAS arrangements contracted at the end of 2019 for the Baltic Sea, based in Frederikshavn (Denmark), and for the North Sea, based in Rotterdam (The Netherlands);
- Following the successful conclusion of a procurement procedure, award of a new contract to replace the EAS stockpile in Southern Europe (current contract will terminate in July 2021). The new equipment depot will be based in Ravenna (Italy) and will become operational by mid-2021.

Detailed information on the contracted vessels and EAS arrangements, the areas covered, and the service provided in 2020 can be found in the table below:

Area covered	Contractor / Contract	Vessel(s) / Assets	Vessel type / storage capacity(m^3) / dispersant stock (tonnes)	Service 2020
1. Contracted vessels				
Southern Baltic	Stena Oil EMSA/NEG/1/2015 Lot 2	*Norden*	Oil Tanker / 2880	Whole year service
Channel and Southern North Sea	DC Industrial S.A. EMSA/NEG/1/2014 Lot 3.1	*Interballast III*	Hopper Dredger / 1886	Whole year service
	DC Industrial S.A. EMSA/NEG/1/2014 Lot 3.2	*DC Vlaanderen 3000*	Hopper Dredger / 2744	Whole year service
Atlantic North	James Fisher Everard – Mojo Maritime France EMSA/NEG/1/2013 Lot 2	*Galway Fisher* / *Mersey Fisher* *Corrib Fisher*	Product Tankers / 4754 Product Tanker / 6248	Galway Fisher in service until 22 July / Mersey Fisher operational as of 23 July Corrib Fisher whole year service
Bay of Biscay	Seaowl EMSA/CPNEG/01/2017	*VN Partisan*	Offshore Supply / 1022	Whole year service
Atlantic Coast	Remolcadores Nossa Terra EMSA/NEG/1/2014 Lot 1	*Ria de Vigo*	Offshore Supply / 1522	Whole year service
Southern Atlantic Coast	Mureloil EMSA/NEG/1/2012 Lot 1	*Bahia Tres*	Oil Tanker / 7413 / Dispersant 200 tonnes	Whole year service

Canary Islands and Madeira	**Petrogas EMSA/NEG/1/2015 Lot 1**	***Mencey***	**Oil Tanker / 3500 / Dispersant 200 t.**	**Whole year service**
Western Mediterranean	**Naviera Altube EMSA NEG/1/2011 Lot 4**	***Monte Anaga***	**Oil Tanker / 4096**	**In service until 19 March**
	Naviera Altube EMSA/CPNEG/1/2019 Lot 2	***Monte Anaga***	**Oil Tanker / 4096**	**Re-enter into service new contract on 7 August**
	Ciane EMSA/NEG/34/2012	***Brezzamare***	**Oil Tanker / 3288**	**Whole year service**
Central Mediterranean	**Tankship EMSA NEG/1/2011 Lot 2**	***Balluta Bay***	**Oil Tanker / 2800 / Dispersant 178 tonnes**	**In service until 14 May**
	Petronav Ship Management EMSA/CPNEG/1/2019 Lot 3	***Adelia***	**Oil Tanker / 7309 / Dispersant 178 tonnes**	**Operational as of 1 October**
	SL Ship Management EMSA/NEG/1/2012 Lot 2	***Santa Maria***	**Oil Tanker / 2421**	**Whole year service**
Adriatic Sea	**Dinamarin EMSA/CPNEG/1/2019 Lot 1**	***Kijac***	**Oil Tanker / 1730**	**Operational as of 12 August**
Aegean Sea	**Environmental Protection Engineering EMSA/NEG/1/2013 Lot 3**	***Aktea OSRV (Aegis I as a back-up vessel)***	**Oil Tanker / 3000 Offshore Supply / 950**	**Whole year service**
Eastern Mediterranean	**Petronav Ship Management EMSA/CPNEG/1/2018**	***Alexandria***	**Oil Tanker / 7458 / Dispersant 200 tonnes**	**Whole year service**
Northern Black Sea	**Petronav Ship Management EMSA/NEG/1/2014 Lot 2**	***Amalthia***	**Oil Tanker / 5154**	**Whole year service**
Southern Black Sea	**Cosmos Shipping EMSA/CPNEG/6/2016 Lot 1**	***Galaxy Eco***	**Oil Tanker / 2969**	**Whole year service**
2. EAS arrangements				
Northern Baltic	**Lamor Corporation AB EMSA/CPNEG/2/2018**	**20 stand-alone equipment sets**	**Contracted storage area: 800m² (Tolkkinen, Finland)**	**Whole year service**
Baltic Sea	**Labelpoland.com EMSA/NEG/8/2015 Lot 2**	**18 stand-alone equipment sets**	**Contracted storage area: 900m² (Gdansk, Poland)**	**In service until 8 March**
Baltic Sea	**Stena EMSA/CPNEG/2/2019 Lot 1**	**18 stand-alone equipment sets**	**Contracted storage area: 900m² (Frederikshavn, Denmark)**	**Operational as of 8 April**
North Sea	**Ambipar EMSA/CPNEG/2/2019 Lot 2**	**19 stand-alone equipment sets Dispersant 200 tonnes**	**Contracted storage area: 900m² (Rotterdam, The Netherlands)**	**Operational as of 15 April**
Southern Europe	**Ottavio Novella EMSA/CPNEG/38/2016**	**23 stand-alone equipment sets Dispersant 200 tonnes**	**Contracted storage area: 900m² (Ravenna, Italy)**	**Whole year service**

Table 2 Summary of OPR services and contractual information in 2020

3.1.2 Operational Assistance to Member States and EU Agencies

In addition, within the context of cooperation between EU Agencies on Coast Guard functions, EMSA continued providing support to the European Fisheries Control Agency (EFCA) chartered vessel *Lundy Sentinel* for oil pollution response duties, with oil spill response equipment and some dispersants.

Furthermore, EMSA also topped up temporarily Croatian response capacities at the request of Croatian authorities by providing two equipment sets, Current Buster 6 and Trawl Net, from the EAS Southern Europe. This cooperation lasted until October, as agreed, following the entry into service of the vessel *Kijac* in the Adriatic Sea.

EMSA was also contacted for three emergencies outside European waters, namely for the Wakashio incident in Mauritius and the two other incidents which happened in the waters of the Gulf of Paria (Venezuela-Trinidad & Tobago) and in Sri Lanka. In all cases EMSA followed the emergency phase of the contingency plan, identifying if equipment of the stockpiles could be mobilised. Unfortunately, due to the particularities of these incidents, EMSA's equipment was not fitting to the particular needs.

3.1.3 Maintaining the Service: Drills and Exercises

Drills

In order to maintain the appropriate level of readiness during the Stand-by phase of the contracts, the companies and vessels concerned carry out different types of activities. The primary activity is the vessel/crew drills, which take place on a quarterly basis. Each drill verifies that the capability of the vessel and specialised equipment, and the skill of the crew, is at an appropriate level.

These drills are primarily an internal event between the Agency and contractors, however, Member State representatives and journalists have taken part in or attended such drills and the Agency encourages such participation.

In 2020, a total of 63 quarterly drills and nine acceptance drills, four for the entry into operational service of new contracted vessels and five for acceptance of technical improvements, were performed by the vessels' operators under contract to the Agency.

The acceptance drills are of particular importance as they are the major milestone for new vessels and/or equipment to enter into the Stand-by phase of a contract. In order to overcome the travel restrictions due to COVID-19, a specific procedure to address the "remote acceptance" of new contracted arrangements and improvement projects was developed and successfully implemented in cooperation with the contractors.

With regard to the EAS arrangements, the drills are called 'Equipment Condition Tests' (ECTs). In 2020, 26 ECTs were conducted by the contractors in order to verify readiness and performance of the equipment.

The figure below provides background information and an overview of the number of drills and ECTs performed by EMSA contractors and monitored by the Agency:

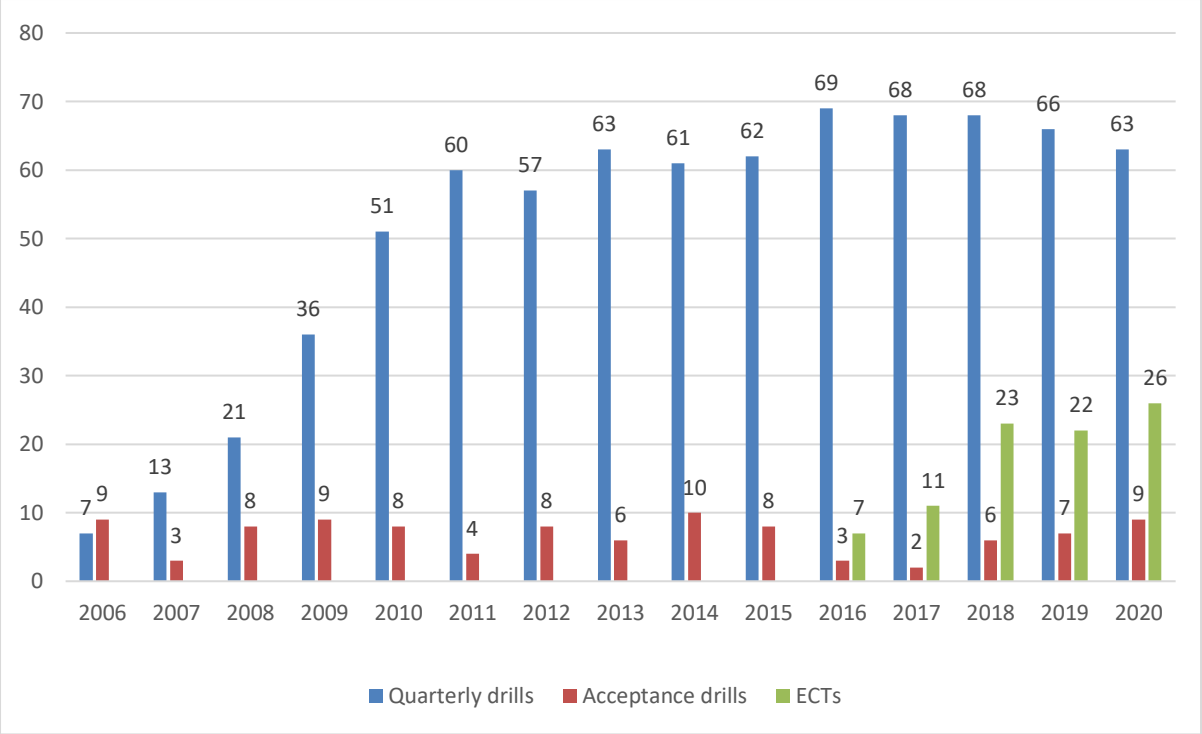

Figure 2 Number of vessel drills and ECTs 2006 - 2020

Exercises

Exercises are a useful method of maintaining pollution response skills as well as an important tool for identifying potential areas that could be improved. At-sea operational exercises in particular greatly assist the integration of EMSA's resources within the response mechanisms of Member States, improving the necessary coordination and cooperation with the coastal State response units.

Due to the restrictions imposed by the COVID-19 pandemic, a number of exercises organised by Member States as well as one "hands-on" training for EAS organised by EMSA had to be cancelled or rescheduled to 2021.

In the course of 2020, four Stand-by oil spill response vessels, one EAS system – including training provided to the host Member State for equipment deployment - and lightweight RPAS were deployed in three at-sea operational exercises, organised in cooperation with EU Member States and/or Regional Agreements in the Baltic Sea, the Mediterranean Sea and the Black Sea.

In addition, the Agency participated in four notification exercises aiming at testing the mobilisation procedures and communication channels, involving activations of four vessels contractors and one EAS contractor.

Moreover, in order to enhance the operational integration of the EAS arrangements at National and Regional level, EMSA continued with the implementation of the EAS training programme and organised one 3-day "hands-on" training session for Member States equipment operators at the location of the new EAS in the North Sea.

Detailed information regarding preparedness activities conducted by EMSA contracted vessels and EAS arrangements in 2020 can be found in the "EMSA Pollution Response Services - Drills and Exercises Annual Report 2020", available online at **www.emsa.europa.eu/opr-documents/opr-reports.html** .

3.1.4 Improvements to the Service

The following vessel improvements were implemented with the relevant vessel contractors:

- Setting-up lightweight RPAS on board of the vessels *Galaxy Eco*, based in Varna (Bulgaria), *Amalthia* based in Constanta (Romania) and *Mencey*, based in Las Palmas (Spain), in order to enhance the oil detection capabilities on board of these vessels;
- Installation of a high-capacity skimmer on board of the *Interballast III*, based in Ostend (Belgium), in order to improve the response capacity of the vessel arrangement.

Besides, in 2020, the Equipment Management Policy was implemented through the replacement of the boom set on board the back-up vessel *Aegis I*, stationed in Piraeus, Greece.

Moreover, the response capacity of the EAS arrangement in Northern Baltic was strengthened through the delivery of specialised equipment for the recovery of "oil in ice" through the delivery of two state-of-the-art arctic skimmers.

In addition, the geographical scope of the dispersant stockpiles was broadened. From the existing stock of 600 tonnes of dispersant available at the EAS stockpile based in Ravenna (Italy), 200 tonnes were transferred to the new vessel arrangement based in Rijeka (Croatia) and 200.00 tonnes to the new EAS stockpile based in Rotterdam (The Netherlands). Accordingly, the existing eight dispersant stockpiles were aligned to a balance stock.

3.2 CleanSeaNet Satellite Service for Oil Spill Monitoring

3.2.1 Introduction

CleanSeaNet, the European satellite-based oil spill monitoring and vessel detection service, was launched in 2007. The service was set up to support Member States' actions to combat deliberate or accidental pollution in the marine environment in the framework of Directive 2005/35/EC (amended by Directive 2009/123/EC) on ship-source pollution and on the introduction of penalties, including criminal penalties, for pollution offences and in particular Article 10.

The service is based on a permanent monitoring of coastal waters through the near real time analysis of Earth Observation (EO) Synthetic Aperture Radar (SAR) images. In 2020 it was available to 28 coastal States: all of the 23 EU coastal Member States (Belgium, Bulgaria, Croatia, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Ireland, Italy, Latvia, Lithuania, Malta, Netherlands, Poland, Portugal, Romania, Slovenia, Spain, Sweden, United Kingdom[11]); two EFTA coastal States (Norway and Iceland); and three candidate countries (Turkey, Montenegro and Albania). Through the SAFEMED IV and BCSEA cooperation programmes, CleanSeaNet was made available across the Mediterranean, the Black Sea and the Caspian Sea to the official project beneficiary countries.

When a possible spill is detected by the service, a pollution alert is sent to national authorities. The alerts are available within 20 minutes of the satellite acquiring the image and the service supports the identification of polluters by combining EO products with vessel traffic information. After receiving this information, the national authority then decides on the appropriate operational response.

In cases of accidental pollution, coastal States can request support from the service in the form of increased SAR satellite coverage over the accident area to enable the monitoring of the spill over time, thus providing support to response operations. Additionally, EMSA can also provide very high-resolution optical products in support to these emergency activations; these can provide an overview of the accident area and potentially help in the identification of coastal areas impacted by the spill.

3.2.2 CleanSeaNet detections in 2020

In 2020, 8,324 images were delivered by the CleanSeaNet service to coastal States, SAFEMED IV and BCSEA beneficiary countries. A total of 8,158 possible oil spills were detected, 4,645 of which with the highest level of confidence regarding the probable detection of hydrocarbons (Class A).

Given the limitations of radar detection for the identification of spills, it is important to note that CleanSeaNet does not detect 'oil spills' but 'possible oil spills'. Other substances with a similar effect include, for example, fish or vegetable oil, ice, algae, and other lookalikes.

[11] As from the 31/01/2020 the United Kingdom is no more a Member State of the EU, however under the transition period Agreement, the UK still enjoyed access to the service till 31/12/2020 midnight.

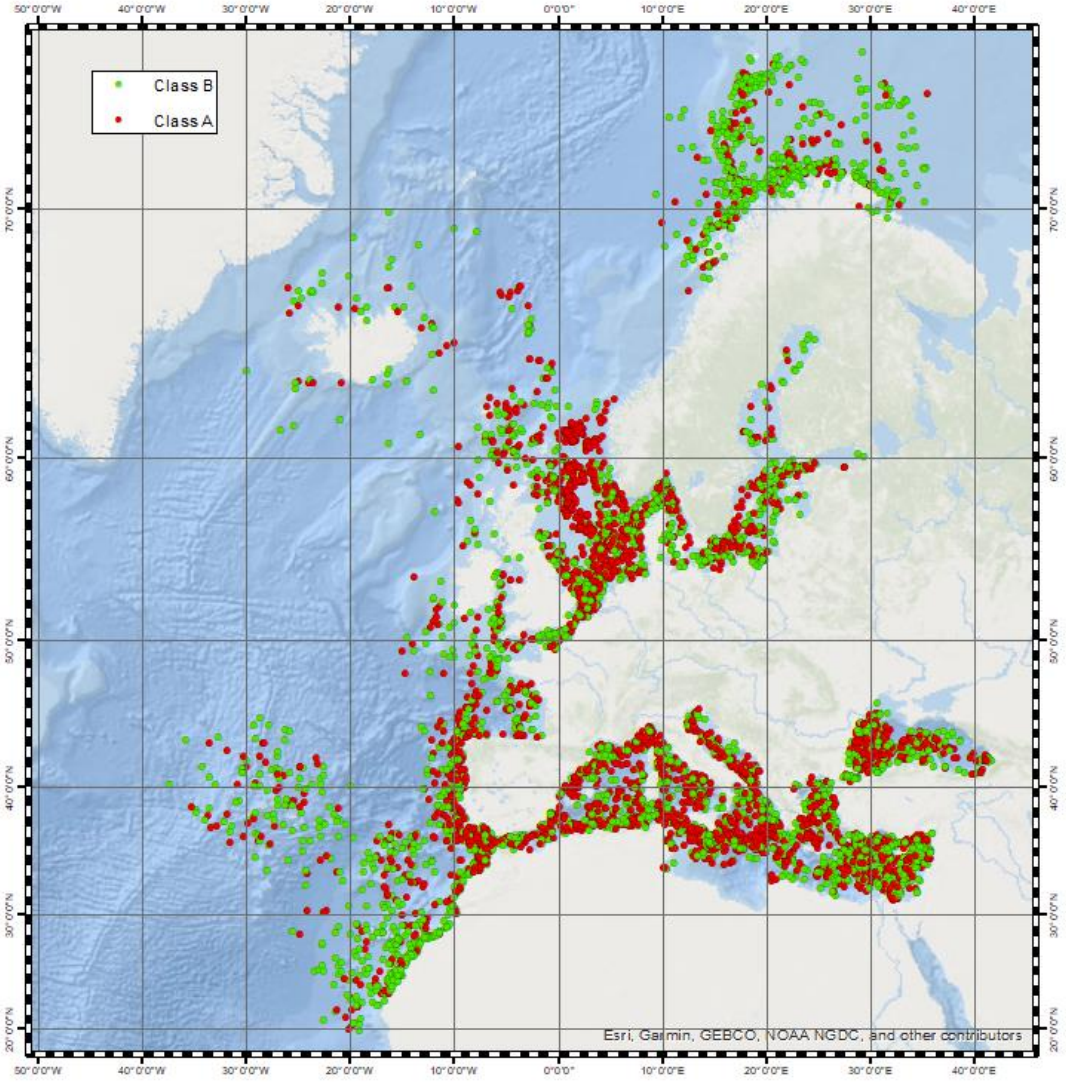

Figure 3: CleanSeaNet Service 2020: distribution of possible oil spills detections within the alert areas of EU coastal States (except French Outermost Regions), Iceland, Norway, Turkey and Montenegro (Red: Class A; Green: Class B)

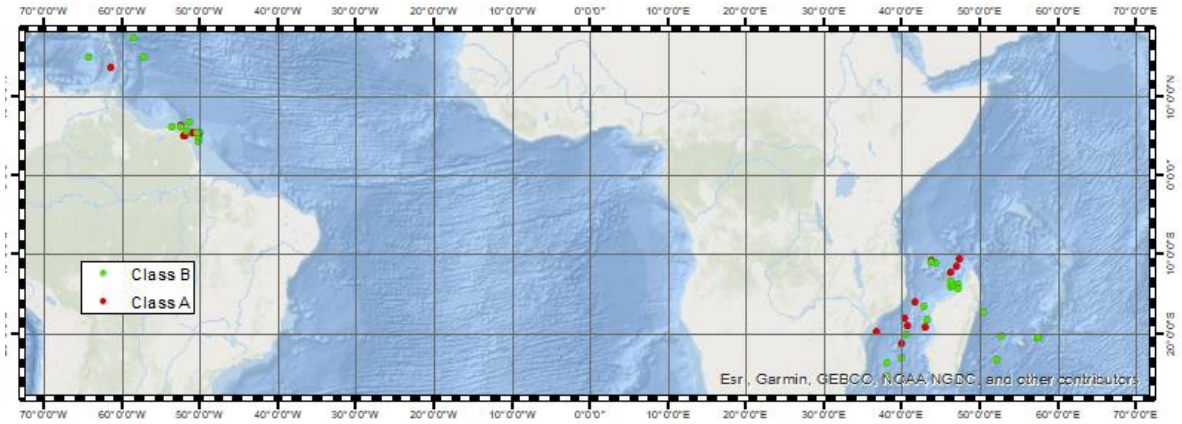

Figure 4: CleanSeaNet Service 2020: map of spills detected with higher and lower confidence level in French Outermost Regions (Red: Class A; Green: Class B)

3.2.3 Support to Aerial Surveillance operations in 2020

Countries that are members of the Bonn Agreement conduct aerial surveillance operations at regular intervals to monitor oil and gas platforms in the North Sea. In September 2020, EMSA supported one "Tour d'Horizon" operation. In addition to the services already foreseen through regular CleanSeaNet planning, during this operation an additional 23 EO services were delivered to the aircraft crews or national centres supporting the operation.

Three additional operational pollution response exercises were supported by CleanSeaNet in 2020:

- BREEZE (Bulgaria), July 2020
- BALEX BRAVO (Estonia), August 2020
- NEMESIS (Cyprus), October 2020

3.2.4 CleanSeaNet service improvements in 2020

In 2020 EMSA deployed a new tool that enables the Agency to efficiently calculate and visualize all relevant CleanSeaNet statistics. The QLIK software implements a set of dashboards that increase efficiency in the visualization and calculation of statistics extracted from the Earth Observation Data Centre. This comprehensive set of statistics produced by QLIK are then reported to Member States via the normal channels (e.g. reports, brochures, presentations to the CleanSeaNet User Group and Regional Agreements forums, etc.).

Concerning new capabilities, at the end of 2020 the Agency started the integration of a new SAR mission (PAZ satellite). It is expected that this task is completed by the beginning of 2021. Additional NRT coverage was established with the integration of a new antenna in Greece (Southwest of Athens).

During the reporting period EMSA launched a project to include Artificial Intelligence for Earth Observation data processing. The project consists in the integration of the value-added products generation into the EMSA's Earth Observation Data Centre (EODC), by implementing Artificial Intelligence algorithms to extract the relevant information, including the oil spill detection products. The first step launched in 2020 includes the production of training datasets, which will be followed by the development of algorithms during 2021 and 2022.

3.2.5 Support to coastal States and the Commission for Accidental Spills and Emergencies

In 2020, twelve requests for additional support from EMSA´s CleanSeaNet service were received from coastal States addressing accidental spills and emergencies. An additional 33 (29 SAR; 4 optical) images were ordered to support these requests. The following table summarizes the emergencies supported.

Table 3: Overview of emergency support provided by the CleanSeaNet service

Date	Requesting country	Description	EO products
2020/01/07	Ireland	The fishing vessel *Alize* with two people on board sank shortly after midnight. EPIRB was activated. Images ordered to monitor potential pollution and debris.	3 SAR
2020/01/10	Spain	4-5 tonnes of fuel oil were spilled during bunkering operations in the port of Ceuta, Spain.	1 SAR
2020/02/25	Iceland	Beach pollution in Iceland. Birds covered in crude oil were found. The source of the oil was unknown.	3 SAR
2020/02/28	French Guiana	MRCC Fort-de-France (French Guyana) requested satellite images to monitor a confirmed pollution of sargassum (algae). This pollution was detected via a normal scheduled CleanSeaNet service on 27 February. Further satellite imagery requested over the same area over the following 3 days.	3 SAR

2020/03/05	France	MRCC Jobourg received an alert reporting that the fishing vessel *Antarès* had capsized northwest of the port of Le Havre. All three crew members were rescued. MRCC Jobourg requested satellite services to detect possible pollution from the sinking vessel.	2 SAR
2020/03/26	Malta	Malta Transport requested satellite images to support local operations and detect possible pollution following the sinking of the tanker *Lady Sandra*. The vessel suffered severe storm damage northeast of Malta and subsequently broke in two parts.	3 SAR
2020/03/30	Spain	Pollution was detected in a Sentinel-1 image north-west of La Palma. The source of the pollution was unknown.	3 SAR
2020/04/17	Ireland	Pollution was detected in a CleanSeaNet image on the south coast of Ireland. The source of the pollution was unknown. The MRCC requested more images to follow up the spill while national assets were deployed.	3 SAR
2020/08/11	Bulgaria	White congealed lumps with a waxy texture, corresponding to palm oil, appeared along the coastline of Bulgaria. A request was made to EMSA to try to identify the possible polluter and for optical images for pollution monitoring.	3 optical
2020/08/12	Ireland	Following the detection of oil in two CleanSeaNet images, the Irish National Maritime Operations Centre in Dublin requested additional services.	2 SAR
2020/08/16	France - La Reunion	Further to the support already provided within the scope of the Copernicus Maritime Surveillance service for the *Wakashio* maritime emergency), MRCC la Reunion requested additional services.	1 SAR and 1 optical
2020/11/08	Portugal	DGRM requested satellite imagery for oil spill monitoring after the sinking of the general cargo vessel *Southwester*, which sent a distress alert after an explosion in its engine compartment. During a towage operation, the *Southwester* lost stability and capsized at around 17 NM SW of Leixões, Porto.	5 SAR

3.3 RPAS - Utilising State of the Art Remote Sensing Technology for Oil Spill Detection, Monitoring and Response and other substances

EMSA is offering aerial pollution monitoring services to EU Member States and agencies with Remotely Piloted Aircraft Systems (RPAS). The services encompass different type of systems optimised for specific services. It includes lightweight quadrocopters for operation on board of a vessel, remotely operated helicopters having a longer endurance and range for monitoring the sulphur emission of the fuel burnt by vessels and fixed wing aircraft for long endurance operations covering large sea areas for general multipurpose maritime surveillance, including pollution detection and verification. A new service was also developed in 2020 based on lightweight RPAS for pollution detection within port areas. A first service of this kind was provided to the Port of Antwerp as of the fourth quarter of 2020.

The Corona pandemic had obviously an impact on the RPAS operation in 2020, but EMSA has adapted the operational schedule in order to be finally provide all planned operations as foreseen for 2020.

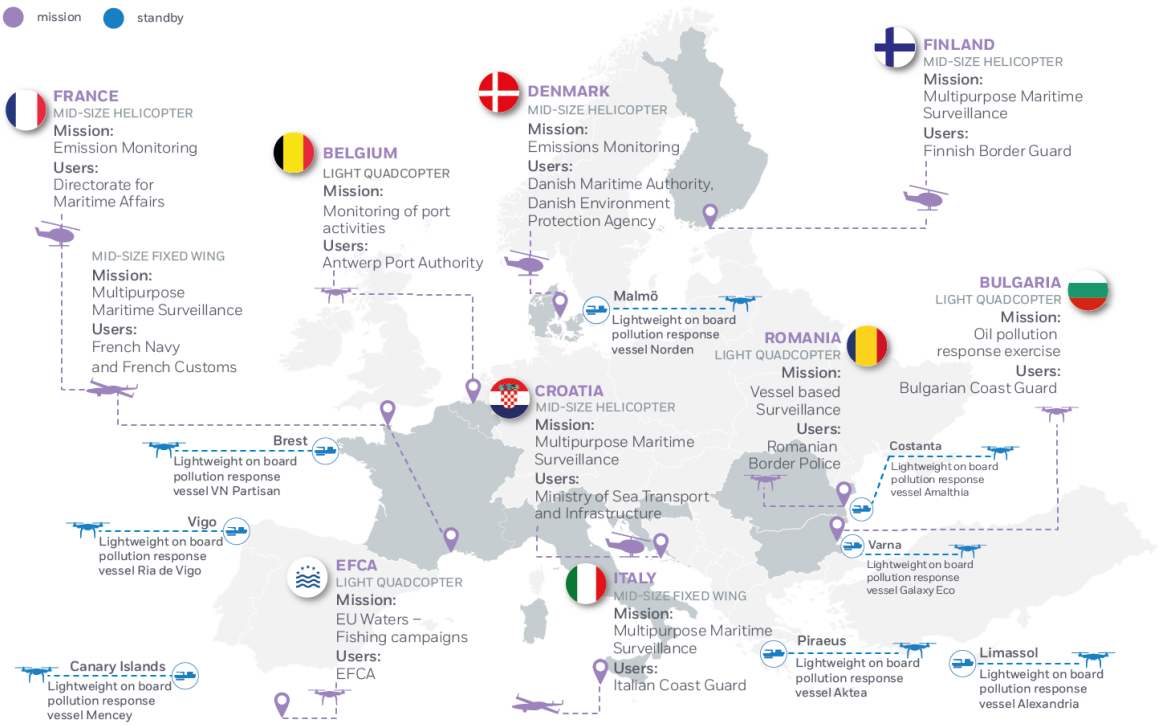

Figure 5: RPAS Services in 2020: geographical distribution of RPAS services provided to the EU Member States and agencies. Blue shaded are the services, which regularly monitor potential oil pollutions as part of their multi-purpose operations.

The payload data of the RPAS services are transmitted live via the RPAS Data Centre enabling the user to have an immediate view of the mission. The RPAS Data Centre was further refined and operated as a backbone for all RPAS services.

All RPAS services provided to the EU authorities include a dedicated training in order to make best use of the operations. The appropriate training was given to the user authorities at the beginning of each service period.

The 3rd RPAS user group Meeting took place online with large attendance by Member State authorities and Agencies.

3.3.1 Oil pollution monitoring

Lightweight RPAS (Remote Piloted Aircraft System) allow improved visualisation of the extend and the amount of oil at the sea surface compared to the view from the bridge of a vessel. This applies during daytime but also during night with night viewing capability of the RPAS sensors. In view of this improved capability, EMSA has in total eight oil pollution recovery vessels equipped with lightweight RPAS to improve the on-board capabilities for oil slick detection as well as to support any other surveillance activities, if needed.

In 2020, lightweight RPAS were ready to fly from four additional EMSA chartered vessels (Galaxy Eco, Amalthia, Mencey and Alexandria[12]) . The installation of RPAS on two additional vessel (Kijac and Monte Anaga) was already started in order to be concluded in 2021.

[12] The initial test with the RPAS in 2019 had to be repeated in January 2020 before having the service fully operational.

EMSA supported the Balex Delta and Breeze exercises using the Light Quadcopter from on-board EMSA oil pollution recovery vessels in two regions (Baltic and Black Seas).

3.3.2 Emission monitoring

In the field of the implementation of the Sulphur Directive, EMSA successfully performed in 2020 RPAS based measurements of Sulphur Dioxide in the plume of vessels, calculating the sulphur content in the fuel burnt. This activity was undertaken during

- 120 operational days in Denmark (North of Great Belt area, Sjællands Odde) for the Danish Maritime Authority and Danish Environment Protection Agency with 181 emission measurements, and
- 87 days in France (Pas-de-Calais, Channel) supporting the French Directorate for Maritime Affairs with 65 emission measurements.

The measurements of Sulphur Dioxide in the plume and the sulphur content in the fuel used by each vessel were included instantaneously in THETIS-EU.

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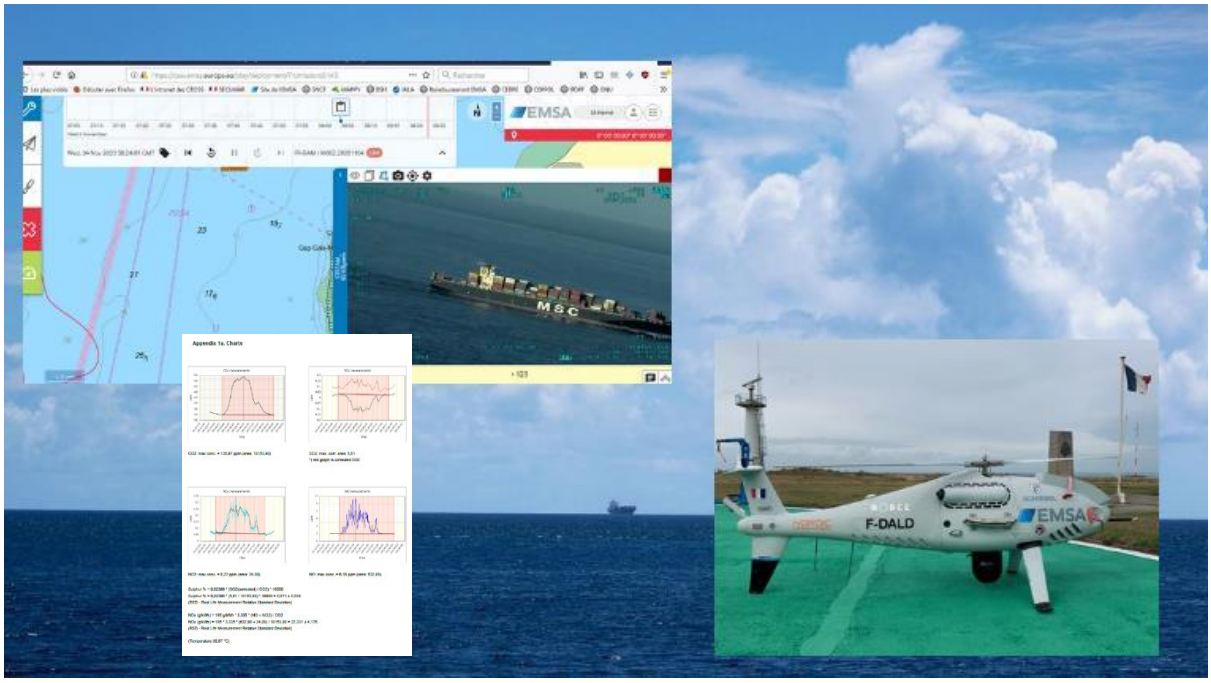

Chapter 4: Cooperation and Coordination

4.1 Introduction

EMSA continued its cooperation with the pollution response experts of EU Member States, EFTA/EEA coastal Countries, EU Candidate Countries, the Regional Agreements Secretariats, the Commission (DG ECHO) and, on behalf of the Commission, with the International Maritime Organization (IMO).

4.2 Activities with regard to Cooperation

4.2.1 Pollution Response Services User Group (PRS UG)

The 10th Pollution Response Services User Group meeting took place on 13 October 2020 as a virtual event. Recent developments on EMSA's Pollution Response Services were presented and discussed in detail. Lessons learnt from recent incidents and exercises, how to enhance cooperation and other relevant developments at national level were also discussed by the group. The group was also used to assist in determining which type of near shore equipment the Agency should procure through a written consultation of Member States.

4.2.2 Inter-Secretariat Meeting

The annual Inter-Secretariat meetings with the Secretariats of the Regional Agreements and Chairpersons of relevant Technical Groups of these Agreements, DG ECHO and EMSA focus on facilitating the exchange of information and sharing of best practices in marine pollution preparedness and response across the European regional seas. The 16th Inter-Secretariat meeting was held on 5 February 2020 in Brussels, hosted by DG ECHO.

4.2.3 Cooperation within the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR)

The work of the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR) continued in 2020. The CTG MPPR provides an EU level platform for Member States to contribute to the improvement of preparedness and response to accidental and deliberate pollution from ships. The CTG MPPR is intended to facilitate and strengthen the exchange of information, views and opinions, share best practice and define the current and future priority actions in this field among the EU national experts, as defined in its Work Program. This is done through dedicated workshops, technical studies, guidelines and reports.

The status of ongoing priority actions and planned activities was reviewed at the 14th CTG MPPR meeting held on 14 October 2020 as a virtual event. There was strong support to continue with the Group's ongoing projects, listed below, providing added value at European level.

With regard to the ongoing CTG MPPR projects, the following actions were undertaken in 2020:

- Guidelines on Health and Safety of Oil Spill Responders:

The working group (WG) on health and safety of responders (HSE WG), comprised of Member States experts is tasked under the lead of Norway to prepare practical guidelines on HSE of oil spill responders, based on existing guidance and real incident experience. Considering the subject matter, an expert from the EU-OSHA Agency is also supporting the work of this working group. Three meetings of this group were held as virtual events in 2020, drafting and revising the guidelines document. The WG will continue working on the guidelines in 2021.

- Guidelines on Oil Spill Sampling:

The working group (WG) on oil spill sampling, comprised of Member States experts, is tasked under the lead of Germany to develop interdisciplinary, practical guidelines on oil spill sampling, based on the OSINet expertise. These guidelines will be a non-binding, hands-on manual for forensic oil spill sampling, intended to provide updated, current best practice guidance as an addition to existing documents, and will incorporate various stand-alone sampling scenarios and case studies. Three meetings of this group were held as virtual events in 2020, revising the guidelines document. The WG will continue working on the guidelines to finalise these in 2021.

- Technical Correspondence Group on hazardous and noxious substances (TCG HNS):

The TCG HNS comprised of Member States experts, is tasked under the lead of France to develop a course programme to be delivered "*from Member States for Member States*" addressing the response to chemical or HNS spills, based on existing national experience in the field. This "exchange of good practice course" under the CTG MPPR will also include a table-top HNS exercise and aims to raise awareness on the challenges and key issues associated with chemical incident response, while presenting a risk-based methodological approach on how to deal with such incidents. Four meetings of this group were held as virtual events in 2020, focusing on developing the first course on "HNS transported in bulk", expected to be held in 2021.

- Common operating procedures for use during international spill response operations:

The working group on common operating procedures (COP WG), comprised of Member States experts, is tasked under the lead of France to develop 'common operating procedures' and a 'common glossary' describing the oil spill distribution, to be used during international spill response operations, to facilitate the communication between the on scene commander and the various participating units and assets (e.g. vessels). This effort is

based on the experience gained from recent spills and aims to facilitate operational communication during response operations at sea that involve international assets.

4.2.4 Cooperation with Third Countries

Building upon the CleanSeaNet service for EU Member States and through the SAFEMED IV and BCSEA cooperation programmes and associated dedicated budgets (not through the APM budget), CleanSeaNet was made available to those official beneficiary countries across the Mediterranean, the Black Sea and the Caspian Sea, who showed interest and signed the applicable Conditions of Use.

4.2.5 Technical Assistance to the European Commission

EMSA again supported DG ECHO and the training consortium in the development of course contents and training curricula for the Technical Expert Course for Maritime Incidents (TEC-MI). The prime objective of the TEC-MI is to prepare maritime experts for interventions and deployments in an affected country as part of a Union Civil Protection Mechanism (UCPM) Team.

4.2.6 Cooperation with Regional Agreements and the International Maritime Organization

With respect to the Regional Agreements, the Agency also provides technical support to the European Commission and participates as part of the European Union delegation in the technical and operational meetings of these Agreements. For example, EMSA participates in the annual Operational, Technical and Scientific Questions Concerning Counter Pollution Activities (OTSOPA) meetings of the Bonn Agreement, in the HELCOM Response Group meetings and is also a member of the HELCOM Informal Working Group on Aerial Surveillance (IWGAS), which meets once a year. EMSA contributes to these meetings by submitting papers, participating in discussions and also by the Agency's involvement in the various operational exercises organised around Europe. In 2020 EMSA continued its contribution at the OTSOPA and HELCOM Response meetings, held as virtual events.

The IMO re-organised its plenary meetings in 2013, as a result of which, the Oil Pollution Preparedness, Response and Cooperation Hazardous and Noxious Substances (OPRC-HNS) Technical Group was discontinued as a separate group. The work of the Group is now undertaken under the umbrella of the Pollution Prevention and Response subcommittee (PPR), which meets annually. EMSA continues monitoring the work related to pollution preparedness and response under this subcommittee.

4.2.7 Cooperation with industry and other stakeholders

The Agency continued to support the major marine pollution conference and exhibition event in Europe, INTERSPILL, as a member of the event's organising Committee[13], recognising the importance of sharing spill response experience and disseminating best practice. In 2020, EMSA contributed to the Committee's meetings, which were held as virtual events, addressing the preparation of the 2022 INTERSPILL event, to be held in June 2022 in Amsterdam.

4.2.8 Implementation of the Administrative Board recommendation regarding further analysing the efficiency of oil pollution response services

Following the Administrative Board's recommendation to further analyse the efficiency of EMSA's oil pollution response services, the Agency conducted in 2019 regional "stress tests" workshops simulating a major oil spill, where the pollution response assets from Member States and EMSA were pooled together and put to action to minimise the impacts of oil pollution. The outcome of this joint "stress tests" was presented to the Administrative Board in 2020 and taken into consideration to identify a number of new activities for the future of the Pollution Response Services. In particular, the needs for contracting additional storage capacity only, near shore (shallow water) equipment were highlighted and incorporated in the work programme 2021-2022.

[13] Since 2007, EMSA has been a party to the MoU between the event's Steering Committee members to organise the conference and exhibition on a "not-for-profit" basis.

Chapter 5: Information

5.1 Introduction

As part of its support to EU and EFTA/EEA Member States, EU Candidate Countries and the EU Commission, the Agency continued collecting and disseminating information in the field of marine pollution preparedness and response to oil and chemical spills.

5.2 Activities with regard to Hazardous and Noxious Substances (HNS)

5.2.1 MAR-ICE Network: Information Service for Chemical Emergencies

The MAR-ICE service, based on a Cooperation Agreement signed between the three MAR-ICE parties (Cedre, Cefic and EMSA), comprises a network of experts to support and advise Member States during the response to chemical spills. 2020 saw the entry into force of the MAR-ICE service expansion to not only provide assistance remotely (level-1) but to also provide on-site expertise and advice by available chemical companies at the requesting country's command post (level-2).

In 2020, the MAR-ICE service was activated on four occasions, two of which for real incidents as requested by Finland and Bulgaria. Following a request by the Finnish authorities, an online information session was provided to 16 Finnish experts on the MAR-ICE service activation procedures, offering a better understanding of the various levels of assistance the service can provide.

5.2.2 MAR-CIS datasheets (MARine Chemical Information Datasheets)

The MAR-CIS Marine Chemical Information Sheets are datasheets of chemical substances that contain relevant information for responding to marine spills of hazardous and noxious substances (HNS). These datasheets provide concise information on the substances' physical and chemical properties, handling procedures and emergency spill response procedures, as well as maritime transport requirements for safe transport at sea.

The MAR-CIS information is available through a web portal integrated in EMSA's Maritime Application Portal. These datasheets are also linked to the SafeSeaNet's Central Hazmat Database (CHD). The MAR-CIS information is also available offline (e.g. at incident site where internet connection might not be available) through an application (MAR-CIS App) for mobile devices such as tablets and smartphones. The MAR-CIS App is available at Google Play and Apple store for downloading by authorized users.

In 2020, in addition to software updates, 25 datasheets were fully revised. Complementing the information available in MAR-CIS, a new BE-CHEM tool (BEhaviour of CHEmicals tool) was developed, to estimate the physical behaviour of chemical substances once released in the environment. This is especially useful for the chemical substances not included in the MAR-CIS, as the physical behaviour of a product once spilled, is very important to determine the response action to be taken.

5.2.3 Modelling tools for tracking oil and chemical spill at sea

In view of maintaining and improving the know-how on operating oil and chemical spills modelling tools in emergencies, EMSA maintained its access rights to commercial software for simulating the fate and trajectory of oil and chemical spills at sea. The output from these tools is commonly used as a decision support tool for drills, exercises, training and contingency planning for mobilising and optimising the deployment of pollution response means. The results can be shared with Member States and Commission upon request.

In 2020, these modelling tools continued to be used at EMSA in a systematic way to maintain competence and were also used internally in real incidents. At the end of July, Bulgaria reported the arrival of balls of palm oil at several beaches. The oil model was used to support Bulgaria in the identification of the potential polluter. In November, the general cargo vessel *Southwester* sank 17 nautical miles Southwest of Leixões, Portugal. The oil model was used internally to estimate the potential for the spilled oil to reach the Portuguese coastline.

5.3 Dispersant Usage Evaluation Tool (DUET)

Following the completion of the enhancement of EMSA's Dispersant Usage Evaluation Tool (DUET), the Agency kept the tool available and provided in September 2020 as a virtual event, a hands-on training to 17 experts from EU and EFTA coastal Member States on the tool's use and functionalities.

5.4 List of Member States' pollution response capacities

In line with Regulation (EU) No 911/2014, the "list of the public and, where available, private pollution response mechanisms and associated response capabilities in the various regions of the Union are now captured in the CECIS MP database". EMSA regularly updates the information of its oil and HNS pollution response capacities in the CECIS MP database. EU/EFTA coastal Member States are responsible for maintaining currency of their national resources.

Annex: Total Expenditures for Pollution Preparedness and Response Activities

Total Expenditures[14] for Pollution Preparedness and Response Activities (APM)	Commitments (in EUR)	Payments (in EUR)
1. Pollution Response Services (Total)	**17,209,227**	**16,118,072**
1.1 Vessel Network 1.2 (renewals, new tenders, improvements)	15,486,499	13,749,223
1.2. EAS (renewals, additional services, establishment of a new arrangement including purchase of equipment)	1,575,512	2,190,772
1.3 Exercises	139,555	169,510
1.4 Missions	7,660	8,566
2. CleanSeaNet (Total)	**7,271,465**	**7,285,952**
2.1 Earth Observation Licenses and Services	**3,491,000**	**3,757,459**
2.2 Support to CleanSeaNet Users	**8,882**	**7,851**
2.3 CleanSeaNet Service Developments	**112,411**	**115,126**
2.4 Remotely Piloted Aircraft Systems setup services	**3,125,221**	**3,033,913**
2.5. CleanSeaNet activity	**533,950**	**371,803**
3. Cooperation, Communication and Information (CCI) (Total)	**151,012**	**312,872**
3.1 HNS-CCI Activities	148,556	264,087

[14] The figures in this report are based on preliminary figures available for 2020. They are subject to verification and confirmation as part of the final accounts of the Agency, which will be checked by the Court of Auditors. Therefore, the final figures may deviate from the figures presented in this report.

3.2 HNS-CCI Meetings	117	46,446
3.3 Missions	2,340	2,340
TOTAL APM allocated	**25,009,988**	**24,084,988**
TOTAL APM utilised	**24,631,704 (98.49%)**	**23,716,896 (98.47%)**