

Consolidated Annual Activity Report 2017

Document history

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EMSA Consolidated Annual Activity Report 2017

Assessment by the EMSA Administrative Board

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

The Administrative Board appreciates the structure of the Consolidated Annual Activity Report 2017. 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 side-by-side representation of planned and actual output for each activity allows for comparison of objectives and results and assessment of the implementation of the Work Programme 2017.

a) Strategic achievements

2017 was the first full year of operations following the extension of the Agency's mandate at the end of 2016. The legislative amendment aimed to reinforce European co-operation on coast guard functions. As planned under the Tripartite Working Arrangement signed by EMSA, EFCA and Frontex, the Agency's annual programme of work for 2017 includes the common annual strategic plan agreed between the three agencies.

As anticipated in the 2016 assessment, given EMSA's historical role in relation to coast guard functions, the implementation of the new mandate can be considered relatively seamless, in the sense of engaging and extending existing activities, not starting new ones, building on previous achievements and creating further added value for its long-time stakeholders. RPAS (Remotely Piloted Aircraft Systems) was an exception in this respect, representing a new frontier in civilian maritime surveillance and presenting a specific set of challenges – and potential benefits, which were tested during 2017 and will be reaped in the coming years.

As hoped, together with the increasing demand for more efficient solutions for reporting and exchange of information, the additional tasks and the formalisation of the Agency's role for coast guard functions, are paving the way for significant developments which are likely to pan out in the coming years in terms of the depth and breadth of the Agency's information services, the range of its capacity building services, and the landscape of maritime functions benefitting from them, with expected added value for maritime safety, security and pollution prevention and response in accordance with the agency's tasks and know-how.

2017 was a special year because the key measure of EMSA's achievements – the EU added value of the Agency – came under heavy scrutiny through the independent external evaluation. The exercise, which was led by the Administrative Board, consisted in stepping back from the day to day work of the Agency and looking at the impact of the Regulation, and at its effectiveness and working practices. The outcome was very positive, concluding that "overall, by working at EU level, EMSA is providing added value in all its areas and for all its stakeholders".

The EMSA 5-year Strategy (2014-2018) outlines four driving ambitions. In 2017, the Agency delivered significant advances in all four areas, as highlighted below.

Standards, Rules and Implementation: EMSA shall be a leading technical partner in cooperation with Member States for the development and implementation of EU safety standards and regulations in the maritime sector.

The contribution of the Agency to the development and implementation of EU standards and regulations in the maritime sector is delivered through a programme of visits and inspections, corresponding reports and cumulative horizontal analyses.

The approach has been fine-tuned over the years and formally structured in the last two by the Methodology for Visits to Member States, which aims to enhance the potential for reducing the administrative burden to Member States, developing and sharing best-practices and lessons learnt, and strengthening the flow and exchange of information; the integration of the cost-efficiency assessment into the horizontal analyses, which aims to maximise the value added to both Member States and the Commission of EMSA visits; and the Quality Management System for Visits and Inspections, which aims to guarantee high standards in terms of the reliability of information and provides a framework for continual improvement.

Following their first year of implementation or piloting in 2016, the quality system and relevant methodologies for visits and inspections were consolidated in 2017 and provided a high level of certainty to Member States and the Commission concerning the added value of their collaboration and technical partnership with the Agency.

Monitoring, Surveillance and Information sharing: EMSA shall aim to become a major provider of reliable and efficient information services for the benefit of the EU maritime cluster and, where appropriate, for the use of other communities.

The process of enriching and tailoring the maritime picture made available by EMSA to its key stakeholders continued in 2017, with the integration of new data and functionalities, and EMSA's Integrated Maritime Services were delivered to more users exercising an ever wider range of maritime functions. Efforts to support the digitalisation of maritime transport continued in 2017 with substantial progress in facilitating data exchange between relevant maritime stakeholders.

The first full year of operational services under the Copernicus maritime surveillance project were delivered, establishing a synergy that will sustain and boost the Agency's earth observation products and services for the years to come.

While the deployment of RPAS services was delayed, due to the pioneering nature of civilian maritime RPAS and resulting technical and logistical issues, testing for multipurpose operations and emissions monitoring was successful. The service will in future add to the data that the Agency can make available across its systems and for different users, from supporting the implementation of standards and rules in the environmental field and contributing to pollution prevention, to enriching the maritime picture for a range of functions in law enforcement, border and fisheries control, search and rescue and pollution response.

Environmental challenges and response: EMSA shall aim to become the main EU resource to support Member States' efforts for mitigating shipping-related environmental risks and responding to environmental accidents in the maritime and offshore sector.

Through the THETIS-EU and THETIS-MRV modules, EMSA provides a set of very concrete tools to address the Sulphur and PRF directives and the MRV regulation. Rolled out respectively in 2015, 2016 and 2017, these modules support the work of the Member States in the enforcement and implementation of EU legislation and standards for mitigating shipping related environmental risks.

As the developer and provider of tools and services to directly support Member State environmental enforcement effort and the expert support to the Commission at the IMO, EMSA is poised for a lead role in this sector in the future, supporting Member State efforts to implement EU and International maritime environmental legislation. The rapid uptake in 2017 of THETIS-MRV among industry stakeholders, on a voluntary basis and well ahead of the first reporting period starting 1 January 2018 is significant in this respect, as is the work on alternative fuels and resulting guidance material made available in 2017 through the Agency's website.

In the field of response also the Agency is enriching its portfolio of services by continuing to build the Equipment Assistance Service, through which EMSA makes specialised stand-alone equipment available to Vessels of Opportunity and thereby diversifies the options available for topping up regional oil pollution response capacity.

Information, knowledge and training: EMSA shall aim to become one of the foremost knowledge providers within the maritime cluster.

Continuity for capacity building activities in neighbouring countries around the Mediterranean and the Black and Caspian seas was assured until 2021 with the two new projects, SAFEMED IV and BCSEA. These activities aim to contribute to the approximation of standards in maritime safety, security and increasingly also pollution prevention and response. This is a crucial element in the overall success of the EU's vision for its seas.

EMSA offers to Member States, candidate and potential candidate countries and neighbouring countries sharing EU sea basins an increasingly innovative, collaborative, and flexible capacity building service that can be specialised and tailor-made and relies increasingly on e-learning. The mapping of the specific needs of different user communities was concluded in 2017 and fed into EMSA's evolving service portfolio in this area. Likewise the growing body of tools and guidance reflects evolving policy priorities and related stakeholder needs.



b) Operational Achievements

In each of the strategic areas, key stakeholders benefitted from EMSA products and services.

Standards, Rules and Implementation (Activities 2.3, 3.1, 3.2, 3.3, 3.4, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5):

All EU ship-safety initiatives and relevant negotiations at IMO were supported by EMSA technical assistance, while the combined effort of EMSA and Member States in the programme of visits and inspections has fed into Commission initiatives to assess and fine-tune maritime safety EU legislation in order to improve the efficiency and effectiveness of measures in place. Special emphasis was given to passenger ship safety and notably the work on fire safety, as well as to the new EMCIP development process.

Monitoring, Surveillance and information sharing (Activities 2.1, 2.2, 2.3, 2.4, 4.5, 5.2):

The process of data integration and incorporating new data sources and functionalities, such as enhancing Automated Behaviour Monitoring, combining fishing vessel positions and search and rescue data, and providing a mobile application, continued to add value for a growing number of end-users showing increasing interest in tailor-made services. Brought together and delivered under the heading Integrated Maritime Services, the Agency's systems 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.

Environmental challenges and response (Activities 2.3, 4.6, 4.7, 5.1, 5.2, 5.3):

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 risk, for example with the Equipment Assistance Services ready for mobilisation in the North and Baltic seas. On the prevention side, the ongoing dialogue on air pollution between the key stakeholders – the Member States, the Industry and the Commission – received technical support from the Agency, including the various THETIS modules provided to support the implementation of different pieces of environmental legislation.

Information, knowledge and training (Activities 2.1, 2.2, 2.3, 3.6, 4.1, 4.2, 4.3, 4.4, 4.5, 4.8, 5.1, 5.3):

Member State demand for training, e-learning or ad-hoc technical assistance from EMSA attests to the Agency's added value in this area, as does the Commission's increasing reliance on EMSA for the implementation, in the maritime safety field, of EU policies regarding candidate and potential candidate countries, and neighbouring countries, channelled through the IPA (Instrument for Pre-Accession Assistance), Mediterranean, and Black and Caspian Sea projects.



c) Management

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. Appropriately, the delay in the deployment of RPAS operations resulted in a budget amendment which included a reduction of the EU subsidy corresponding to the amount that could not be consumed in 2017 and that related to the European cooperation on coast guard functions. Such delays — directly linked to the pioneering nature of the civilian maritime RPAS services — will continue to be subject of vigilant scrutiny by the Agency allowing for expeditious counter measures.

With the exception of the above-mentioned adjustments, the resources (staff and budget) used by the Agency are in line with the activities as planned and developed in the Work Programme 2017. Variations between planned and actual resources were marginal and justified, and correspond to the flexibility needed for the efficient and sound management of resources and tasks during the course of 2017. Further implementation of the "redeployment pool" cuts and the phasing in of the posts related to the enlarged mandate were achieved through efficient and sound planning, deployment and monitoring of resources. The Agency's new budget structure, which took effect in 2016, continued to allow for an overview of all project-financed activities in the Agency's portfolio.

The Administrative Board in particular congratulates the Agency on the execution of its budget: 98.04% in commitment appropriations and 96.25% in payment appropriations. This calculation considers the decrease of appropriations and budget amendment related to the European cooperation on coast guard functions mentioned above.

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 CAAR2017 and on the work of the Administrative and Finance Committee throughout the year, the Administrative Board notes the Agency's exhaustive and thorough 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 2017, all audit recommendations issued by 31/12/2017 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 2017 and the overall multi-annual strategic framework.

The Administrative Board welcomes the results of the finalized external evaluation of EMSA showing that year by year, the Agency has increased its added value as a service provider and ensured uniform implementation of EU regulation to the benefit of its stakeholders across the maritime sector. Based on the evaluation of the Agency's activities and services, the Administrative Board has issued a number of recommendations to guide the future of the Agency that will be implemented according to a corresponding action plan.

Throughout 2017, EMSA has carried out the new tasks within the area of coast guard function assigned to it with the revision of the Agency's mandate in 2016, and the Administrative Board notes with satisfaction how the Agency contributes to improved European cooperation and takes on a pioneering role in incorporating new technologies such as RPAS into the maritime situational picture.

The high quality of information systems and databases developed by EMSA have resulted in an increasing interest expressed by third countries in exploring the potential for exporting the Agency's knowledge and, by extension, EU standards and solutions beyond the geographical dimension while safeguarding Agency resources and EU interests.

Finally, the Administrative Board greatly values the excellent performance of the EMSA staff in carrying out the tasks of the Agency throughout the year, enhancing maritime safety, security and prevention of pollution.

Done at Lisbon, 12 June 2018

Signed



Andreas Nordseth
Chairman of the Administrative Board

Director's 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 2017, as published in the EMSA Single Programming Document 2017-2019, was drawn up within the multi-annual framework outlined above and in parallel with the legislative process leading to the latest revision of the EMSA Founding Regulation, which was adopted in September 2016 and which aimed to greatly intensify interagency cooperation between EMSA, EFCA and Frontex to further support coastguard functions (Regulation (EU) No 2016/1625 of 14 September 2016).

In the CAAR 2016 I wrote that the year 2016 was coloured by this legislative process in terms of planning for possible new tasks, for potential new responsibilities, in order to be in a position to take them on as efficiently and effectively as possible from when they enter into force - to hit the ground running. The setting up of RPAS services to support multi-purpose operations was one such task which was planned for 2017 and proved more complex than anticipated. The novelty of the maritime environment and of the civilian context was particularly challenging respectively for contractors, from a technical point of view, and for Member State authorities, from a logistics and legal point of view. Thus, the Agency drafted a budget amendment in November 2017 in order to return part of the EU subsidy granted for that purpose.

With the exception of this delay – the first RPAS operations took place in the last quarter of 2017 and service development and delivery will continue to expand through 2018 - the objectives set out for 2017 were achieved through a high level of implementation of the work programme for that year. Thanks to good governance, sound management, 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 have come to expect and depend upon – to help them make the sector cleaner, safer and more efficient.



Markku Mylly
Executive Director

Structure of the document

The Consolidated Annual Activity Report (CAAR) is an annual reporting exercise focused on the implementation of an annual programme of work, with specifically allocated resources and related annual objectives, outputs, and performance targets.

The CAAR 2017 provides a detailed account of the actions carried out to implement the Work Programme 2017 with the resources authorised for that year, in accordance with the applicable general framework. A key element of this framework has been the first 5% staff cut provided for under the Commission Communication on the programming of resources for decentralised agencies, completed in 2016 (202 posts), and the next 5% cut for the redeployment pool, partially implemented in 2017 with minus 4 posts on existing tasks. The legislative proposal adopted in 2016 and modifying the Agency's mandate provided for plus 14 posts in 2017 to support the new tasks related to European cooperation on coast guard functions, bringing total posts in 2017 to 212.

Part I of the CAAR 2017 reports on the operational achievements of the year. Information is provided per activity, focusing on the added value of each activity with respect to higher level objectives. Budget and staff resources devoted to each activity are indicated, in terms of both "planned" and "actual" inputs, and performance targets and results are provided. Annex VII contains the dedicated report on the multi-annual funding of the Agency's pollution preparedness and response activities.

Parts II, III and IV focus on the management of the Agency and the building blocks of assurance.

The Agency in brief

Safer seas, quality shipping, efficiency of maritime transport and cleaner environment and oceans

The idea of a European Maritime Safety Agency (EMSA) originated in the late 1990s along with a number of other important European maritime safety initiatives. EMSA was set up as the regulatory agency that would provide a major source of support to the Commission and the Member States in the field of maritime safety and prevention of pollution from ships. The Agency was established by Regulation (EC) 1406/2002 and subsequent amendments have refined and enlarged its mandate to cover, among other measures, the efficiency of maritime transport.

Tasks and working context

EMSA, as a body of the European Union (EU), sits at the heart of the EU maritime safety network and fully recognises the importance of effective collaboration with many different interests and, in particular, between European and international institutions, Member States' administrations and the maritime industry.

EMSA's activities can be broadly described as:

- providing technical and scientific assistance to the Member States and the Commission in the proper development and implementation of EU legislation on maritime safety, security, prevention of pollution by ships and maritime transport administrative simplification;
- monitoring the implementation of EU legislation through visits and inspections;
- improving cooperation with, and between, Member States in all key areas;
- at the request of the Commission, providing technical and operational assistance to non-EU countries around EU sea basins;
- providing operational assistance, including developing, managing and maintaining maritime information services related to ships, ships' monitoring and enforcement;
- carrying out operational preparedness, detection and response tasks with respect to pollution caused by ships and marine pollution by oil and gas installations.

Equally it is important to note that the Agency's working environment reflects the initiatives launched by the EU in all policy areas related to the seas in order to strengthen Europe's competitiveness and sustainable growth. In this respect, of particular relevance is the contribution to the success of the Growth and Jobs Strategy, in terms of supporting the implementation of an attractive framework for quality shipping and quality operators in Europe.

Mission, vision and values

- EMSA's mission: To ensure a high, uniform, and effective level of maritime safety, maritime security, prevention of, and response to, pollution caused by ships as well as response to marine pollution caused by oil and gas installations;
- EMSA's vision: To promote a safe, clean and economically viable maritime sector in the EU;
- EMSA's values: Efficiency, effectiveness, transparency, flexibility, creating added value.

Legal and resource framework

The Agency's mandate has been refined and enlarged over the years through successive amendments to its founding act. The amendment of January 2013 (Regulation (EU) n.100/2013) enhanced existing tasks and added new tasks. EMSA was empowered to further assist the Commission and the Member States in its core tasks, to assist states applying for accession and countries covered by the European Neighbourhood Policy (ENP), and to make broader use of its resources to help EU Member States respond to pollution caused by ships as well as respond to marine pollution caused by oil and gas installations. Moreover, subject to certain conditions, ancillary tasks were introduced, enabling the Agency to use its expertise and tools for other EU activities related to the Union maritime transport policy. In addition, specific requests for assistance can be put forward by the Commission and/or the Member States, the implementation of which is addressed on a case-by-case basis taking into account the impact on the resources of the Agency.

The amendment of September 2016 (Regulation (EU) 2016/1625) was aimed at intensifying cooperation between EMSA, Frontex (European Border and Coast Guard Agency) and EFCA (the European Fisheries Control Agency) to improve synergies between those agencies "in order to provide more efficient and cost-effective multipurpose services to national authorities carrying out coast guard functions."¹

The following areas were identified for improved interagency cooperation:

- information sharing
- surveillance and communication services
- capacity building
- risk analysis
- capacity sharing

As to what concerns EMSA, the work focused on functions falling under its mandate with a view to enhance the assistance and the services that it already provided to Frontex and EFCA and to its users' communities at national level, which traditionally and on a day-to-day basis work with EMSA, and which represent the key stakeholders of the Agency.

The Coastguard Pilot Project launched in 2016, with European Parliament financing, was completed mid-2017. The report provided a status of existing cooperation between the three agencies, identified possibilities for enhanced cooperation in the five areas mentioned above and reported on the outcome of a demonstration project which was managed by EMSA in the field of multipurpose unmanned aerial surveillance.

The annual programme of work for 2017 was based on:

- The Agency's Founding Regulation, Regulation (EC) No 1406/2002, as amended by Regulation (EU) No 2016/1625 of 14 September 2016;
- The Regulation (EU) 911/2014 on the multiannual funding for the action of the European Maritime Safety Agency in the field of response to pollution caused by ships and to marine pollution caused by oil and gas installations;
- The Commission's Communication on programming of human and financial resources for decentralised agencies 2014-2020 (COM (2013)519);
- The EMSA 5-year Strategy as approved by the Administrative Board in November 2013;
- The Action Plan on response to pollution from oil and gas installations, adopted by the Administrative Board in November 2013.

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.

The year in brief

EMSA continued to carry out **Visits and inspections** to monitor the implementation of EU legislation in the fields of maritime safety, maritime security and the prevention of pollution by ships, and to improve the efficiency and effectiveness of the measures in place, following requests by the Commission and the EFTA Surveillance Authority.

The inspections of Recognised Organisations (ROs) were carried out as per the planning agreed with the Commission, using a risk based approach. The implementation of corrective actions taken by the ROs following previous EMSA inspections and Commission assessments was verified. The first inspections of the Indian Register of Shipping following its recognition in 2016 were integrated in the inspection planning without additional resources. Six ships were visited as part of the Ro-pax campaign on structural fire protection, both to verify implementation of corrective actions reported by the ROs concerned and the correct execution of surveys by other ROs. EMSA also prepared draft Commission assessments for four ROs.

A total of 47 visits and inspections were carried out in different fields (Classification Societies, Standards for Seafarers (STCW), port State control, accident investigation, marine equipment, port reception facilities, the sulphur content of marine fuels and fishing vessel safety). In addition, EMSA participated in nine missions organised by the Commission and one by the EFTA Surveillance Authority during which a range of individual maritime security inspections were carried out.

In line with the revision of the Founding Regulation, the Agency continued to analyse and assess several series of EMSA inspection and visit reports, to assist the Commission in its consideration of the effectiveness of EU maritime legislation. In 2017, two horizontal analyses were completed: an analysis of the second full cycle of visits to Member States concerning port State control and a consolidated analysis of the findings from the visits to Member States related to Directive 2002/59/EC on vessel traffic monitoring and information systems, including the related visits on the specific issue of places of refuge. Following the successful pilot cost-effectiveness analysis carried out in 2016 and proving the feasibility and benefits of analysing costs, effectiveness and efficiency of the measures put in place by Member States when implementing and enforcing the requirements of Union law, specific cost-effectiveness methodologies were developed for the two new visit cycles that started in 2017, concerning Directive 2009/16/EC on port State control and Directive 2014/90/EU on marine equipment. Two workshops took place in 2017, in preparation for the aforementioned cycle of visits to Member States on marine equipment that started in the 4th quarter of 2017, and on Directive 2001/96/EC establishing harmonised requirements and procedures for the safe loading and unloading of bulk carriers, in preparation for the cycle of visits that is planned to start in the 2nd quarter of 2018.

As one of the measures to strengthen the implementation of Directive 2002/59/EC in the area of **Places of Refuge**, a third biennial Table Top Exercise was organised in Norway. On this occasion, the exercise focussed on the granting of a place of refuge in view of a threat of chemical pollution.

A second statistical review carried out on the number of seafarers holding valid EU certificates and endorsements of recognition, representing a snap-shot of the European labour market, was published in 2017. The report was based on data extracted from certificates and endorsements registered by EU Member States up to 31 December 2015 and recorded in the **EMSA STCW Information System**.

Following the revision of its mandate, the Agency focussed on capacity building and possible initiatives to support the coast guard functions falling under its mandate. Following a bottom-up approach, a workshop was organised with representatives of the Member States responsible for Flag State, Port State and implementation of environmental legislation, in order to map possible needs and define possible actions to be pursued by EMSA to support national competent authorities.

Given the vast and growing regulatory framework, the training delivered at EMSA in 2017 was more focussed on case studies, practical exercises, working groups, to foster exchange of best practises and learning from each other. At the same time seven eLearning modules on the different basic trainings on EU legislation were developed and offered through MaKCs. Furthermore in 2017 the Agency developed and delivered a series of guidance and best practices such as the revised guidance for Sulphur Inspectors and LNG Bunkering Guidance for Port Authorities/ Administrations. In addition the Agency participated as an observer to the work of the European Coast Guard Functions Forum, with focus on the work of the Training Network for the development of a set of common standards for education to be applied across the EU.

In relation to **prevention of pollution from ships**, the Agency continued to support the Commission and the Member States in various fields. Firstly the Agency supported the Commission in the impact assessment and in the drafting of the revised PRF Directive. As concerns the implementation of Directive EU/2016/802 as regards sulphur content of marine fuels, the Agency organised specialised training for sulphur inspectors both in-house and at national level as well as workshops, to enhance uniform implementation throughout the Union, and further developed THETIS-EU with a risk-based

target mechanism – including specific alerts from remote sensing and other available technologies - and amended the text of the guidance for Sulphur Inspectors. Throughout 2017, the Agency continued to provide technical and secretariat support to the European Sustainable Shipping Forum and its associated subgroups. The support entailed drafting of technical notes, minutes of the meetings, guidance notes (namely the EMSA LNG Bunkering Guidance for Port Authorities/ Administrations) submissions to IMO and logistical support, including hosting of the ESFF Plenary. The Agency also provided technical assistance to the Commission and the Member States for the implementation of the Ship Recycling Regulation. In this respect the Agency finalised and published a study on the Hazardous Materials included in the EU Ship Recycling Regulation but not in the Hong Kong Convention. Finally the Agency contributed to the work of the Commission for further Technical and Operational Measures for enhancing Energy Efficiency (EE) of International Shipping, on the discussions for the Global Data Collection System for maritime transport covering fuel consumption, greenhouse gas emissions and on the further development of the Energy Efficiency Design Index (EEDI).

In 2017 EMSA developed and delivered **THETIS-MRV** in support of the MRV Regulation. The system went live on 7 August 2017 and since then it has been supporting the workflow foreseen by the MRV Regulation, offering services to companies, verifiers and Flag States. Finally the Agency further enhanced the emission inventories tool through which shipping emissions - based on shipping activity data for domestic, short sea and international shipping – for 2016 were calculated, thus offering to the Commission and Member States a quantification of the bottom-up emissions (SO_x, NO_x and PM) resulting from combustion of marine fuel from international and domestic shipping. The activity data are the historic Automatic Identification System (AIS) data made available by the Member States through SafeSeaNet as well as LRIT data, as foreseen by the Cooperation Agreement that was signed with the Commission (DG ENV) in September 2015.

Activities to strengthen **Port State Control** in co-operation with the Paris Memorandum of Understanding (Paris MoU) remained a priority. In addition to ensuring the management of THETIS, the Agency continued to support the implementation of the inspection regime at national level through an extensive e-learning system, training and the provision of a specific helpdesk. In addition EMSA supported the Commission in the preparatory work for the third joint ministerial conference of the Paris and Tokyo memoranda of understanding on port State control. Furthermore EMSA provided its technical expertise in the deliberations in the Council and the European Parliament in relation to the proposal 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.

The Agency provided technical support, based on its “EMSA III” study, for negotiations at IMO’s Maritime Safety Committee, which concluded a compromise improvement to the SOLAS damage stability requirements for passenger ships. The Agency advised the Commission on its research on whether the Stockholm agreement for Ro-Ro ferries needs to be retained after the new SOLAS stability standard enters into force. In parallel, EMSA delivered the first version of a Small Craft Code in consultation with Member State experts, and continued to support the Commission’s REFIT of EU Passenger Ship Safety legislation by providing data and analysis. The Agency coordinated technical discussions between Member States’ administrations and accident investigation bodies on Ro-Ro vehicle deck fire safety, including a third joint workshop and the FIRESAFE II study. The results of EMSA’s work in this area will be submitted to IMO meetings at each stage. EMSA completed the second draft implementing regulation of standards for equipment subject to the Marine Equipment Directive.

In 2017 Member States uploaded 6130 occurrences in the Agency’s **European Marine Casualty Information Platform (EMCIP)**; a 30% increase over 2016. The data in EMCIP was used to publish the fourth Annual Overview of Marine Casualties and Incidents. The development of the new EMCIP was launched to provide the Member States with an in-house, modern, user-friendly and supportive application to report and analyse casualty data. The Agency also began the development of a methodology to analyse marine casualty and incident data, supported by a pilot project on fishing vessel safety. EMSA continued to support the Permanent Cooperation Framework of Accident Investigation Bodies including a seminar on the human element in accident investigation.

A total of 18 different **training** activities took place in 2017. They were attended by a total of 431 participants and covered a wide range of topics, including training for port State control officers and accident investigators. In addition to that, the Agency continued offering training within the framework of technical assistance to the enlargement countries (16 trainings for 117 participants), **SAFEMED IV** (6 trainings and 30 participants) and the **Black and Caspian Sea Project** (1 training

and 38 participants).² Finally, within the context of SAFEMED IV, support was provided to the Mediterranean Coast Guard Functions Forum, including its Secretariat.

The Agency is recognised as a **European platform for exchange of knowledge and best practices** between maritime safety and pollution response experts from the Commission, EU Member States, EFTA/EEA Member States and candidate as well as potential candidate countries: 54 different workshops and working groups were organised with 1653 participants from all over Europe. These included several sessions for CleanSeaNet users, ongoing SafeSeaNet group workshops, EMCIP workshops and User Group meetings, THETIS User Group meetings, PSC training review meetings, a workshop on fires on ro-ro decks involving national administrations and accident investigation bodies, Marine Equipment Experts' meeting notably on the implementation of the new MED Directive, working groups comprising LRIT National Competent Authorities and specialised groups in the field of Marine Pollution Preparedness and Response (e.g. vessel users, claims management, dispersants). Moreover, in terms of Commission Implementing Regulation (EU) n° 651/2011 of July 2011, EMSA ensured the Secretariat of the Permanent Co-operation Framework (PCF) for the Investigation of Accidents in the Maritime Transport Sector and hosted the PCF 7 meeting in June 2017.

In the field of **maritime information systems**, the Agency continued to focus on delivering its operational maritime information services SafeSeaNet, CleanSeaNet, Copernicus Maritime Surveillance, THETIS, LRIT (Long Range Identification and Tracking), IMS (Integrated Maritime Services) for national authorities, EU and international bodies.

Improving functionalities is a continuous process in dialogue, for example with the users in Member States, with a focus on the further development of information services. Operational training on new system developments and value added services was provided to users from Member States, EU Agencies and other institutions as foreseen, namely 17 training sessions were provided for over 250 participants from Coastal States maritime authorities and 2 EU Agencies (EFCA and Frontex) including 3 national training sessions upon request of Member States in Ireland, Spain and Portugal. Training webinars for users of Integrated Maritime Services began and their uptake will grow in 2018. Four (e-learning) modules for users were provided for this purpose.

The central **SafeSeaNet** service continued to function well throughout 2017, complying with the performance and reliability requirements defined by the Interface and Functionalities Control Document (IFCD). The continuous upgrading of the central SSN system including the development of central databases (Ship, Hazmat and Organisations - Shore-based Traffic Monitoring and Information Database (STMID)), and links to national SSN systems in accordance with SSN V.3 have progressed.

A new version of SafeSeaNet (version 4) will be implemented at central and national level in 2018-2019, following the revision of Annex II of the Port Reception Facilities Directive. The detailed technical requirements were discussed and agreed during 2017. A joint training course organised by EMSA and DG ECHO on SafeSeaNet and the Common Emergency Communication and Information System (CECIS) for reporting of pollution incidents was provided for MS at EMSA in March. The Shore-based Traffic Monitoring and Information Database (STMID) was developed and opened up to Member States pending data migration. An e-Learning course on how to use the Central HAZMAT Database (CHD) for reporting dangerous and polluting goods in SafeSeaNet was provided. The e-Learning module also includes a description of the Marine Chemical Information Sheets (MAR-CIS) database, information developed for responders to chemical accidents at sea, as one of the action points under the HNS Action Plan of the Agency.

SafeSeaNet, together with the Central Hazmat Database, provided support to the 3rd Table top Exercise (TTE) in Norway, as the main point of reference for the decision-making process as laid down in the EU Operational Guidelines on Places of Refuge.

Development of a single **SafeSeaNet ecosystem web interface** (SafeSeaNet Ecosystem Graphical User Interface – SEG) to provide one single interface for SafeSeaNet, LRIT, CleanSeaNet and Integrated Maritime Services proceeded as planned.

As requested by the Commission and the Member States, the Agency continued to provide technical support for the implementation of the **Reporting Formalities Directive** (Directive 2010/65/EU), in particular for the development guidelines for Single Windows, providing the grounds for a harmonised implementation of the Directive by the Member States. EMSA has provided **technical assistance** regarding the implementation of the Directive 2010/65/EU and the development of the National Single Window on request of Member States and as approved by the EMSA Administrative Board. Peer reviews,

² The SAFEMED IV and Black & Caspian Sea Projects started in March 2017, which justifies less number of activities compared to previous years.

to identify best practices and concerns in the implementation of Directive 2010/65/EU were carried out in five (Croatia, Estonia, Germany, Italy and Spain) of the seven Member States who volunteered for this exercise. In addition EMSA provided support to the Commission in the evaluation of Directive 2010/65/EU and the Vessel Traffic Monitoring and Information System Directive (Directive 2002/59/EC, as amended).

In 2017 The EMSWe (European Maritime Single Window environment) Study was concluded presenting results on the cost of operation on such a tool for EMSA. In addition EMSA continued the e-Manifest pilot project in collaboration with the participating Member States and the Commission. These two actions will provide input to the Commission in view of the revision of the Reporting Formalities Directive (2010/65/EU) in 2018.

The **Integrated Maritime Services (IMS)** continued to be delivered during 2017, with the integration of new data and functionalities (SSN Port Notifications and details, THETIS PSC public data, Ports and organisations, Sentinel 2 Earth observation images, and additional met-ocean layers). The total number of IMS users increased to more than 1000 and the number of Member States using IMS (for maritime safety, port and maritime security, marine environment protection and the efficiency of maritime traffic and maritime transport) increased to 26. In addition all users were successfully migrated to the new SSN Graphical User Interface (SEG), the new modern display giving access to all maritime traffic/surveillance applications and services, and were given access to the IMS Mobile App version (available on iOS and Android). Finally, 2017 saw an increase in the interest and implementation of System-to-System interfaces, specifically for the distribution of Satellite-AIS data.

IMS continued to provide Automated Anomaly Behaviour Monitoring (ABM) tools, which are computer-based systems analysing real time vessel position reports for the detection of abnormal and/or user specific behaviours. ABM algorithms, which can be configured at user level, are used by various communities with positive operational outcomes. In line with the ever-growing demand and reflecting user requirements, EMSA developed new ABMs and reached a total number of 24 different algorithms.

Intensive consultations with users and collaboration groups (IMS Group User Consultation Meetings, ABM Workshops, trainings, webinars) continued.

EMSA has become a **major provider of reliable and efficient information services for the benefit of the EU maritime cluster** and, where appropriate, for the use of other communities.

During 2017, cooperation in the field of maritime surveillance with EU and international bodies continued. The following bodies are each provided with a specifically tailored integrated maritime service, which can include additional data provided by the user: **Frontex** (border control), **EFCA** (fisheries monitoring and control), **MAOC-N** (law enforcement - narcotics) and **EUNAVFOR missions** (anti-piracy and anti-people smuggling).

Services to **EFCA** (fisheries monitoring and control) were significantly broadened through the development of fishery specific maritime information to support the implementation of the Illegal, Unreported, and Unregulated (IUU) Fishing Council Regulation.

With respect to **Frontex** (border control), EMSA continued to provide a range of services including the fusion of satellite imagery with vessel information data in support of the EU Migration Agenda. This Vessel Detection Service saw a major scaling up in usage during 2017. Services to Frontex are provided through a specific application linked to the EMSA SafeSeaNet ecosystem and undergo continuous development to support at-sea border control operations.

Building on procurement completed in 2016, the Agency launched the set-up of **Remotely Piloted Aircraft System (RPAS)** services for maritime surveillance and environmental monitoring. 2017 saw extensive testing of the RPAS with the first operations taking place during the last quarter of the year in Portugal and Denmark, supporting Member State authority activities in maritime surveillance and emissions monitoring domains, respectively. Earlier in the year, an RPAS demonstration under the framework of the Coastguard Pilot Project was organised by EMSA in Spain and supported by Frontex and EFCA. The successful event validated the use of RPAS for multipurpose missions addressing needs stemming from all coast guard Functions.

Regarding **Earth Observation** services, 2017 saw the first full year of operations for the **Copernicus Maritime Surveillance Service (CMS)** which provides support to a wide range of user communities active in the maritime domain. **CleanSeaNet**, the near-real-time satellite-based oil spill and vessel detection service, had its 10th anniversary of operations, and continued to provide regular services to coastal States. Through the Commission's SAFEMED IV and Black and Caspian Sea cooperation programmes for EU Neighbouring countries, CleanSeaNet is available across the Mediterranean, Black and Caspian Seas to the official beneficiary countries in addition to the EU Member State and European Free Trade

association (EFTA) users. EMSA, in cooperation with DG-GROW and ESA, finalised the testing of the European Data Relay Satellite (EDRS) which will enable near real time operations outside of Europe. The Agency also deployed a new Earth Observation Data Centre (EODC) component that increased processing performance of earth observation products and enables the EODC to cope with significant higher volumes of data.

The **EU LRIT Cooperative Data Centre (EU LRIT CDC)** fully met the International Maritime Organization (IMO) performance requirements. The **LRIT International Data Exchange (LRIT IDE)** provided services and testing support to 58 LRIT Data Centres all over the world. Developments regarding the second modification of the LRIT system were completed for both applications in due time, in line with IMO requirements. This modification impacted also the LRIT Ship Database and the LRIT Consumption Tool, which both needed to be updated. Thanks to this change, the ship type is now included in LRIT information. The Coastal SURPIC has also been introduced, as well as additional filtering possibilities on flag and ship type when requesting LRIT information, for example through a Coastal State Standing Order.

Throughout 2017 **THETIS** was fully operational and enhanced to meet new requirements. The system is able to support Member States (and not only PSC authorities); combining port call information from Paris MoU members, inspection data from Port State Control and the Ro-Ro ferry surveys, inspection data from national authorities responsible for the implementation of the Sulphur Directive, while storing information from the Recognised Organisations and accredited laboratories (for fuel sampling) at ship level. Today users, depending on their access rights, are able to record and exchange data on inspections and verifications, while the system facilitates targeting, alerts and exchange of information on the basis of predefined requirements. PSC inspections are recorded in the appropriate module of THETIS, while those required by other EU maritime legislation are recorded in the appropriate module of THETIS-EU, such as Sulphur and PRF Directives. In 2017 EMSA developed a new webservice which could be used both by Recognised Organisations (ROs) in order to comply with the relevant provisions of Article 10.4 of Regulation 391/2009 and possibly by Flag States wishing to submit eCertificates.

EQUASIS continued its valuable contribution to the shipping industry by providing accurate and reliable ship safety and environmentally related information. In 2017 three new data providers were accredited and started providing data. The internal MARINFO information system which contains worldwide data collected from commercial providers on ships' characteristics, accidents, movements, ownership, ship's history etc., has been incorporated in the THETIS environment and has provided valuable information to the Commission in its ex-post evaluations of EU legal acts namely PSC, FS and PRF Directive.

With regard to the **Network of Oil Spill Response Vessels**, 17 fully equipped vessels for mechanical recovery were available for mobilisation at the end of 2017. Four of these vessel arrangements were also equipped for seaborne dispersant application with associated dispersant stockpiles of 200 tonnes each, in Malta, Cyprus, Portugal and on the Canary Islands (Spain).

The vessel contracted at the end of 2016, covering the area of southern Black Sea, successfully completed the preparation phase and entered into operational service mid-2017. After expiration of the first term of the contract for the Bay of Biscay, following a procurement procedure, a new oil recovery vessel was contracted to replace the response capacity for this area. The procurement for a new vessel contract in the northern Baltic Sea was not successful and no contract was awarded. Three vessel contracts, covering the southern Atlantic, western and central Mediterranean Sea, were renewed for an additional four-year period.

During 2017, actions for replacing of pollution response equipment, which has deteriorated over time, were focussed on booms replacement. Overhauling of aging equipment included two sweeping arm sets and one offshore skimmer system.

In order to maintain the quality of the service - capability of the vessel, specialised equipment and crew - 70 quarterly and acceptance **drills** were carried out. Moreover, 11 operational **exercises** with Member States involved deployment of 12 EMSA contracted vessels. Service activation and channels of emergency communication were tested through 15 notification exercises aiming at the signature of 21 Incident Response Contracts with vessel contractors.

The pollution response services were activated by Greece to support the response actions to the pollution incident resulted from the sinking of the product tanker *Agia Zoni II* in the vicinity of Piraeus. The EMSA contracted vessel *Aktea OSRV* was timely mobilised and performed two weeks **oil spill response operations** under the command of the Hellenic Coast Guard.

Within the context of **cooperation between EU Agencies on coast guard functions**, and following an urgent request from the European Fisheries Control Agency (EFCA), the back-up vessel *Aegis I* was made available to EFCA to perform fisheries inspections and ancillary SAR duties in Mediterranean waters from August to December 2017. EMSA monitored the implementation of this charter in close collaboration with EFCA.

The main activity related to the two **Equipment Assistance Service (EAS)** stockpiles in the Baltic Sea and the North Sea was to enhance the operational integration of the arrangements at Regional level through a new **EAS training programme** including “hands-on” training sessions for equipment operators. Moreover, the response capacity of EAS North Sea arrangement was strengthened through the delivery of one additional current buster system.

Following a procurement procedure, the EAS service was further strengthened through the establishment of a third equipment depot in the Adriatic Sea. The new EAS arrangement based in Ravenna (Italy) became fully operational at the end of 2017 and provides specialised stand-alone equipment for Vessels of Opportunity primarily in southern Europe.

In order to facilitate the use of EMSA’s new Equipment Assistance Service (EAS), a new **e-learning module** was developed and made available to authorised users of the Member States on the Agency’s extranet.

In the course of the year, 11 **drills** (condition tests) were performed in order to verify the functionality of EAS equipment. In addition, the operational readiness of the two EAS arrangements in the Baltic and North Sea was tested through the participation in two operational and some notification **exercises** with Member States.

The Agency continued to provide information services in the field of **Hazardous and Noxious Substances (HNS)** in accordance with the HNS Action Plan. EMSA’s information service for marine chemical emergencies (**MAR-ICE Network**) was activated five times by four different Member States and once by EMSA during a port of refuge table-top exercise (SCOPE). In order to further enhance the accessibility and use of **MAR-CIS** information (Marine Chemical Information Sheets for pollution response to incidents involving chemicals), an **application for mobile devices** (tablets, smart phones) was developed and released. This allows the use of the MAR-CIS database offline. In addition, new datasheets for more chemical substances were developed and existing ones revised with improved information on possible response options for those substances. MAR-CIS information can also be accessed from the new Central Hazmat Database (CHD), which is part of EMSA’s SafeSeaNet (SSN). EMSA’s Dispersant Usage Evaluation Tool (DUET), a software tool to predict the fate and trajectory of an oil spill and the impact of dispersant application on the oil fate, was available for Member States.

EMSA assisted DG ECHO in the (joint) development of a **training course on maritime pollution** under the UCPM (Union Civil Protection Mechanism), namely the Technical Expert Course – Maritime Incidents (TEC-MI), with EMSA involved early in the preparation process.

The dissemination of information on EMSA’s pollution response services continued in 2017 with meetings of the **Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR)**, where work progressed on the development of practical guidelines and a training curriculum on proper oil sampling for finger printing; the Pollution Response Services User Group, focusing on recent developments of EMSA’s pollution response services including the newly established Equipment Assistance Service; and the **Inter-Secretariat meeting** with DG ECHO and the secretariats of the Regional Agreements. The Agency participated in the meetings of the **HELCOM Response Group and OTSOPA** (specialised committee of the North Sea Bonn Agreement) and a workshop of the **EU Offshore Authority Group**. EMSA was invited to assist the Commission on the subject of dispersant use in the EU.

Under the **Multi-Annual Financing (MAF)** framework for the period 2014-2020, the Agency is required to provide input to a Mid-term Evaluation conducted by the Commission. In order to support this evaluation, EMSA concluded an **external study on the cost effectiveness and cost efficiency** of the Agency’s oil pollution response activities.

PART I Achievements of the year

List of EMSA activities

Area	ABB Code (Activity Based Budgeting)		Activity	Project-financed activities
	2100 4300	7900	Cooperation on coast guard functions	<i>Pilot project - coast guard functions</i>
Traffic monitoring and information on ships and cargoes	2100		Union maritime information and exchange system (Integrated maritime services; SafeSeaNet; Improving internal market and maritime transport efficiency)	
	2200		EU LRIT Cooperative Data Centre and International LRIT Data Exchange	
	2300	7700	THETIS Information System	<i>THETIS-EU</i>
		7710		<i>THETIS-MRV</i>
		7720		<i>Emission Inventories Project</i>
	2400		Maritime Support Services	
	7500			<i>Copernicus</i>
	7200			<i>Frontex</i>
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	
	3600		Horizontal analysis and research	
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	
	4200		Accident investigation	
	4300	7800	Training, cooperation and capacity building	<i>EU Funds for enlargement countries</i>
		7900		<i>Pilot project - coast guard functions</i>
	4400		Marine equipment and ship safety standards (including IMO)	
	4500	7600	Ship Inspection Support	<i>Equasis (R0 funds)</i>
	4600		Prevention of pollution by ships	
	7100			<i>SAFEMED III and new project SAFEMED IV</i>
	7400			<i>TRACECA II and new project BC Sea</i>

Pollution preparedness detection and response	5100	Operational Pollution Response Services	
	5200	CleanSeaNet and illegal discharges	
	5300	Cooperation and information relating to pollution preparedness and response	
Horizontal activities	6500	Communication, missions & events support	
	6100-6400	Overhead/horizontal tasks	

Human and Financial Resources per activity

The Agency implements an activity based approach to budgeting and reporting (Activity Based Budgeting). The lifecycle stretches from initial planning of the draft budget preparation which starts towards the end of year N-2 to the final presentation of actuals in the Consolidated Annual Activity Report in year N+1. Activity Based Budgeting (ABB) codes are tagged to commitments and payments, tracking the cost of both direct and indirect activities. Direct staff is allocated to one operational activity according to the prevailing function of the staff. Indirect staff and overhead and administrative costs are ventilated across operational activities, based on the number of direct staff allocated to each activity. The ABB exercise covers fresh credits (C1 funds) only. Project financed funds (R0 funds) and staff are not included.

Project-financed activities have separate codes. They are presented separately when they are accompanied by dedicated staff (Copernicus, Frontex, SAFEMED III/IV, and TRACECA II/BC Sea) and within an EMSA activity when there is no provision for dedicated staff. Copernicus is an exception as the 3 dedicated staff are financed by the EMSA subsidy and not by the project.

In 2017 the Agency had an establishment plan of 212 statutory staff (AD/AST), minus 4 posts for existing tasks and plus 14 posts for new tasks, namely cooperation on coastguard functions. In addition, 33 contract agents (CA) and 18 seconded national experts (SNE) were funded by the EMSA subsidy and allocated to the various EMSA activities (except 3 CAs allocated to Copernicus). Finally, 11 CAs and 1 SNE were funded by and allocated to project financed activities.

Detailed information on human and financial resources per activity is available in Annex V

European cooperation on coast guard functions

Legal Basis

- Regulation EU N° 2016/1625 of the European Parliament and the Council of 14 September 2016 amending Regulation (EC) N° 1406/2002

Multi-annual strategic objectives

- To support the Commission and the Member States in improving ship safety. (A1)
- To increase the effectiveness and efficiency of EMSA's integrated maritime information services to its full potential based on existing applications such as SafeSeaNet. (B1)
- To explore, at reasonable cost, in a sustainable and viable way, new capabilities offered by technology in the field of maritime surveillance for the benefit of the Commission and the EU Member States with added value for maritime safety, security and environmental protection. (B2)
- To continue to work to further develop the EU maritime traffic monitoring and information system. (B3)
- To engage in supporting other communities and enhance the Agency's role as central EU data provider of maritime related information as defined by Union law. (B4)
- To continue developing its role as forum for discussion of best practices. (D5)
- To consolidate its role as training provider including the use of modern techniques. (D6)

The amendment of September 2016 (Regulation (EU) 2016/1625) aimed at intensifying cooperation between EMSA, Frontex (European Border and Coast Guard Agency) and EFCA (the European Fisheries Control Agency) in order to improve synergies between those agencies "in order to provide more efficient and cost-effective multipurpose services to national authorities carrying out coast guard functions."³

The following areas were identified for improved interagency cooperation:

- information sharing
- surveillance and communication services
- capacity building
- risk analysis
- capacity sharing

Subsequently, the three agencies defined the modalities of their enhanced cooperation in a Tripartite Working Arrangement (TWA) which was approved by their governing boards and entered into force on 17 March 2017.

Regarding EMSA, the work focused on functions falling under its mandate with a view to enhancing the assistance and the services that it already provided directly or through Frontex and EFCA to coast guard user communities at national level, and which represent the key stakeholders of the three Agencies. In the capacity building domain, EMSA along with the other two Agencies participates as an observer to the European Coast Guard Functions Academy Network Project (ECGFA-Net) while on the same time engaged in discussions with EFCA for developing joint training sessions in the area of Fisheries.

The Agency's work in this area was conducted as an integral part of its activities, primarily 2100 "Union maritime information and exchange system" and 4300 "Training, cooperation and capacity building".

³ 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.

Pilot project: Coast guard functions

In 2017 EMSA continued to actively participate in the pilot project on “Creation of a European Coast Guard Function”, which originated by virtue of Decision C(2016) 3541 adopted by the European Commission in June 2016 and for which an Ad-Hoc Grant Agreement for an Action was granted to EMSA. The project aimed at creating operational and technical synergies between different coast guard functions at EU Level particularly between EMSA, EFCA, and Frontex.

In respect of the implementation of the actions as were required by the Ad-Hoc Grant Agreement, through Task 1 ‘Sharing Information’, EMSA coordinated with EFCA and FRONTEX on further improving the existing cooperation on matters related to the exchange of information for the purposes of maritime surveillance. Under Task 2, ‘Remotely Piloted Aircraft Systems’ (RPAS), EMSA successfully carried out a week long RPAS demonstration exercise at INTA’s facilities in Huelva, Spain which included a Member State Open Day. The event validated the use of RPAS for multipurpose missions in maritime surveillance addressing needs stemming from all coast guard Functions. Finally under Task 3, EMSA contributed to the development of the outline of guidelines on inter-EU agencies cooperation which will serve as the basis for the “Handbook on European cooperation on coast guard functions” expected to be developed by the Commission.

EMSA organised and hosted the closing conference in June 2017, during which the outcome of the pilot project was presented by the participating Agencies, together with the Commission and the European Parliament, to the different users’ communities from the Member States. The pilot project has shown the benefits of sharing information and best practices between the three Agencies and has clearly demonstrated the added value of such interagency cooperation.

Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
Pilot project: Coast guard functions	EC-DG MARE	2016-2017 420,000	219,180	no extra staff
Legal Basis				
<ul style="list-style-type: none">Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.3(a), 2.3(b) and 2.5 and 2a.1				

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

2.1. THE UNION MARITIME INFORMATION AND EXCHANGE SYSTEM

Planned Input		Actual input
Commitment appropriations in EUR	25,429,504	15,027,014
Payment appropriations in EUR	19,403,501	10,496,725
Staff	32 AD ⁴ , 12 AST ⁵ , 3 SNE, 4 CA	34 AD, 12 AST, 3 SNE
Multi-annual strategic objectives		
<ul style="list-style-type: none"> ▪ To increase the effectiveness and efficiency of EMSA's Integrated Maritime Services (IMS) to its full potential based on existing applications such as SafeSeaNet. (B1) ▪ To explore, at reasonable cost, in a sustainable and viable way, new capabilities offered by technology in the field of maritime surveillance for the benefit of the Commission and the EU Member States with added value for maritime safety, security and environmental protection. (B2) ▪ To continue to work to further develop the EU maritime traffic monitoring and information system. (B3) ▪ To engage in supporting other communities and enhance the Agency's role as central EU data provider of maritime related information as defined by Union law. (B4) ▪ To become a reliable source of information and statistics for the EU on maritime matters. (D4) ▪ To continue developing its role as forum for discussion of best practices. (D5) 		

⁴ 7 AD are for the European cooperation on coast guard functions (in planned and actual input).

⁵ 1 AST is for the European cooperation on coast guard functions (in planned and actual input).

a. Integrated Maritime Services

The Integrated Maritime Services (IMS) for Member States continued to be delivered during 2017, with the integration of new data and functionalities (SSN Port Notifications and details, THETIS PSC public data, Ports and organisations, Sentinel 2 Earth observation images, and additional met-ocean layers). The total number of IMS users increased to more than 1000 and the number of Member States using IMS (for maritime safety, port and maritime security, marine environment protection and the efficiency of maritime traffic and maritime transport) increased to 26. In addition all previous IMS users were successfully migrated to the new SSN Graphical User Interface (SEG), the new modern display giving access to all maritime traffic/surveillance applications and services operated by EMSA, and also have access to the IMS Mobile App version (available on iOS and Android). Finally, 2017 saw an increase in the interest and implementation of System-to-System interfaces for the distribution of Satellite-AIS data; 4 Member States were connected.

IMS continued to provide Automated Anomaly Behaviour Monitoring (ABM) tools, which are computer-based algorithms analysing real time vessel position reports for the detection of abnormal and/or user specific behaviours. ABM algorithms are used by various communities with positive operational outcomes. In line with the ever-growing demand and reflecting user requirements, EMSA developed new ABMs and reached a total number of 24. New types of ABM services combining new technologies or data sets were explored.

Intensive consultations with users and collaboration groups (2 IMS Group User Consultation Meetings, 1 ABM workshop, 6 trainings and 9 webinars) continued.

In parallel, IMS were provided to a range of other institutional users (e.g. MAOC-N, EUNAVFOR) with some of these services being expanded or reinforced. The provision of information services to Frontex and its stakeholders, mainly based on Earth observation data combined with vessel traffic information more than tripled in volume of deliveries. 2017 saw also the first full year of operations regarding the Copernicus Maritime Surveillance Service as a mechanism to provide information derived from earth observation satellite data to a range of users. Fisheries authorities under the coordination of EFCA were the main beneficiary of this integrated maritime service. An updated Service Level Agreement with EFCA included the development of a support tool regarding the implementation of EU legislation on Illegal, unreported and unregulated fishing (IUU). Specific chapters are dedicated below to services to Frontex and Copernicus, including services to EFCA.

RPAS operations began later in the year with flights in Denmark and Portugal to monitor ship gas emissions and to conduct general maritime surveillance. The RPAS Data Centre was set-up and supported the abovementioned operations by providing the associated data streams to the users in a unified format.

Legal Basis

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

Expected outcome 2017

Provision of Integrated Maritime Services to EU Member States authorities executing functions in the maritime domain, EU bodies and/or third countries will continue in 2017. New satellite data streams from national missions will be provided where available, and RPAS services will be rolled out for the first time. 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.

Multi-annual strategic objectives

- To explore, at reasonable cost, in a sustainable and viable way, new capabilities offered by technology in the field of maritime surveillance for the benefit of the Commission and the EU Member States with added value for maritime safety and security. (B2)
- Work to further develop the EU maritime traffic monitoring and information system. (B3)
- To prepare IPA and ENP countries for association to EMSA's traffic monitoring services and for use of EMSA's pollution response services. (D3)
- To continue developing its role as forum for discussion of best practices. (D5)

Annual objectives 2017

- 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.
- Analysing new technologies and information products to enhance and complement the Integrated Maritime Services portfolio, including RPAS, VDES and satellite video streams, amongst others.
- Further collaboration within the context of the ESA-EMSA SAT-AIS initiative and with those Member States that have SAT-AIS missions or programmes, in order to continue provision of global feeds of SAT-AIS data to EMSA's users.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Provide Integrated Maritime Services for Member States and other EU stakeholders with maritime related tasks / functions. 2. Further development of the platform for the provision of Integrated Maritime Services. Training support for end-users and stakeholders provided as appropriate, for individual systems or combined data services. 3. Continue to process, store, and distribute global satellite AIS data to end-users; based on data provided to EMSA, directly procured by EMSA, and received from Member States that have a national satellite AIS mission/programme in place. 4. Provision and integration of image related data (including video/streamed data) for the Agency's Integrated Maritime Services. 5. Provision and integration of met-ocean data within the Integrated Maritime Services, including the provision of in-situ, sea and weather forecast (model), and remote sensing earth observation data. 6. Provide RPAS services to Member States and EU bodies in support of national coast guard functions. For the maritime stakeholders EMSA will focus on emission and pollution monitoring. This output entails a number of service contracts and a Data Centre contract for data receipt and distribution. 	<ol style="list-style-type: none"> 1. IMS continued to provide expected services to Member States, a range of EU bodies and third countries. The number of IMS Member States increased to 26, while the total number of Member state users increased to more than 1000. 2. The IMS platform has continued in its development with the integration of new data and functionalities (SSN Port Notifications and details, THETIS PSC public data, Ports and organisations, Sentinel 2 Earth observation images, and additional met-ocean layers). A new set of Automated Behaviour Monitoring (ABM) algorithms were developed. In addition all Member States' users were successfully migrated to the new SSN Graphical User Interface (SEG), and also have access to the IMS Mobile App version. 7 trainings, 1 workshop and 9 webinars were provided in support of existing and new Member State end-users. 3. The provision of global SAT-AIS data stream continued to be provided to EMSA users. The global SAT-AIS data was procured by EMSA through a framework service contract with a commercial SAT-AIS data provider. Norway also provided a global feed of SAT-AIS data to EMSA from their Norwegian SAT-AIS programme. The 5th Meeting of the EU Satellite-AIS Collaborative Forum was held in November 2017. 4. The EMSA portfolio of satellites and the associated acquisition capabilities continued to be a robust source of operationally relevant data for integration into a range of IMS services. 5. EMSA has increased its range of met-ocean products and includes over 35 different in-situ,

	<p>remote sensing and forecast layers. These products are provided to all IMS users through a technical collaboration with CMEMS, CAMS, EMODNet and EUMETSAT.</p> <p>6. Following an extensive testing period, including an RPAS demonstration event, the first RPAS operations took place during the last quarter supporting Member State authority activities in maritime surveillance. RPAS operations in Portugal with daily flights proved that the new RPAS service offers additional capabilities to support the maritime surveillance operations of different types as implemented by national authorities in areas such as fisheries control, customs, detection of polluters and illegal activities at sea. The RPAS operation for emissions monitoring in Denmark which had been initially launched with success, was suspended for contractual issues between the contractor and the RPAS provider. In parallel the new RPAS Data Centre was fully functional and supported the RPAS operations in providing data to users.</p>
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Output Indicators		Target 2017	Result 2017
Integrated Maritime Services: Platform Availability	percentage per year availability of platform	95	99.37
	hours maximum continuous downtime of IMS platform	12	9h59
Integrated Maritime Services Availability	percentage per year availability to Member States	95	99.27
	percentage per year availability to EUNAVFOR Atalanta	95	99.24
	percentage per year availability to EFCA	95	99.24

b. SafeSeaNet

The central SafeSeaNet service continued to function well throughout 2017, complying with the performance and reliability requirements defined by the Interface and Functionalities Control Document (IFCD). The preparation of the next upgrade of the central SSN system has progressed. Following the revision of Annex II of the Port Reception Facilities Directive, there are consequential impacts in the waste information to be reported and exchanged through SSN. A new version of SafeSeaNet (version 4) will be implemented at central and national level in 2018. The business rules of the SSN V.4 were concluded successfully and translated into technical specifications in 2017.

The development of the central databases (Ship, Hazmat and Organisations - Shore-based Traffic Monitoring and Information Database (STMID)) has also progressed. A new version of the STMID was developed and opened up to Member States pending data migration. This new version allows Member States to register and update their information directly in the system.

Development of a single SafeSeaNet ecosystem web interface (SafeSeaNet Ecosystem GUI – SEG) to provide one single interface for SafeSeaNet, LRIT, CleanSeaNet and Integrated Maritime Services proceeded as planned.

The data quality was set as a priority activity. During 2017 individual meetings took place with Spain, the Netherlands, Malta and the UK on data quality which led to recommendations for concrete improvements of their systems.

An e-Learning course on how to use the Central HAZMAT Database (CHD) for reporting dangerous and polluting goods in SafeSeaNet was provided. The e-Learning module also includes a description of the Marine Chemical Information Sheets (MAR-CIS) database, information developed for responders to chemical accidents at sea, which is one of the action points under the HNS Action Plan of the Agency. SafeSeaNet, together with the Central Hazmat Database, provided support to the 3rd Table top Exercise (TTE) on Places of Refuge this year hosted by Norway, testing the EU Operational Guidelines on Places of Refuge.

Operational and technical classroom training was provided at EMSA for all MS on the new SafeSeaNet Ecosystem Graphical User Interface in June.

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)

Expected outcome 2017

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. 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.

Annual objectives 2017

- Provide the SafeSeaNet central service on a 24/7 availability basis, and provide operational support to all users, including necessary training 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.
- Pending the identification of appropriate business needs, refine and improve the SafeSeaNet Ecosystem common Graphical User Interface (SEG) as launched in 2016.
- Refine and improve the SafeSeaNet Common Management Console.
- Refine and improve the Central Ship Database and the Central Hazmat Database as launched in 2016.
- Develop an eLearning platform for SSN courses.
- Possibly expand the portfolio of EMSA maritime information databases to support users' statistical needs (dependent on the outcome of work undertaken in 2016 in support of Eurostat).
- Prepare the technical specifications of SSN V.4.

Planned output 2017

1. SafeSeaNet is operational on a 24/7 basis to support Member States to undertake activities related to maritime monitoring.
2. EMSA will provide support to Member States regarding compatibility of national systems with SafeSeaNet and potential improvements.
3. The SafeSeaNet Ecosystem Central databases will be operational and available to use in national systems and improve data quality on related national databases.
4. The SafeSeaNet Ecosystem Graphical User Interface and the Common Management Console phased-in across all maritime applications.
5. Subject to ongoing needs, support to the Commission and Member States regarding the revision of the Directive 2002/59/EC as amended, will be provided as appropriate.

Actual output 2017

1. SafeSeaNet was operational on a 24/7 basis to support Member States.
2. EMSA provided support to Member States upgrading their national systems to include additional SSN functionalities (e.g. Incident report distribution). Guideline documents (e.g. PortPlus Guidelines, updated Incident report guidelines including the link with the Places of Refuge operational guidelines) were also drafted to support Member States.
3. Continued development of Central Databases. The Central Organisations Database (COD) was made available to Member States to consult and update their information as previously provided in the Shore-based Traffic Monitoring and Information Database (STMID). An e-Learning course on how to use the Central HAZMAT Database (CHD) was also made available.
4. The development of a common Graphical User Interface for SafeSeaNet, LRIT, CleanSeaNet and Integrated Maritime Services was finalised and the transition to operation started at the end of the year.
5. Feedback was provided to the Commission regarding the evaluation of the Directive 2002/59/EC as amended.

Output Indicators		Target 2017	Result 2017
SAFESEANET			
SafeSeaNet system including requirements under the Reporting Formalities Directive (2010/65/EU): Service Operation	percentage per year availability of central SafeSeaNet system	99	99.61
	hours maximum continuous downtime of central SafeSeaNet system	12	9h20m
	reports per year (AIS)	1800 million	5,641,759,824
	notifications per year (PortPlus, Incident reports, MRS)	4.5 million	7,211,826
SafeSeaNet system including requirements under the Reporting Formalities Directive 2010/65/EU: Reporting Performance	percentage of responses to Member States' requests delivered in accordance with SafeSeaNet IFCD (time) requirements	99	100

c. Improving internal market and maritime transport efficiency

As requested by the Commission and the Member States, the Agency continued to provide technical support for the implementation of the Reporting Formalities Directive (Directive 2010/65/EU), in particular for the development guidelines for Single Windows, providing the grounds for a harmonised implementation of the Directive by the Member States. EMSA has provided technical assistance regarding the implementation of the Directive on the request of Member States (Portugal) and as approved by the EMSA Administrative Board. Peer reviews, to identify best practices and concerns in the implementation of Directive 2010/65/EU were carried out in five (Croatia, Estonia, Germany, Italy and Spain) of the seven Member States who volunteered for this exercise. In addition EMSA provided support to the Commission in the evaluation of the Directive.

EMSA continued the e-Manifest pilot project in collaboration with the participating Member States and the Commission (DG MOVE and DG TAXUD). Concrete results were achieved, including: the mapping of maritime and customs formalities; the implementation of the 2nd version of the EMSW (tested in 2017); and the preparation of the 3rd version (to be tested in Spring 2018). These two actions will provide input to the Commission in view of the revision of the Reporting Formalities Directive (2010/65/EU) which is to take place in 2018. In 2017, the European Maritime Single Window (EMSW) study was concluded presenting results on the costs of building and operating such a tool by EMSA.

EMSA submitted a proposal to DG MARE for the "Project on connecting industry and competent authorities in the European Maritime Single Window Environment (2018-2020)". The Grant Agreement with DG MARE will be signed in 2018 and will ensure the continuation of the eManifest pilot project. This new project will support the development of the Reporting Gateway and will test the interoperability with other IT systems (e.g. NSWs, Mandatory Reporting Systems, VHF Data Exchange System - VDES for the transmission of digital data between ship and shore using satellite solutions, eCustoms and Eurostat).

EMSA reached an agreement with Norway to participate in a Norwegian VDE-SAT Demonstration which aims to explore the possibility of testing the exchange of ship reporting data via the Reporting Gateway using Norway's newly launched VDES microsatellite.

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)

Expected outcome 2017

The Agency will assist Member States to better meet the requirements of the Reporting Formalities Directive. Such support is expected to include identifying best practice approaches for achieving EU wide harmonisation. Based on new technological developments, EMSA will test the use of VDES and other means available to improve service quality and support the implementation of the NSW and the proof of concept for a EMSW.

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.

Multi-annual strategic objectives

- To increase the effectiveness and efficiency of EMSA's integrated maritime information services to its full potential based on existing applications such as SafeSeaNet. (B1)
- Work to further develop the EU maritime traffic monitoring and information exchange system. (B3)
- Subject to the provision of financial and human resources the Agency shall engage in supporting other communities and enhance its role as central EU data provider of maritime related information as defined by its Founding Regulation. (B4)
- To become a reliable source of information and statistics for the EU on maritime matters. (D4)
- To continue developing its role as forum for discussion of best practices. (D5)

Annual objectives 2017

- Assist the Commission in the evaluation and revision of the Reporting Formalities Directive.
- Work on measures which will facilitate the overall effectiveness/efficiency for ships in relation to reporting formalities.
- Support the Commission in further developing the European Maritime Single Window (EMSW) prototype to test the simplification and harmonisation of reporting formalities including the development of an eManifest and elaboration of message standards.
- Carry out a study on the technical, human and financial resources required to develop and operate a EMSW.

Planned output 2017

1. Assist the Commission in the evaluation and revision of the Reporting Formalities Directive and in assessing its implementation.
2. The EMSW prototype will be made available and tested by the eManifest pilot project participants within Member States and shipping industry.

Actual output 2017

1. EMSA has carried out peer reviews with five Member States, provided technical assistance to one Member State and released updates of the guidelines for the implementation of the Directive. The study regarding the development and operation of a European Maritime Single Windows was concluded.
2. EMSA has run two operational test phases with the Member States and Industry associations participating to the e-Manifest pilot project. Two major releases of the EMSW prototype were made available for that purpose.

Output Indicators

SafeSeaNet system data exchange in support of the Reporting Formalities Directive (2010/65/EU)

The exchange requirements of the Reporting Formalities Directive (2010/65/EU) are integrated in the PortPlus message, and therefore covered by the SafeSeaNet indicators.

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

The Long Range Identification and Tracking (LRIT) services hosted by EMSA, consisting of the European Union LRIT Cooperative Data Centre (EU LRIT CDC), the International LRIT Data Exchange (LRIT IDE), the EU LRIT Ship Database, and LRIT Consumption Tool, were fully operational throughout the year. LRIT services continued to feed the maritime picture. The LRIT IDE and EU LRIT CDC were compliant with the International Maritime Organization (IMO) requirements in accordance with IMO MSC.263(84) Revised performance standards and functional requirements for the LRIT, MSC.1/Circ.1259 and MSC.1/Circ.1376. The LRIT IDE provided services and testing support to 58 LRIT Data Centres all over the world.

Developments regarding the second modification of the LRIT system were completed for LRIT IDE and EU LRIT CDC in due time, in line with IMO requirements. This modification impacted also the LRIT Ship Database and the LRIT Consumption Tool, which both needed to be updated. Thanks to this change, the ship type is now included in LRIT information. The Coastal SURPIC has also been introduced, as well as additional filtering possibilities on flag and ship type when requesting LRIT information, for example through a Coastal State Standing Order.

Planned input		Actual input
Commitment appropriations in EUR	3,418,710	3,632,584
Payment appropriations in EUR	3,561,712	3,590,235
Staff	6 AD, 7 AST	7 AD, 7 AST
Legal Basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.3(a), 2.4 (a) and 2.4(h) 		
Expected outcome 2017		
The Agency will continue to operate the EU LRIT CDC and the LRIT IDE 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.		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To explore, at reasonable cost, in a sustainable and viable way, new capabilities offered by technology in the field of maritime surveillance for the benefit of the Commission and the EU Member States with added value for maritime safety, security and environmental protection. (B2) To continue to work to further develop the EU maritime traffic monitoring and information system. (B3) To continue developing its role as forum for discussion of best practices. (D5) 		
Annual objectives 2017		
<ul style="list-style-type: none"> Continue operation and maintenance of the EU LRIT CDC in accordance with IMO performance standards. Continue operation and maintenance of the LRIT IDE in accordance with IMO Resolution MSC.322 (89). 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 2017		Actual output 2017
<ol style="list-style-type: none"> Continued operations and ongoing maintenance of both systems (EU LRIT CDC and LRIT IDE) at EMSA. Perform necessary upgrading of the EU LRIT CDC and the LRIT IDE, as requested by 		<ol style="list-style-type: none"> New releases of the EU LRIT CDC and LRIT IDE were developed in response to requirements of the second modification of the LRIT system in compliance with IMO Performance Standards.

<p>Member States or IMO.</p> <ol style="list-style-type: none"> Support to Member States for use of the EU LRIT CDC. LRIT IDE testing support to LRIT Data Centres. Quality of the services maintained. 	<ol style="list-style-type: none"> The development of the upgrades for the EU LRIT CDC and LRIT IDE were done in line with the implementation plan prepared in 2015 and approved by the IMO Sub-Committee NCSR 3. During NSCR 4, in March 2017, it was decided that the go live for these improvements would be the 18th of April 2017 and both applications were operational on time. Support to the EU LRIT CDC users was provided through a helpdesk. Two LRIT National Competent Authority (NCA) meetings as well as one Regional LRIT training were organised regarding the use of the EU LRIT CDC through the SSN Ecosystem Graphical User Interface (SEG). The IDE Operator provided the services of a helpdesk which catered for technical and operational support, such as the validation of the testing activities carried out by LRIT Data Centres, technical support to Contracting Governments, and support to the LRIT Coordinator (IMSO) in performing audits of other LRIT Data Centres. The EU LRIT CDC quality of service was above the criteria defined by IMO (99%) throughout the year. For the LRIT IDE, the IMO requirements were also fulfilled. The percentage of ships reporting correctly in the EU CDC continued to increase. IMSO audits were performed for both EU LRIT CDC and LRIT IDE.
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Output Indicators		Target 2017	Result 2017
EU LRIT DATA CENTRE			
System operational	percentage per month availability	99	99.88
	hours maximum continuous downtime	4	1h18
EU CDC reporting performance	percentage position reports delivered in accordance with IMO requirements (periodic reports: 15 min; polls: 30 min)	99	99.74
Web user interface	percentage per year of availability to users	99	99.84

LRIT IDE			
System operational	percentage per year availability of LRIT IDE in accordance with IMO requirements	99.9	99.93
	hours maximum continuous downtime of LRIT IDE	4	4h

2.3 THETIS AND ASSOCIATED MODULES

THETIS and its modules are essential tools for harmonised monitoring and targeting of ships within the framework of Port State Control; they are pivotal in daily PSC operations and other inspections foreseen by EU legislation. THETIS also serves as a common platform for reporting inspections and sharing information and alerts to ensure the proper implementation of international conventions and EU legal acts and thereby support efforts to eliminate substandard shipping.

In 2017 THETIS was operational throughout the year without any disruption, thus ensuring the quality and continuity of the service provided. THETIS is a single window information system combining port call information (from SafeSeaNet) and inspection data. The system supports the daily work of Port State Control Officers through a risk based targeting mechanism and by making available PSC reports to all relevant national authorities in the EU and the Paris MoU region. Around 18,000 inspections were recorded in the system by 600 authorised users from 28 connected countries.

In addition in 2017 a new webservice was developed which could be used both by Recognised Organisations (ROs), in order to comply with the relevant provisions of Article 10.4 of Regulation (EC) 391/2009, and possibly by Flag States wishing to submit e-Certificates.

Finally, a dedicated helpdesk service for users was offered throughout the year and a number of dedicated workshops for end users took place, either to build their knowledge or to introduce enhancements.

THETIS-EU was further developed with a risk-based targeting mechanism – including specific alerts from remote sensing and other available technologies - and the text of the guidance for Sulphur Inspectors was amended. 12000 Sulphur Inspections were recorded in the dedicated module in 2017.

In 2017 the development of THETIS-MRV was completed, and the system went live on 7 August 2017 (see Project: THETIS-MRV).

Planned input				Actual input
Commitment appropriations in EUR		2,043,475		2,282,433
Payment appropriations in EUR		1,929,999		2,152,497
Staff		5 AD, 1 AST, 1 CA		5 AD, 1 AST, 1 SNE
Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
THETIS-EU	EC – DG ENV	2014-2017 200,000	43,984	no extra staff
Legal Basis				
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.3(a) and 2.2.(b) 				
Expected outcome 2017				
<p>The Agency operates the Port State Control information system 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 (1999/35/EC), Regulation 391/2009 on common rules and standards for ship inspection and survey organisations, the BWMC (when it enters into force in September 2017) and Regulation 1257/2013 on Ship Recycling.</p> <p>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.</p> <p>THETIS-EU accommodates also the Port Reception Facilities Directive (2000/59/EC).</p> <p>THETIS-MRV will cater the provisions of Regulation (EU) 2015/757.</p> <p>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.</p>				

Multi-annual strategic objectives

- To maximise its support role for an efficient and expanded scope of the PSC regime. (A8)
- To increase the effectiveness and efficiency of EMSA's integrated maritime information services to its full potential based on existing applications such as SafeSeaNet. (B1)
- To assist the Commission, Member States and the maritime industry, where appropriate, in meeting, implementing and monitoring international and European legislation and initiatives on the reduction of SOx and NOx emissions. (C1)
- To assist the Commission and the Member States in the implementation of Regulation on the monitoring, reporting and verification of emissions of carbon dioxide, from maritime transport. (C2)
- To assist Member States in the implementation of the new rules in the field of ship related pollution. (C5)
- To continue developing its role as forum for discussion of best practises. (D5)

Annual objectives 2017

- Maintain the proper operation of THETIS, THETIS-EU and other newly developed modules.
- Implement timely developments to comply with new or amended International or EU legislation coming into force.
- Provide relevant training.
- Organise regular meetings with relevant end users.
- THETIS-MRV operational (see also project: THETIS-MRV).

Planned output 2017

1. Information System (THETIS): operational, maintained and under continuous enhancement to meet new requirements.
2. Information System (THETIS-EU): operational, maintained, and under continuous enhancement to meet new requirements.
3. Interface with SafeSeaNet operational.
4. Deployment of THETIS-MRV system.
5. Cooperation with Paris MoU and Member States to supervise, verify and validate the operation and further enhancement of the THETIS system.
6. Cooperation with the Commission and the Sulphur Committee to supervise, verify and validate the operation and further enhancement of THETIS-EU (Sulphur Module).
7. Training to users.

Actual output 2017

1. Information System (THETIS): operational and under continuous enhancement to meet new requirements.
2. Information System (THETIS-EU): operational and under continuous enhancement to meet new requirements. A targeting mechanism was developed and implemented
3. Interface with SafeSeaNet: operational and updated to match the NSW changes.
4. THETIS-MRV was developed as planned and went live on 7/8/2017.
5. EMSA participated in PSC annual Committee meeting as data manager; all developments were presented and tasks were assigned for the next year.
6. Cooperation with the Sulphur and PRF competent authorities in the Member States was ensured to supervise, verify and validate the operation and further enhancement of the system. Regular updates on the developments were offered to MSs through the Sulphur Committee and the ESSF PRF subgroup.
7. Training to users: various communities (PSC, Sulphur, PRF) were provided targeted training depending on their needs and access rights.

Output Indicators		Target 2017	Result 2017
System operational	availability in percentage	96	99.96%
	hours maximum continuous downtime	6	0
Helpdesk Service	percentage of requests closed in less than 5 days	75	not available ⁶

⁶ 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 is expected to be re-established by mid-2018. In the meantime, working methodologies and procedures remain in place and are stable, indicating that the targets continued to be met.

Project: THETIS-MRV

Regulation (EU) 2015/757 (the MRV Regulation) foresees monitoring and verification of fuel consumption, CO₂ emissions and ship efficiency on a "per-voyage" basis and annual reporting to a central database. The Commission, using this central database, will make publicly available on an annual basis the aggregated per-ship data on fuel consumption, CO₂ emissions and energy efficiency aiming at providing information facilitating the implementation of cost-effective measures to reduce ships' fuel consumption, by removing existing market barriers, such as the lack of reliable information.

In addition, the central database will facilitate the enforcement by EU Member States acting as flag States or as port States by providing information on the documents of compliance foreseen by the MRV Regulation. The Commission - taking into account that the existing THETIS system is a flexible tool that can support in a cost effective manner enforcement and inspection obligations stemming from EU legislation - delegated to EMSA the task of developing a new module (THETIS-MRV) in support of the MRV Regulation. Following several prototypes, a first version of the dedicated module was delivered in July 2017. After extensive testing, THETIS-MRV was put on-line in August 2017 to give companies the opportunity to use the system to develop their Monitoring Plans.

As foreseen by the MRV Regulation, THETIS-MRV is a web-based application where all relevant parties (industry and MS) can fulfil their monitoring and reporting obligations in a centralized and harmonised way. The system has a voluntary and a mandatory module, but as demonstrated by the number of users the industry has acknowledged its user-friendliness and is using both modules.

Project financed input

Project	Funding source	Time frame and envelope	Financial input 2017	Staff
THETIS-MRV	EC – DG CLIMA	2016-2020 500,000	265,670	no extra staff

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.

Expected outcome 2017

THETIS-MRV operational by the end of 2017.

Multi-annual strategic objectives

- To maximise its support role for an efficient and expanded scope of the PSC regime. (A8)
- Subject to the provision of financial and human resources the Agency shall engage in supporting other communities and enhance its role as central EU data provider of maritime related information as defined by its Founding Regulation. (B4)
- To support if necessary the Commission in setting up a Monitoring, Reporting and Verification system for emissions in line with future policy developments in this area. (C3)
- To contribute to the protection of the marine environment in the EU. (C4)
- To assist Member States in the implementation of the new rules in the field of ship related pollution. (C5)
- To become a reliable source of information and statistics for the EU on maritime matters. (D4)

Annual objectives 2017

- Implementation of the tasks defined in the relevant cooperation agreement with the Commission.
- Development of THETIS-MRV.
- THETIS-MRV operational by the year-end.
- Setting-up of Helpdesk for Member States.
- Organisation of workshops and/or trainings for users.
- Provision of technical assistance to the Commission with respect to delegated and implementing acts foreseen by the MRV Regulation.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. THETIS-MRV developed and operational. 2. Organisation of awareness and technical workshops for competent authorities of Member States. 	<ol style="list-style-type: none"> 1. THETIS-MRV went live in August 2017. Further functionalities, non-critical for initial operation, were delivered in the following months. 2. A dedicated training on Monitoring, Reporting & Verification of carbon dioxide emissions from maritime transport was delivered. 3. EMSA has developed a special page dedicated to MRV related issues on its corporate website, with a series of video tutorials. 4. The Agency participated in events, workshops and conferences to raise awareness about THETIS-MRV.

Output Indicators		Target 2017	Result 2017
THETIS-MRV	Timely delivery of tasks foreseen by the cooperation Agreement	THETIS-MRV operational	Yes
		Minimum one workshop/training organised	Yes

Project: EMISSION INVENTORIES

In 2017 the emission inventories tool for the calculation of shipping emissions - based on shipping activity data for domestic, short sea and international shipping - was further enhanced.

The tool supports the quantification of the bottom-up emissions (SO_x, NO_x and PM) resulting from combustion of marine fuel from international and domestic shipping.

Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
Emission Inventories Project	EC – DG ENV	2015-2018 150,000	15,000	no extra staff
Legal Basis				
<ul style="list-style-type: none"> Directive 1999/32/EC as amended, Art. 7 				
Expected outcome 2017				
<p>Functionality operational in THETIS-EU to evaluate the inventories of shipping emissions based on shipping activity data for domestic, short sea and international shipping.</p> <p>Further enhancement to develop a fuel calculator to support Sulphur Inspectors.</p>				
Multi-annual strategic objectives				
<ul style="list-style-type: none"> To assist the Commission, Member States and the maritime industry, where appropriate, in meeting, implementing and monitoring international and European legislation and initiatives on the reduction of SO_x and NO_x emissions. (C1) Subject to the provision of financial and human resources the Agency shall engage in supporting other communities and enhance its role as central EU data provider of maritime related information as defined by its Founding Regulation. (B4) To contribute to the protection of the marine environment in the EU. (C4) To assist Member States in the implementation of the new rules in the field of ship related pollution. (C5) To become a reliable source of information and statistics for the EU on maritime matters. (D4) 				
Annual objectives 2017				
<ul style="list-style-type: none"> Implementation of the tasks defined in the relevant cooperation agreement with the Commission. Quantification of the bottom-up emissions (SO_x, NO_x and PM) resulting from combustion of marine fuel from international and domestic shipping, covered by the AIS data. Assessment, as appropriate, of the positive effect on air quality of specific measures such as the stricter sulphur requirements under Directive 2016/802/EU. 				
Planned output 2017		Actual output 2017		
<ol style="list-style-type: none"> Emission inventory modelling functionality, relevant enhancements and results for emission inventories based on shipping activity data. Organisation of awareness and technical workshops for competent authorities of Member States. 		<ol style="list-style-type: none"> The Agency further enhanced the emission inventories tool; new areas such as the local area pollution for Mediterranean and Irish Sea were included. The emission inventories obtained through the tool were presented both in the Sulphur Committee and the air emissions subgroup of the ESSF where they were discussed and analysed. 		

Output Indicators		Target 2017	Result 2017
Emission Inventories	inventories of shipping emissions based on shipping activity data will have to be attributed per Member State in their relevant sea areas (EEZ, PCZ, SECAs) for the period 2012-2017	<p>New functionality in THETIS-EU operational</p> <p>Calculation and analysis of inventories of shipping emissions for the period 2016</p> <p>Minimum one workshop organised</p>	<p>Yes</p> <p>No⁷</p>
Fuel Calculator	<i>fuel calculator tool for voluntary open sea compliance checks</i>	New functionality to support Sulphur Inspectors before or during Sulphur Inspections	Yes

⁷ The delivery of the technical solution was postponed, meaning that calculation and analysis are delayed.

2.4 MARITIME SUPPORT SERVICES

During 2017, the Maritime Support Services (MSS) performed well above target, providing an uninterrupted 24/7 operational and technical helpdesk to users of all vessel traffic monitoring and surveillance systems hosted by the Agency. The MSS provided a single point of contact in case of emergencies and provided continuous monitoring of all EMSA hosted maritime applications, facilitating high availability and performance standards. Regular assessments and reporting of SafeSeaNet data quality, implementation, and performance to the SafeSeaNet National Competent Authorities have shown its effectiveness by driving improvements at Member State level. In September MSS launched a survey among its stakeholders as suggested by IAS with good results.

Planned input		Actual input
Commitment appropriations in EUR	1,839,326	1,594,141
Payment appropriations in EUR	1,866,810	1,542,942
Staff	8 AD, 2 AST, 3 SNE, 2 CA	5 AD, 1 AST, 4 SNE, 4 CA
Legal Basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2 		
Expected outcome 2017		
<p>Users of the vessel traffic and maritime information services benefit from timely and appropriate helpdesk and monitoring services.</p> <p>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.</p>		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To increase the effectiveness and efficiency of EMSA's integrated maritime information services to its full potential based on existing applications such as SafeSeaNet. (B1) 		
Annual objective 2017		
<ul style="list-style-type: none"> Provide timely and appropriate helpdesk and monitoring services. 		
Planned output 2017		Actual output 2017
<p>1. Maritime Monitoring Services to be provided on a 24/7 basis including:</p> <ul style="list-style-type: none"> 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 		<p>1. The MSS was available 24/7, without interruption, and provided the following services:</p> <ul style="list-style-type: none"> Helpdesk support and monitoring of the applications. Maintained the reference lists and coordinated the update of two new versions of the UNECE list of location codes (LOCODEs) employed by the maritime applications. Verified and reported on the consistency and quality of data provided by Member States to SafeSeaNet, including new checks for the Waste and Security information. Supported Contracting Governments of the EU LRIT Data Centre regarding the integration of relevant ship data as well as monitoring the associated ship reporting requirements. MSS supported the EMSA inspection teams by preparing ad hoc reports to support Dept B visits to the Member States. Assisted in developing and revising of

<ul style="list-style-type: none"> Refining procedures to maximise efficiency in relation to pending requests <p>2. In the event of maritime emergencies, the MSS will:</p> <ul style="list-style-type: none"> 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. 	<p>application monitoring procedures for various releases and new services (RPAS DC, new version of the EODC etc) as well as undertaking the associated monitoring of their performance and availability.</p> <ul style="list-style-type: none"> The survey assessing user perception of MSS services was done in September 2017 (performed on a two-yearly basis as recommended by the IAS). Coordinated the upgrade of the EMSA Public Key Infrastructure for system to system connections. Provided support to DG ENV related to ships suspected of breaching the Waste Shipment Regulation (EC) No 1013/2006. <p>2. The MSS was available at all times in case of emergency. The EMSA contingency plan was activated on 7 occasions in 2017.</p>
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Output Indicators		Target 2017	Result 2017
Maritime Support Services available 24/7	average time in hours for feedback or resolution of issues relating to emergencies, incidents in maritime applications or urgent helpdesk requests	<2	Not available ⁸
	average time in hours for feedback or resolution of issues relating to non-urgent helpdesk requests or scheduled interventions	<8	
MSS Data Quality Reports	reporting on the SafeSeaNet implementation and data quality (overall and per Member State)	20 Reports	25

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 is expected to be re-established by mid-2018. In the meantime, working methodologies and procedures remain in place and are stable, indicating that the targets continued to be met..

Project: COPERNICUS SECURITY SERVICES – MARITIME SURVEILLANCE

Copernicus Maritime Surveillance had its first full year of operations in 2017, with a six fold increase in the number of Earth Observation (EO) services delivered to Coastal States (when compared to 2016). Services were provided to more than 16 Member States and International Organisations in the fields of fisheries control, maritime safety and security, law enforcement, customs and defence.

New users are supported in an iterative process during which they define their user requirements, with the support of EMSA. The Agency then undertakes the necessary technical work to set up user accounts, and to plan, order, acquire and deliver the Copernicus services based on earth observation data and derived products.

In May, EMSA organised a training session that introduced the SafeSeaNet Ecosystem Graphical User Interface (SEG) to an EFCA-IMS-IUU Pilot Project group. 15 operational staff of different Member State administrations, working with illegal, unreported and unregulated fishing (IUU), attended the event. In autumn 2017, EMSA organised a dedicated basic training session on Copernicus Maritime Surveillance services, which was attended by 13 operational staff from 8 Member State administrations working in the area of maritime safety and security, law enforcement and customs.

Project financed input

Project	Funding source	Time frame and envelope	Financial input 2017	Staff
Implementing the Copernicus programme for maritime surveillance	EC-DG GROW	2015-2020 € 40,000,000 (expected)	11,083,810	3 CA ⁹

Legal Basis

- Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.4 (a), 2.4 (b) and 2a.2(c)
- Regulation (EU) N° 377/2014 of the European Parliament and of the Council establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010

Expected outcome 2017

Copernicus services are offered through EMSA to stakeholders in the maritime surveillance domain in accordance with user requirements.

Multi-annual strategic objectives

- To explore, at reasonable cost, in a sustainable and viable way, new capabilities offered by technology in the field of maritime surveillance for the benefit of the Commission and the EU Member States with added value for maritime safety, security and environmental protection. (B2)
- To continue to work to further develop the EU maritime traffic monitoring and information system. (B3)
- To engage in supporting other communities and enhance the Agency's role as central EU data provider of maritime related information as defined by Union law. (B4)
- To become a reliable source of information and statistics for the EU on maritime matters. (D4)

Annual objectives 2017

⁹ These posts are part of the establishment plan of the Agency and are covered by EMSA's subsidy.

- Implement the activities defined in the Copernicus Maritime Surveillance Services Annual Implementation Plan for 2017.
- Develop EMSA's portfolio of earth observation products and services in areas relevant for Copernicus activities.
- Expand the Copernicus component to users already served by EMSA (Maritime safety, fisheries control, law enforcement and marine pollution (i.e. CleanSeaNet))¹⁰.
- Explore new technologies that can enhance the Copernicus service portfolio and support the Copernicus Service delivery process.
- Organising promotion, training and user up-take of Copernicus services.

Planned output 2017	Actual output 2017
1. Provision of Copernicus component of maritime surveillance services as part of existing Integrated Maritime Services and exploring new services based on collected user requirements.	<p>1. Copernicus Maritime Surveillance services were provided to users in the following user communities (which represents a 6 fold increase compared to 2016):</p> <ul style="list-style-type: none"> - Fisheries control (725 images); - Maritime Safety and Security (159 images); - Law enforcement (453 images); - Customs (509 images); - Defence and support to international organisations (18 images). <p>2. Delegated Copernicus tasks were implemented as per the approved Annual Implementation Plan 2017, including several trainings, and communication products.</p>

Output Indicators		Target 2017	Result 2017
Copernicus services availability	percentage per year availability of Copernicus services	95	99.37

¹⁰ Border control is covered by a separate Copernicus service managed by Frontex.

Project: FRONTEX

Under the EMSA-Frontex Service Level Agreement (SLA), EMSA provides surveillance tools and services to support Frontex and its stakeholders' activities, namely through the EUROSUR network.

The services provided under the SLA Annual Programme 2017 were:

- Vessel Monitoring and Tracking: Integrated maritime traffic picture from real time data sources
- Vessel Detection Service: Combining satellite image detections with vessel position data
- Anomaly Detection Service: Algorithms and alerting tools for vessel behaviour monitoring
- Activity Detection Service: Monitoring shoreline and sea activities with satellite images
- Vessel Reporting Service: Monitoring vessels of interest

In 2017, 12 additional algorithms for vessel behaviour were developed making a total of 24 available for Border Surveillance. In parallel, the visualisation of satellite images associated with the Vessel and Activity Detection Services was integrated into the EUROSUR Fusion Services.

The achievements are reflected in the SLA Annual Report 2017 and illustrated by a variety of operational success cases at sea.

Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
Providing integrated maritime services to Frontex	Frontex	2016-2019 45,000,000	12,116,819	7 CAs
Legal Basis				
<ul style="list-style-type: none">▪ Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.4 (a), 2.4 (b), 2a.2(d)▪ Regulation (EC) N° 1052/2013 Art. 18. (EUROSUR)				
Expected outcome 2017				
Integrated maritime services are offered to Frontex in accordance with their user requirements and their end users in Member States.				
Multi-annual strategic objectives				
<ul style="list-style-type: none">▪ To explore, at reasonable cost, in a sustainable and viable way, new capabilities offered by technology in the field of maritime surveillance for the benefit of the Commission and the EU Member States with added value for maritime safety, security and environmental protection. (B2)▪ To continue to work to further develop the EU maritime traffic monitoring and information system. (B3)▪ To engage in supporting other communities and enhance the Agency's role as central EU data provider of maritime related information as defined by Union law. (B4)▪ To become a reliable source of information and statistics for the EU on maritime matters. (D4)				
Annual objectives 2017				
<ul style="list-style-type: none">▪ Implement the Service Level Agreement signed between EMSA and Frontex.▪ Service delivery based on the SLA annual programme and specific agreements signed with Frontex.▪ Following Identification of appropriate business needs, further develop the services to Frontex and their end users in Member States.▪ Provide operational support to users.				

Planned output 2017	Actual output 2017
1. Provision of integrated maritime services under the existing Frontex-EMSA SLA framework, and in support of the implementation of the EUROSUR regulation.	1. The five integrated maritime services under the existing Frontex-EMSA SLA framework were provided as expected. The Anomaly, Activity and Vessel Detection Services were further enhanced.

Output Indicators		Target 2017	Result 2017
Frontex services availability	percentage per year availability to Frontex	95	99.83

Visits and Inspections to monitor the implementation of EU legislation

3.1 CLASSIFICATION SOCIETIES

Inspecting Recognised Organisations (ROs) is a core task of the Agency. In 2017, EMSA carried out sixteen office inspections of ROs. The locations and scope of the inspections were determined on a risk-basis, 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. Preparation of inspections included remote auditing techniques whereby detailed information was evaluated before the inspection, enabling a focussed approach during the inspection itself. Where possible, inspections were combined to minimise mission costs.

Findings were established in all inspections, triggering voluntary corrective actions in all cases, the implementation of which will be verified in the next round of inspections.

There was a continued focus on common issues for ships in operation (including ISM audits and ESP surveys) and on newbuilding activities (application of rules and statutory requirements, development and application of software tools to support newbuilding activities, projects of Ultra Large Container Ships), as well as on internal verification activities as part of the ROs' control over their survey and certification processes.

As in previous years, EMSA continued to carry out visits to verify the structural fire protection of RO-pax ships. In 2017, two ships were visited to verify corrective actions reported by the ROs concerned following previous visits. In addition, four ships classed by ROs that had not been subject to such verification were visited. These visits also included verification of fire safety in the machinery spaces and special category spaces. Findings were established and ROs reported corrective actions. All initial ship visits have shown that issues with regards to fire safety are not all detected and resolved following inspections by the ROs concerned.

Planned Input		Actual input
Commitment appropriations in EUR	1,778,181	1,832,524
Payment appropriations in EUR	1,782,936	1,764,818
Staff	10 AD, 1 AST, 1 SNE	10 AD, 1 AST, 1 SNE
Legal Basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2 (b), 2.3(c), 2.4(h) and 3 		
Expected outcome 2017		
Based on the reports submitted by the Agency, the Commission should be able to make a sound assessment 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.		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To support the Commission and the Member States in improving ship safety. (A1) To increase resource effectiveness and efficiency through the development of a "risk-based" approach to inspections. (A2) To increase efficiency of the Commission's assessments of recognised organisations, in particular through a risk-based approach to inspections. (A5) To develop ideas for more effective sharing of information on inspections. (A6) To assist the Commission in verifying the correct implementation by the EU recognised organisations of the quality assessment and certification entity (QACE). (A7) 		

Annual objectives 2017

- Maintain the same inspection effort per RO as in 2016 while incorporating IRS.
- 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.
- Develop and implement ideas for more effective sharing of information on inspections.
- Assist the Commission in verifying the correct implementation by the EU recognised organisations of the quality assessment and certification entity (QACE).
- Provide end-of cycle inspection and draft assessment reports to support the Commission's assessments of Recognised Organisations.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. 16-20 inspections of Recognised Organisations' offices. 2. Upon request of the Commission, initial inspections of classification societies following any new request for EU recognition. 3. 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. 4. End-of-cycle inspection reports and draft assessment reports and recommendations, to assist the Commission in its preparation of the assessments of Recognised Organisations and their follow-up. 5. Support to the Commission and the Member States in the implementation of Regulation (EC) No. 391/2009 "on common rules and standards for ship inspection and survey organisations" 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. 6. Upon request by a Member State, after consultation with the Commission, provision of appropriate information resulting from the inspections of the ROs, in order to support the Member State's monitoring of the ROs that carry out certification tasks on its behalf. 	<ol style="list-style-type: none"> 1. In total 16 office inspections were carried out, two of which included a ship visit. Additionally, four ship visits were carried out. 2. No initial inspections were requested by the Commission. 3. As requested, EMSA provided support to the Commission for the preparation of the assessment of the Quality Assessment and Certification Entity. 4. EMSA prepared End-of-cycle and draft Commission assessment reports of four ROs, as requested by the Commission. 5. EMSA assisted the Commission with the above mentioned activities and also, inter alia, with activities related to COSS and IMO meetings. 6. EMSA received a request from one Member State to provide inspection reports of several ROs it authorises but, after consultation with the Commission, no reports were provided.

Output Indicators		Target 2017	Result 2017
Inspections	number of RO inspections per year	16-20 ¹¹	16
	percentage of planned inspections completed	100	100

¹¹ This target excludes inspections of candidate ROs and ad hoc ship visits.

Reports	number of reports per year	16-20	19
End-of-cycle inspection and draft assessment reports	number of reports per year	5-7	4 ¹²

¹² One End-of-Cycle report planned for 2017 was issued early, in December 2016, and another was produced by the Commission without EMSA involvement.

3.2 STCW

The Agency continued to carry out inspections of the maritime education, training and certification systems in third countries. In 2017, inspections were carried out in Morocco, the Philippines, Senegal and South Africa. In addition, the Agency continued the second cycle of visits to Member States, reaching the mid-point in the cycle by the end of the year.

EMSA prepared five technical opinions on the corrective action plans submitted by five third countries and evaluated six responses to the Commission's assessments from four third countries. The corrective actions taken by the inspected countries have led to significant improvements in their systems. EMSA also prepared five opinions in response to EU Pilots provided to the Commission by two EU Member States, and provided technical advice to the Commission on Letters of Formal Notice three times concerning two EU Member States.

In 2017, a second statistical review on the number of seafarers holding valid EU certificates and endorsements of recognition, representing a snap-shot 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 2015 and recorded in the STCW Information System. In addition, the third set of data on certificates and endorsements issued to seafarers by the Member States up to 31 December 2016 was collected. EMSA will continue to receive such data in the coming years, providing statistics and trends on potential seafaring manpower in the EU, for the benefit of policy makers and the industry.

EMSA completed the development of a STCW Distance Learning Programme which, together with the two existing training courses, means that training on STCW can reach a much wider audience. In addition, the 'Basic STCW training' and 'Advanced STCW training' were updated and offered to EU Member States and third countries, as 'Comprehensive Training on the STCW Convention and Code' and 'Enhance your Knowledge on the STCW Convention and Code', respectively (see also Training, Cooperation and Capacity Building).

Finally, EMSA conducted the support study for the REFIT Evaluation of Directives 2008/106/EC and 2005/45/EC. This study was presented in a workshop organised by the Commission in Brussels together with the results of the Open Public Consultation and the Stakeholders Consultation conducted as part of the same exercise.

Planned Input		Actual input
Commitment appropriations in EUR	1,404,091	1,303,359
Payment appropriations in EUR	1,400,179	1,285,119
Staff	6 AD, 2 AST, 1 SNE, 1 CA	6 AD, 2 AST, 1 SNE
Legal Basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2 (b), 2.4(e), 2.4(h) and 3 		
Expected outcome 2017		
<p>Based on the reports submitted by the Agency, the Commission should be able 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.</p> <p>The assistance of the Agency in the legislative evaluation of Directives 2008/106/EC and 2005/45/EC should help the Commission to complete more effectively its fitness check in this regard and to develop with the assistance of the Agency as deemed necessary any resultant legislative initiatives.</p>		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To support the Commission and the Member States in improving ship safety. (A1) To become a reliable source of information and statistics for the EU on maritime matters. (D4) 		

Annual objectives 2017	
<ul style="list-style-type: none"> Same effort of visits and inspections as in 2016. Maintain 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 relevant legislation arising from the fitness check (REFIT-Regulatory Fitness) of Directive 2008/106/EC and 2005/45/EC initiated in 2016. 	
Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 4-5 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. 	<ol style="list-style-type: none"> Four inspections of third countries. Four visits to Member States. A high level of availability of the STCW Information System was ensured, above the planned minimum target. A second statistical review on the number of seafarers holding valid EU certificates and endorsements of recognition, representing a snap-shot of the European labour market, was published. Support Study on the REFIT Evaluation of Directives 2008/106/EC and 2005/45/EC. STCW Distance Learning Programme completed. STCW training packages.

Output Indicators		Target 2017	Result 2017
Inspections and visits	number of inspections and visits per year	7-9	8
	percentage of planned inspections and visits completed	100	114.3
Reports	number of reports per year	7-9	7
STCW Information System	percentage per year availability	95	99.66

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

EMSA continued the agreed cycles of visits to Member States to assist the Commission and the EFTA Surveillance Authority in their assessment of Member States in achieving a convergent and effective implementation of Union maritime law. In 2017, 17 visits were carried out in respect of five EU Directives: on accident investigation (Directive 2009/18/EC), the sulphur content of marine fuels (Directive 2016/802/EU), port State control (2009/16/EC), marine equipment (Directive 2014/90/EU) and fishing vessel safety (Directive 97/70/EC). The outcome of each visit was presented to the Member State in question and the Commission (and where appropriate the EFTA Surveillance Authority) through the visit reports.

The four visits concerning Directive 2009/18/EC on accident investigation completed the visit cycle. Following that, EMSA started analysing the outcome of these visits, with the aim of completing the Horizontal Analysis during the first quarter of 2018.

The visits in 2017 also saw the start of the third cycle of visits on port State control and the second on marine equipment. Following a request from the Commission, preparatory work also started for the cycle of visits on Directive 2001/96/EC on the safe loading and unloading of bulk carriers, which is planned to start in the second quarter of 2018.

Visits are conducted in full cooperation with Member States, which benefit from an impartial external view of their operational implementation and enforcement of Union law, taking into account local and regional concerns. The visits give Member States an opportunity to better plan resources, assess training requirements and review any gaps and shortcomings, as appropriate, in order to optimise the level of compliance with Union law. The information obtained also provides important feedback to the Commission on the effectiveness of the Directive in achieving its purpose. This enhances cooperation between the Commission and Member States towards achieving consistency and meeting common targets. Furthermore, the visits generated important information for the horizontal analyses on operational implementation and on the cost effectiveness of the measures in place to be conducted once a full cycle of visits has been completed.

Planned Input		Actual input
Commitment appropriations in EUR	1,342,946	1,426,198
Payment appropriations in EUR	1,331,512	1,294,000
Staff	6 AD, 2 AST, 1 SNE	6 AD, 2 AST, 1 SNE
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2 (b), 2.3(d) and 3 		
Expected outcome 2017		
<p>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.</p> <p>Assist EU and EFTA Member States in their understanding of the requirements of EU legislation and the resources needed for its effective implementation.</p> <p>Conclude the cycle of visits on accident investigation and start the third cycle of PSC visits and the second cycle of marine equipment visits.</p>		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To support the Commission and the Member States in improving ship safety. (A1) To maximise its support role for an efficient and expanded scope of the PSC regime. (A8) 		
Annual objectives 2017		
<ul style="list-style-type: none"> Sound implementation of the Methodology for Visits to Member States. Primary focus on accident investigation and the sulphur content of marine fuels. Start a third cycle of visits on port State control. Start a second cycle of visits on the implementation of Directive 2014/90/EU on marine equipment. 		

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Four to five visits to Member States in respect of Directive 2009/16/EC on port State control and related activities. 2. Desktop analysis of implementation of the PSC Directive 2009/16/EC as amended at the request of the Commission. 3. Four visits to EU Member States to monitor the implementation of Directive 2009/18/EC on the investigation of accidents in the maritime transport sector. 4. Five visits on the implementation of the Sulphur Directive and related Commission Implementing Decisions. 5. One to two visits in respect of Directive 2014/90/EU on marine equipment. 6. One follow-up visit to an EFTA Member State in respect of port reception facilities. 7. One visit to an EFTA Member State concerning the implementation of EU legislation on fishing vessels. 8. 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. 9. Upon request by the EFTA Surveillance Authority other visits to EFTA Member States to monitor the implementation of relevant legislation. 	<ol style="list-style-type: none"> 1. Five visits to Member States were undertaken and three were reported. 2. Only one PSC visit was carried out in 2016, so no desktop analysis was requested by the Commission. 3. Four visits to Member States were undertaken and reported. 4. Five visits to Member States were undertaken and reported. 5. Two visits to Member States were undertaken. 6. The visit was postponed at the request of the EFTA Surveillance authority. 7. One visit to an EFTA Member State was carried out. 8. Following a Commission request, preparatory work was begun for a cycle of visits in respect of Directive 2001/96/EC on the safe loading and unloading of bulk carriers to start in 2018. 9. No such requests were received from the EFTA Surveillance Authority.

Output Indicators		Target 2017	Result 2017
Visits	number of visits per year	16-18	17
	percentage of planned visits completed	100	106.25 ¹³
Reports	number of reports per year	16-18	12 ¹⁴

¹³ Achievement is measured against the bottom of the number range.

¹⁴ The new Methodology for Visits to Member States provides that draft reports of new cycles of visits are sent to the visited Member State for factual corrections before they are finalised. This has increased the time for a final report to be sent after a visit has been completed, so reporting is lower than expected.

3.4 MARITIME SECURITY

EMSA continued to assist the Commission in monitoring Member State implementation of Regulation (EC) No 725/2004 on enhancing ship and port facility security. The practical arrangements for EMSA's technical assistance are set out in a Working Arrangement between the Commission and EMSA. This was reviewed during 2017 and amendments were agreed to further enhance EMSA participation in the maritime security inspection process. Technical assistance to the EFTA Surveillance Authority was provided in respect of ship security only, pending amendments to the EEA Agreement to extend the scope of EMSA's assistance to the full scope of Regulation (EC) No 725/2004, as is provided to the Commission.

The number of inspection missions remained at a similar level to recent years, while the number of individual inspections, which was unusually high in 2016 (71 inspections), returned to the more usual levels (36 in 2017, 39 in 2015), reflecting Commission priorities in terms of the types of inspection carried out during each mission.

EMSA's reports highlighted observations identified during the inspections, provided recommendations and information on Member States' implementation of maritime security measures, procedures and structures. EMSA also provided technical input for future inspections for the Commission's consideration.

Two training courses on port facility security, mainly addressed to officers in the administrations with port and port facility security responsibilities, were developed and delivered to Member States and to SAFEMED III beneficiary countries. One was delivered in Bulgaria with the participation of officers from the Romanian Administration as part of a regional training cooperation. Additionally a ship security training course for officers in the administrations with experience and knowledge in flag/port State security aspects was delivered.

EMSA also initiated the development of distance learning training modules on maritime security and cyber security awareness for officers working in the maritime administration (see also Activity 4.3 "Training, Cooperation and Capacity Building").

EMSA continued to participate in the MARSEC (Maritime Security) Committee and the Stakeholders' Advisory Group on Maritime Security chaired by the Commission, contributing to the MARSEC agenda on specific issues of interest to the Member States. Additionally, EMSA assisted the Commission in the process of accreditation for national security inspectors in the framework of the implementation of the Regulation (EC) No 725/2004.

In the framework of EMSA's support to the work of the European Coast Guard Functions Forum (ECGFF) EMSA organised, in support of the German chairmanship, a workshop on maritime cyber-attack prevention in the maritime domain with relevant stakeholders, with the objective of raising awareness of cybersecurity and the prevention of attacks in the maritime domain.

Planned Input		Actual input
Commitment appropriations in EUR	490,855	661,239
Payment appropriations in EUR	492,044	638,655
Staff	3 AD	3 AD, 1 SNE, 1 CA
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2 and 2.2 (b) 		
Expected outcome 2017		
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.		

Multi-annual strategic objectives	
<ul style="list-style-type: none"> Adding value from visits and inspections (Strategic Action Area¹⁵). 	
Annual objectives 2017	
<ul style="list-style-type: none"> Similar effort of missions as in 2016. Provide the Commission and the EFTA Surveillance Authority with timely advice on the level of security implementation by the Member States. 	
Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 10-12 missions to EU Member States, upon request of the Commission. Two to three missions to Norway and Iceland, upon request of the EFTA Surveillance Authority. 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. 	<ol style="list-style-type: none"> Nine missions to EU Member States. During these missions, 36 individual inspections were carried out and 17 reports were submitted to the Commission. One mission to an EFTA Member State and one report submitted. EMSA participated in the working groups set up by the Commission to discuss the methodology and procedures for certain types of inspection. No formal requests from the Commission for assistance to verify Member States' proposed action plans were received.

Output Indicators		Target 2017	Result 2017
Inspections	number of missions per year	12-15	10 ¹⁶
	percentage of planned missions completed	100	83.3% ¹⁷
Reports	number of reports per year ¹⁸	30-35	18 ¹⁹

¹⁵ Activity 3.4 Maritime Security" has no corresponding strategic objective – the reference is therefore to the action area "Adding value from visits and inspections".

¹⁶ The Commission cancelled two missions and the EFTA Surveillance Authority requested EMSA's participation in fewer missions than expected.

¹⁷ Achievement is measured against the bottom of the number range.

¹⁸ More than one report may be prepared by the Agency following an inspection mission, for example if more than one Member State is inspected.

¹⁹ EMSA's participation in fewer missions than expected, together with long term staff unavailability, meant that EMSA participated in fewer individual inspections during the missions that did take place and therefore fewer inspection reports were produced.

3.6 HORIZONTAL ANALYSIS AND RESEARCH

When a cycle of visits or inspections has been concluded, or when deemed appropriate, such as mid-cycle, the Agency analyses its visit and inspection reports with a view to identifying horizontal findings on operational implementation and general conclusions on the effectiveness and cost efficiency of the measures in place. These analyses are intended to facilitate discussions with the Commission and Member States, to draw relevant lessons and disseminate good working practices.

In 2017, two horizontal analyses (HA) were completed: a consolidated analysis of a full cycle of visits to Member States on vessel traffic management and information systems, including the visits focussing on places of refuge, and an analysis of the findings from the visits to Member States related to Directive 2009/16/EC on port State control.

Moreover, in relation to places of refuge, a third biennial table top exercise was organised in Norway as one of the measures to strengthen the implementation of Directive 2002/59/EC and to benefit from the conclusions of the HA. On this occasion, the exercise focussed on the granting of a place of refuge in view of a threat of chemical pollution.

Two workshops took place in 2017, namely in preparation for the cycles of visits to Member States for Directive 2014/90/EU on marine equipment that started in the 4th quarter of 2017 and for Directive 2001/96/EC on the safe loading and unloading of bulk carriers, which is planned to start in the second quarter of 2018.

Following the successful pilot cost effectiveness analysis of the port State control Directive carried out in 2016, the horizontal analyses for both of these visit cycles will address the findings identified during the visits and include a cost-effectiveness analysis of the measures in place.

Planned Input		Actual input
Commitment appropriations in EUR	536,000	461,649
Payment appropriations in EUR	537,585	447,886
Staff	3 AD ²⁰ , 1 CA	3 AD
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2(c) and 3.5 		
Expected outcome 2017		
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.		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To support the Commission and the Member States in improving ship safety. (A1) To provide the Commission with objective, comparable audit information and generic findings based on analysis of completed inspection cycles and the whole range of related information available as well as with technical recommendations as appropriate. (A3) To enhance an effective dissemination of relevant Horizontal Analysis results not only to the Commission but also to Member States' maritime administrations, including sharing best practices. (A4) To continue developing its role as forum for discussion of best practices. (D5) To use available technical knowledge to analyse research projects with a maritime safety or environmental protection interest, where appropriate. (D7) 		

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

Annual objectives 2017

- 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.).
- Conduct analyses of research projects to assist the Commission, upon request, with preparatory work for updating/developing legislation.
- Analyse research instrumental to other tasks (especially in relation to environmental protection issues).

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. 2-3 Horizontal Analyses of full or part cycles or series of visits and inspections. 2. Analyses of research projects, upon request, to assist the Commission with preparatory work for updating/developing legislation. 3. Support the Commission and the Member States by sharing the results of and knowledge gained from the Horizontal Analyses through workshops and seminars. 	<ol style="list-style-type: none"> 1. Two horizontal analyses were completed. 2. No requests were received. 3. Two pre-cycle workshops were held with the Commission and Member States. 4. A Table Top Exercise was organised to support Member States' use of places of refuge under Directive 2002/59/EC.

Output Indicators		Target 2017	Result 2017
Analyses on the basis of full or part cycles or series of visits and inspections	number of horizontal analyses per year	2-3	2
	percentage of planned analyses completed	100	100

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

EMSA continued to provide technical assistance to the Commission in its participation in all the structures of the Paris MoU. In particular EMSA supported the Commission in the discussions for the declaration adopted during the Third Joint Ministerial Conference of the Paris and Tokyo Memoranda of Understanding on Port State Control held in Canada in May 2017.

EMSA also participated in the IMO Workshop for PSC MoU Agreements organised by IMO, where relevant tools developed by the Agency were highlighted as potentially the best way forward to ensure global harmonisation on PSC. In addition EMSA chaired the IMO correspondence group on PSC to update the IMO Resolution on PSC.

In 2017 EMSA also offered technical assistance to the Commission for the proposal for a 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 and repealing Council Directive 1999/35/EC, and supported the work of the Commission in the ex post evaluation of Directive 2009/16/EC on port State Control. Finally the Agency continued to host and enhance RuleCheck and MaKCs (see Ship Inspection Support) in accordance with the mandate by the Paris MoU Committee.

Planned Input		Actual input
Commitment appropriations in EUR	690,855	689,397
Payment appropriations in EUR	713,914	709,473
Staff	3 AD	3 AD
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.4(d) and 2.4(h). 		
Expected outcome 2017		
<p>The Agency will continue to support the Port State Control system in line with the PSC Directive (2009/16/EC) as amended. The support include 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.</p> <p>The Agency is working towards harmonising Port State Control in and by Member States, by developing 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.</p> <p>The Agency will support the Commission in the ex post evaluation of the PSC Directive (2009/16/EC) through participation in the steering committee of the relevant FWC for evaluation and impact assessment of the PSC Directive, as well as by providing relevant data from THETIS to the contractor.</p>		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To support the Commission and the Member States in improving ship safety. (A1) To maximise its support role for an efficient and expanded scope of the PSC regime.(A8) To assist the Commission, Member States and the maritime industry, where appropriate, in meeting, implementing and monitoring international and European legislation and initiatives on the reduction of SOx and NOx emissions. (C1) Support EU Strategies on regional sea basins. (D1) 		
Annual objectives 2017		
<ul style="list-style-type: none"> Assist in the publication of information relating to ships (PSC Directive 2009/16/EC as amended). Provide technical assistance as concerns the Paris MoU on Port State Control. Support the Commission in the preparatory work and for the participation to the third joint ministerial conference of the Paris and Tokyo memoranda of understanding on port State control (Vancouver, Canada, May 2017). Provide technical assistance in the deliberations in the Council and the European Parliament in relation 		

to the proposal 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 as concerns the ex-post evaluation of Directive 2009/16/EC on port State control.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Management and enhancement of harmonised training tools. 2. Keeping up-to-date the publication of banned vessels and company performance. 3. Ensuring the daily publication of the list of poor performing companies. 4. Providing statistics upon request. 5. Supporting the Commission in the implementation of the PSC Directive (2009/16/EC) as amended. 6. Supporting the Commission and the Member States in the implementation of the RoPax Directive (1999/35) for as long as it is still applicable. 7. Assistance to the Commission on the proposal 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. 8. Participation in all technical meetings and working groups of the Paris MoU, and certain policy meetings, on behalf of the Commission. 9. Assistance to the Commission in the potential revision of Annexes of the PSC Directive 2009/16/EC. 10. Assistance to the Commission in the ex-post evaluation of the PSC Directive 2009/16/EC. 	<ol style="list-style-type: none"> 1. MaKCs and RuleCheck were maintained and enhanced in accordance with the mandate by the Paris MoU Committee. Four new modules were made available to the Paris MoU users. 2. The publication of banned vessels and company performance was kept up-to-date. 3. The daily publication of the list of poor performing companies was ensured. 4. Statistics were provided as relevant, in particular within the context of the ex-post evaluation of Directive 2009/16/EC as well as to support discussions on the proposal for a 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 and repealing Council Directive 1999/35/EC. 5. Support was provided to the Commission in the implementation of the PSC Directive (2009/16/EC), in particular through the participation in the meetings of the Paris MoU, COSS and III Sub-Committee at IMO. 6. Support was ensured to the Commission and the Member States in the implementation of the RoPax Directive (1999/35/EC). 7. Support was provided to the Commission in the discussions on the proposal for a 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 and repealing Council Directive 1999/35/EC. 8. Participation was ensured in all technical meetings and working groups of the Paris MoU, and other meetings, on behalf of the Commission, in particular in the coordination meetings for defining the final outcome of joint ministerial meeting of the Paris MoU and the Tokyo MoU. 9. No assistance was requested by the Commission for revising the Annexes of the PSC Directive 2009/16/EC. 10. Statistics and technical assistance were provided to support the ex-post evaluation of the PSC Directive 2009/16/EC.

4.2 ACCIDENT INVESTIGATION

The Agency continued to manage the European Marine Casualty Information Platform (EMCIP) and coordinated a working Group of Member States' experts to improve the EMCIP taxonomy. Several documents were updated for EMCIP users, including user manuals, reporting guidelines and data quality policy. The contract for the new EMCIP was awarded in December 2016 for deployment of the new EMCIP by mid-2018. The new application will be more user-friendly and include tools to assist investigations and analysis.

EMSA continued to provide the Secretariat to the Permanent Cooperation Framework (PCF) and organised the 2nd PCF Inter-sessional seminar with focus on Human Element in Accident Investigation. Support was also provided to the different PCF Working Groups.

Training activities included three sessions of the "Core Skills for Accident Investigators" course (CSC) dedicated to both MS and ENP Countries and an e-learning module on legislation for accident investigation.

The 4th edition of the "Annual Overview of marine casualties and incidents", providing extensive data on ships involved and consequences, was published. A summary overview providing key figures was also made available.

Data from EMCIP were used to support specific projects (e.g. EfficientSea2 and Blue Battery), requests from Member States as well as internal needs.

A methodology to analyse EMCIP data with a view to detecting potential safety issues was developed, to be tested through a pilot project on fishing vessels in early 2018.

Planned Input		Actual input
Commitment appropriations in EUR	1,318,971	1,376,273
Payment appropriations in EUR	1,296,349	1,216,814
Staff	4 AD, 1 AST, 1 SNE	4 AD, 1 AST, 1 SNE
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a) and 2.4(c) 		
Expected outcome 2017		
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.		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To support the Commission and the Member States in improving ship safety. (A1) To develop practical solutions for providing operational support to Member States – at their request - concerning investigations related to serious and very serious maritime accidents. (A9) To support the Commission and EU Member States to enhance maritime safety through the analysis of accident investigation reports and by producing maritime casualty statistics and analysing trends. (A10) To become a reliable source of information and statistics for the EU on maritime matters. (D4) 		
Annual objectives 2017		
<ul style="list-style-type: none"> Ensure the proper running of EMCIP. Start the development of a more efficient and user-friendly EMCIP. Carry out analysis of the safety investigation data reports made available in EMCIP. 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. Assist the Commission in the evaluation of the Accident Investigation Directive (2009/18/EC). 		

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Supporting the Member States and the Commission in the implementation of the Accident Investigation Directive. 2. 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. 3. Monitoring and improving EMCIP data quality through sampling verification, aiming at maintaining high quality standards while reducing the burden for Member States and the Agency. 4. Developing a modern, more efficient and user-friendly platform for EMCIP, to be hosted at EMSA. 5. Investigating practical solutions for providing operational support, if requested by Member States, in investigations related to serious or very serious maritime accidents. 6. Analysing data and reports from casualty investigations and proposing any appropriate Safety Recommendations to the Commission. 7. Publishing the annual overview of marine casualties and incidents on the basis of data provided by the Member States. 8. Assist the Commission in the evaluation of the Accident Investigation Directive (2009/18/EC). 	<ol style="list-style-type: none"> 1. The Agency concluded the action plan resulting from the Workshop dedicated to implementation issues with Directive 2009/18/EC, together with the Member States and the Commission. 2. The Secretariat of the Permanent Cooperation Framework (PCF) was provided, including the organisation of the 7th PCF meeting and the 2nd PCF intersessional seminar focused on Human Element in Accident Investigation. The Agency also led the Working Group on Training and qualification of Accident Investigators and supported all other working groups established by the PCF. 3. EMCIP was maintained up and running with 388 users from 49 organisations registered. A new workflow was deployed to streamline the reporting process in EMCIP. 4. The development process for the new EMCIP was in line with the planned schedule. Consultation with experts from Member States through several meetings took place for fine tuning the requirements of the interface fitting the users' needs. New procedures were implemented to monitor the data quality in EMCIP to ensure a high quality level. 5. No request from Member States for operational support was received. 6. A methodology to analyse potential safety issues by assessing the occurrences reported in EMCIP was implemented, to be tested through a pilot project focused on fishing vessels in early 2018. 7. The 4th edition of the Annual Overview was published. Moreover, data from casualty investigations were provided in response to ad-hoc requests to support both internal and external needs. Input was provided also for the end of cycle Horizontal analysis - of the visits to MS on the implementation of the AI Directive. This also included statistics from EMCIP. 8. Support was provided to the Commission in the evaluation of the Accident Investigation Directive.

Output Indicators		Target 2017	Result 2017
EMCIP meetings	number of meetings per year	2	3
EMCIP Database	number of occurrences notified in EMCIP during the year	4000	6130
PCF meetings	number of meetings per year	1	2

4.3 TRAINING, COOPERATION AND CAPACITY BUILDING

Training and cooperation is one of the key tasks of the Agency. In 2017 the Agency delivered 18 training sessions (including PSC seminars), attended by around 431 experts from the EU Member States, Norway and Iceland, and the Paris MoU Region for the PSC seminars. In addition the Agency organised 16 training sessions for 117 experts from the enlargement countries.

Furthermore and in line with the new approach fostered by the Agency for capacity building, 14 eLearning modules were made available for a number of interested communities.

The portfolio of training activities offered by the Agency was in line with the programme defined by the representatives of the member states, Norway and Iceland during the annual meeting of the Consultative Network on Technical Assistance (CNTA).

The activities put in place confirmed their added value to support the national capacity to implement the Union acquis, to foster cooperation and to disseminate best practices, thus achieving uniform implementation of EU maritime legislation and a level playing field.

Planned Input			Actual input	
Commitment appropriations in EUR		2,256,713	1,904,178	
Payment appropriations in EUR		2,242,675	1,651,718	
Staff		6 AD ²¹ , 1 AST, 2 SNE, 1 CA	5 AD, 1 AST, 2 SNE	
Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
EC Funds for Candidate and Potential Countries	EC-DG NEAR	ongoing n/a	155,336	no extra staff
Legal Basis				
<ul style="list-style-type: none">Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.3(a), 2.3(b)2.5 and 2b				
Expected outcome 2017				
<p>To promote best practices between EU Member States and increase knowledge and awareness of solutions found, benefiting maritime safety, ship and port facility security and prevention of and response to marine pollution by ships. To offer a programme of trainings targeted to the needs of the Member States and focussed on case studies, to support better capacity building in the implementation of EU legislation.</p> <p>To support the process of approximation to EU maritime safety “acquis” for enlargement countries.</p> <p>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.</p>				

²¹ 3 AD for the European cooperation on coast guard functions in planned input and 2 AD in actual input.

Multi-annual strategic objectives

- To support the Commission and the Member States in improving ship safety. (A1)
- To become the implementing body of maritime safety related projects for IPA and ENP countries. (D2)
- To prepare IPA and ENP countries for association to EMSA's traffic monitoring services and for use of EMSA's pollution response services. (D3)
- To continue developing its role as forum for discussion of best practices. (D5)
- To consolidate its role as training provider including the use of modern techniques. (D6)

Annual objectives 2017

- Training for Member States more focussed on specialised needs, kept at least at the same level as in 2016, and complemented by e-learning modules.
- 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 and participation in relevant joint initiatives.
- Training for Member States in relation to the coast guard functions falling under the mandate of the Agency.
- Participation and support to the work of the European Coast Guard Functions Forum
- Participation and support to the work of the Mediterranean Coast Guard Functions Forum, including its Secretariat.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Up to 18 training sessions for Member States on the range of topics covered by EMSA's mandate. 2. Up to 6 sessions for training/technical assistance for officials from enlargement countries related to EU-legislation and EMSA activities. 3. Six new e-learning modules available to Member States (see also Section 4.5 Ship Inspection Support). 4. 1 Conference with representatives of the Member States for the coast guard functions falling under the mandate of the Agency. 	<ol style="list-style-type: none"> 1. 18 training sessions for Member States were organised covering both existing and forthcoming legal acts falling within the EMSA's mandate. 2. 16 sessions for training/technical assistance for officials from the enlargement countries were organised. 3. 14 new e-Learning modules were made available. 4. One event on capacity building for the competent authorities of coast guard functions falling under the mandate of the Agency (Flag State, Port State and Environment) was organised in March 2017.

Output Indicators		Target 2017	Result 2017
Training for Member States	number of MS training sessions per year	18	18
	number of MS experts attending per year	360	431
Training for enlargement countries	number of AC training sessions per year	up to 6	16
	number of AC experts attending per year	50	117
Customer satisfaction	level of customer satisfaction	>80%	>80%

4.4 MARINE EQUIPMENT AND SHIP SAFETY STANDARDS

In 2017, EMSA continued to support the Commission's Fitness Check of EU Passenger Ship Safety legislation and associated follow-up actions. The three amending Directives were published in December. Within the same framework, EMSA prepared the first version of the Guide for Small Passenger Ships using a performance-based standards approach. The Guide was finalised with the contribution of experts from Member States and relevant industry through a correspondence group and several dedicated meetings, including a final workshop in EMSA. The Guide was delivered to the Commission in December and further development will be decided in 2018.

With regard to the work on fires on the vehicle decks of ro-ro passenger ships, EMSA developed and coordinated, at technical level, the consultation on two submissions and an INF paper to the IMO. In addition, EMSA commissioned the FIRESAFE II study as a framework contract. As in previous years, EMSA hosted a workshop on this subject with the participation of representatives from the Accident Investigation Bodies and the Maritime Administrations of the Member States. EMSA continued promoting discussions at a technical level within the group of experts created in 2015.

EMSA also ensured technical support for the implementation and update of the Marine Equipment Directive (2014/90/EU). The first Implementing Regulation was published in February, providing a list of marine equipment standards, including for the first time application dates, concerning first placing in the market and last placing on board. The Agency also followed the work of the MarED Technical Secretariat for Notified Bodies and managed the contracts for the MarED database, taking into account the MED article 11 regarding the Implementing Regulation for setting the context for the electronic tag. EMSA and USCG reached an agreement on the final draft for the update of the EU-USA Mutual Recognition Agreement (MRA) Annex II in October. Within the Administrative Cooperation Group of EU Member States for Market Surveillance (MED ADCO) EMSA provided support for drafting uniform declarations of conformity and a uniform approach to the risk assessment stemming from safety issues as identified by the market surveillance authorities.

Planned Input		Actual input
Commitment appropriations in EUR	1,899,419	1,801,234
Payment appropriations in EUR	1,743,382	1,591,577
Staff	7 AD ²² , 1 AST, 2 SNE	7 AD, 1 AST, 1 SNE
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(a), 2.2(c) and 2.4(h) 		
Expected outcome 2017		
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.		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To support the Commission and the Member States in improving ship safety. (A1) To become a reliable source of information and statistics for the EU on maritime matters. (D4) 		
Annual objectives 2017		
<ul style="list-style-type: none"> Continue to assist the Commission in the development of legislation arising from the REFIT process initiated in 2014, of Directives 2009/45/EC on safety rules and standards for passenger ships, 2003/25/EC on specific stability requirements for ro-ro passenger ships, 1998/41/EC on the registration of persons on board and 1999/35/EC on mandatory surveys of ro-ro ferry and HSC passenger services. Continue to coordinate the technical discussions on Ro-Ro vehicle deck fire safety. Assist the Commission with technical advice in relation to their "Study on the safety level of specific stability requirements for ro-ro passenger ships", which aims to provide evidence on the potential safety 		

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

gap between SOLAS 2009 (as amended) and Directive 2003/25/EC (Stockholm Agreement) and the impacts of updating or repealing the Directive.

- Support the Commission and the Member States in relation to the submissions and work of the technical bodies of the IMO on passenger ship safety and to the Member States' expert group meetings, with regard to matters of Union competence.
- Update the list of standards for marine equipment subject to flag State approval and conduct technical review of safeguard clause cases.
- 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.
- Maintenance of the MarED database.
- Follow-up of the EU-USA Mutual Recognition Agreement and management of the alert system.
- Analysis of research projects relevant to ship safety.
- 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 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Providing technical support to the Commission and the Member States on the work at IMO in the field of Maritime Safety Standards. 2. In particular, the Agency will provide technical support regarding developments on passenger ship damage stability, fire safety, the ISM code and Goal Based Standards. 3. Providing technical support to the Commission in the development of relevant legislation and follow-up actions within the REFIT process of passenger ship safety legislation (Directive 2009/45/EC on safety rules and standards for passenger ships, Directive 2003/25/EC on specific stability requirements for ro-ro passenger ships Directive, 1998/41/EC on the registration of persons on board, and Directive 1999/35/EC on mandatory survey of ro-ro ferry and HSC passenger services. 4. Preparation of the update to the list of standards for marine equipment that is subject to flag State approval (yearly basis). 5. Examination of safeguard clause cases submitted under the Marine Equipment Directive. 6. 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. 	<ol style="list-style-type: none"> 1. Technical support was provided to the Commission and the Member States in IMO meetings by reviewing the meeting submissions and providing technical input for the EU coordination non-paper, particularly focused on passenger ship safety. In addition EMSA developed two submissions and one INF paper regarding ro-ro vehicle deck fires. 2. Technical support was provided for the draft biennial report on the implementation of the ISM code. A third workshop on fires on board ro-ro decks was organised with representatives from the Member States and the Accident Investigation Bodies, with contributions from industry experts and researchers. 3. In December, the amending Directives arising from the Fitness Check of passenger ship safety legislation were published. EMSA provided support to the Commission. In addition, EMSA coordinated a group of experts on the follow-up action related to small passenger ships. The associated performance-based Guide was finalised and delivered in December to the Commission. Technical advice was provided regarding five exemption requests. 4. Publication of the Annex to the first Implementing Regulation for the Marine Equipment Directive (2014/90/EC Article 35). 5. Support to the safeguard cases ongoing under the direct supervision of the market surveillance authorities within the Marine Equipment Directive (2014/90/EC). 6. No issue was raised within the alert system foreseen by the MRA signed between the EU and the USA.

Output Indicators		Target 2017	Result 2015
MarED Database	percentage per year availability of MarED DB	99	99.73

4.5 SHIP INSPECTION SUPPORT

EMSA continued to host the Management Unit of Equasis, including its Helpdesk function. In 2017 the website was redesigned and went live in April 2017. In addition, the publication of the annual statistics on the world's fleet was ensured. Equasis remains the only free of charge source of consolidated data related to the world merchant fleet and the daily number of visitors highlights its relevance worldwide.

The Agency has also further developed the MARINFO information system, incorporated it into the THETIS environment, and produced data and statistics as needed, to support the ex post evaluation of the Directive 2009/16/EC and the ex-post evaluation and impact assessment of Directive 2000/59/EC, to support the annual frequency of inspections and samples foreseen by Directive 2016/802/EU, and to support the Impact assessment for the new proposal for the PRF Directive and the deliberations for the new RoPax Directive.

RuleCheck, a decision-support tool which contains all applicable maritime legislation such as IMO Conventions, Codes, Resolutions and Circulars, ILO Conventions and Guidelines, relevant EU Regulations and Directives as well as the respective manuals and Instructions of the Paris, Black Sea and Mediterranean Memoranda of Understanding on Port State Control, was enhanced with new functionalities (myShipEU).

The eLearning platform MaKCs was enriched with a number of new modules. The tools continued to serve various user communities within and beyond the EU domain, thus supporting harmonised implementation of international conventions, global harmonisation of PSC practices, and adequate access to the up-to-date regulations and training.

Planned Input			Actual input	
Commitment appropriations in EUR		1,107,993	1,166,954	
Payment appropriations in EUR		1,088,500	1,055,817	
Staff		4 AD ²³ , 2 SNE	4 AD, 1 SNE, 1 CA	
Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
Equasis	Equasis Member States	ongoing	514,198	no extra staff
Legal basis				
<ul style="list-style-type: none">Regulation (EC) N° 1406/2002 as amended, Art. 1.2 and 2.4(d)Directive 2000/59/EC Art.12.3Regulation (EU) 2015/757 Art.21.6Commission Implementing Decision 2015/253 Art.8Directive 2009/16/EC as amended				
Expected outcome 2017				
<p>Reliable information systems that can significantly contribute towards rationalising and optimising assessment of the compliance with the requirements of International and EU legislation.</p> <p>Reliable and compatible data support the Agency's tasks in preparing and making use of up-to-date and validated information on maritime safety.</p>				
Multi-annual strategic objectives				
<ul style="list-style-type: none">To support the Commission and the Member States in improving ship safety. (A1)To maximise its support for an efficient and expanded scope of the PSC regime. (A8)To become a reliable source of information and statistics for the EU on maritime matters. (D4)				

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

Annual objectives 2017

- 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 (2016-2020) of Equasis.
- Promote and disseminate regular maritime-related statistics (possibly a publication) 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 and EU Flag Administrations.
- Enrich MaKCs with new modules supporting national authorities performing coast guard functions within the mandate of the Agency.
- Manage, upon request, the creation of more and different User Groups in RuleCheck, thus offering the option of uploading folders relevant to the work of user communities (national legislation folders).
- Provide the necessary support to the Indian Ocean Caribbean MoUs for the use of MaKCs.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Management of Equasis. 2. Publishing the annual statistical report on the world merchant fleet in Equasis. 3. Production of statistical products (regular or ad hoc) from the MARINFO database, as well as analyses, services and publications, for internal and external use, as appropriate. 4. Support data analysis pilot projects. 5. Enhancement of the MARINFO database through the promotion and development of an in-house web portal. 6. 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. 7. Further development of MaKCs to support different stakeholders exercising functions in the maritime domain and national authorities carrying out coast guard functions. 	<ol style="list-style-type: none"> 1. The function of Management Unit of Equasis was ensured by EMSA. 2. The annual statistical report on the world merchant fleet in Equasis was published. 3. Statistics were produced to support different REFIT exercises, ex post evaluations, impact assessments using MARINFO. 4. No requests were received to support data analysis pilot projects. 5. The MARINFO database was incorporated into the THETIS environment. 6. Statistics were produced and analysed to support the annual frequency of inspections and samples foreseen by Directive 2016/802/EU. 7. MaKCs was enriched with 14 new modules. The platform is available to 3000 users from 67 countries.

Output Indicators		Target 2017	Result 2017
EQUASIS - Availability of the system	percentage per year availability	99.5	99.92
EQUASIS - Users	number of users per month	35 000	33 819
EQUASIS - Contributors	number of contributing members	9-10	10
RuleCheck ²⁴	availability in percentage	85	99.97
	Maximum continuous downtime in days	9	0
RuleCheck Helpdesk Service	Percentage of requests closed in less than 9 days	75	not available ²⁵
MaKCs	Availability in percentage	85	99.87
	Maximum continuous downtime in days	9	0.12 days
	Number of modules developed	5	14
MaKCs Helpdesk Service	percentage of requests closed in less than 9 days	85	not available ²⁶

²⁴ RuleCheck and MaKCs KPIs have been adjusted for 2016 onwards. Results 2015 and targets 2017 are therefore not comparable.

²⁵ 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 is expected to be re-established by mid-2018. In the meantime, working methodologies and procedures remain in place and are stable, indicating that the targets continued to be met..

²⁶ See previous footnote.

4.6 PREVENTION OF POLLUTION BY SHIPS

In 2017, the Agency continued to support the Commission and the Member States in various fields related to the prevention of pollution by ships. Firstly the Agency provided technical assistance to the Commission for the impact assessment and the drafting of the revised PRF Directive.

As concerns the implementation of the Sulphur Directive, the Agency organised specialised training for sulphur inspectors both in-house and at national level as well as workshops to enhance uniform implementation throughout the Union, and further developed THETIS-EU with a risk-based targeting mechanism – including specific alerts from remote sensing and other available technologies.

Throughout 2017, the Agency continued to provide technical and secretariat support to the European Sustainable Shipping Forum (ESSF) and its associated subgroups. The support entailed drafting of guidance notes (namely the EMSA LNG Bunkering Guidance for Port Authorities/ Administrations and the revision of the guidance for sulphur inspectors) and submissions to IMO and providing logistical support, including hosting of the ESSF Plenary.

The Agency also provided technical assistance to the Commission and the Member States for the implementation of the Ship Recycling Regulation. In this respect the Agency finalised and published a study on the Hazardous Materials included in the EU Ship Recycling Regulation but not in the Hong Kong Convention. Finally the Agency contributed to the work of the Commission for further Technical and Operational Measures for enhancing Energy Efficiency (EE) of International Shipping, on the discussions for the Global Data Collection System for maritime transport covering fuel consumption, greenhouse gas emissions and on the further development of the Energy Efficiency Design Index (EEDI).

For the Regulation (EU) 2015/757 (EU MRV) on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, EMSA developed and delivered a training for the Flag States with particular focus on how to obtain information from THETIS-MRV to ensure compliance of ships flying their flag.

Planned Input		Actual input
Commitment appropriations in EUR	940,758	934,816
Payment appropriations in EUR	942,740	884,785
Staff	5 AD	5 AD
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.2(d), 2.4(h), 2a.2(a) and 2a.2(b) 		
Expected outcome 2017		
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.		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To assist the Commission, Member States and the maritime industry, where appropriate, in meeting, implementing and monitoring international and European legislation and initiatives on the reduction of SOx and NOx emissions. (C1) To assist the Commission, Member States and the industry in the technical development related to alternative fuels for ships. (C2) To support if necessary the Commission in setting up a Monitoring, Reporting and Verification system for emissions in line with future policy developments in this area. (C3) To contribute to the protection of the marine environment in the EU. (C4) To assist Member States in the implementation of the new rules in the field of ship related pollution. (C5) 		

Annual objectives 2017

- Technical assistance to the Commission in monitoring compliance with the requirements relating to sulphur content in fuel.
- Technical assistance to the Commission in implementing and reviewing the Directive on Port Reception Facilities.
- Technical assistance to the Commission for further actions related to air quality.
- 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 the development of a dedicated module in THETIS (THETIS-MRV) and assistance in preparing implementing and delegated acts.
- 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 782/2003 on the prohibition of organotin compounds on ships.
- Support as appropriate the Commission and Member States in the implementation of the Ballast Water Management Convention.

Planned output 2017

1. Port reception facilities:

- Organising workshops for Member State experts to improve the implementation of the Directive (guidelines, exchange of information), the reporting and enforcement (guidance on reporting, development of THETIS-EU), as well as to support the revision process (assistance in drafting the text of the revised Directive, support to the Commission in the deliberations at the Council and the European Parliament).
- Providing assistance to Member States for the uniform implementation of the Directive on the basis of the interpretative guidelines.
- Providing assistance to the PRF ESSF subgroup as technical secretariat.

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 preparation of the implementing and delegated acts.
- 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.

Actual output 2017

1. Port Reception Facilities:

- Taking into account that the Commission was working on a new proposal, it was decided not to organise a dedicated workshop on PRF. Instead a training was delivered for PRF inspectors focusing on EMSA guidance and the use of THETIS-EU. Moreover EMSA supported the revision process by providing reliable statistics for the Impact assessment, drafting text proposals for the enforcement regime and the new inspection database and by participating in a series of meetings at the request of the Commission.
- A training was delivered for PRF inspectors focusing on EMSA guidance and the use of THETIS-EU.
- EMSA participated actively in and supported as technical secretariat the last meeting of the ESSF subgroup as well as the two correspondence groups set up to support the revision process.

2. Greenhouse gases:

- The Agency contributed to the enforcement mechanisms debate by facilitating the exchange of information between MSs and the Commission e.g. information on non-compliant ships, refusal/expulsion orders, penalties, etc.
- The Agency supported as technical secretariat 6 meetings of the two ESSF subgroups.
- Comments and solutions were provided to the Commission in following international developments, notably in relation to the Energy Efficiency Design Index, its review and its

- 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 assistance to the two MRV ESSF subgroups as technical secretariat.
- Providing technical assistance for the alignment of THETIS-MRV to the Global Data Collection System if the latter is adopted by IMO.

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, developing a targeting system in THETIS-EU.
- RPAS services are offered to interested Member States to monitor emissions of ships passing their waters in order to support the implementation of Directive 2016/802/EU.
- 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.), exhaust gas cleaning systems (scrubber), biofuels and other alternative methods as required by Directive 2016/802/EU as regards the sulphur content of marine fuels.
- Providing assistance to the Commission on organisational activities to the ESSF Plenary and to its relevant Sub-Groups.
- Providing technical support to the Commission within the context of the Sulphur Committee foreseen by Directive 2016/802/EU (Art.9).
- Finalising a study on the use of fuel cells in shipping.

extension to additional ship types. The Agency participated in the relevant discussions at IMO level.

- Comments and solutions were provided to the Commission in following international developments concerning the Global Data Collection System for maritime transport covering fuel consumption and greenhouse gas emissions as well as further technical and operational measures to enhance the energy efficiency of ships. The Agency participated in the relevant discussions at IMO level and workshops jointly organised by DG MOVE and DG CLIMA.
- The Agency prepared, participated and followed up the final meetings of the MRV ESSF subgroups as technical secretariat. Concept papers were provided, in particular on the mandatory and a voluntary module of THETIS-MRV.
- The Agency participated in several information days on the THETIS-MRV, organised by DG CLIMA, ECSA and other stakeholders. The Agency also presented THETIS-MRV in the Maritime Cyprus Conference 2017.

3. Air emissions:

- The Agency provided technical assistance to the Commission in the implementation of Directive (EU) 2016/802 as regards the sulphur content of marine fuels. Assistance included 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, and calculation of shipping emission inventories for the years 2011 to 2015.
- The Agency provided technical assistance to the Member States in the implementation of the Sulphur Directive. Assistance included further enhancement of THETIS-EU to include alerts from RPAS as well as the development of a risk based targeting mechanism which was made available in April 2017.
- One workshop was organised, where the EMSA Guidance on LNG Bunkering to Port Authorities and Administration aiming at providing technical assistance to the Commission and the Member States on the use of alternative fuelling (LNG) in shipping were presented and finalised.
- One workshop was organised for the exchange of best practices on Directive (EU) 2016/802 and discussed future actions including participation of third countries in THETIS-EU.
- Assistance was provided to the Commission on organisational activities in the ESSF Plenary and its relevant Sub-Groups. The Agency organised, supported and followed up 8 meetings for LNG (one meeting), EGCS (three meetings), Competitiveness (one meeting), finance (one

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.
- Finalising Best Practise Guidance on the Inventory of Hazardous Materials.
- Performing a study on the Hazardous Materials included in the EU Ship Recycling Regulation but not in the Hong Kong Convention.
- Developing guidance manuals for Flag State and Port state Inspections with reference to the enforcement provisions of Title II of the SRR.

5. Ballast water and anti-fouling systems:

- Contributing to the implementation of the IMO Convention by following and contributing to the development on various issues, notably sampling for compliance and risk assessment, ensuring consistency between regional/national approaches in Europe and helping Member States ratify or implement the Convention.
- Providing technical assistance to the Commission and the Member States regarding the issue of anti-fouling systems, as appropriate.

6. Other:

- Monitoring and advice on international and EU developments related to other environmental issues such as Maritime Spatial Planning and Conservation and Management Tools in Areas beyond National Jurisdiction.
- Provision of technical assistance and support to the Commission and Member States in the implementation of international conventions in EU law relevant for the area of liability and compensation. This will translate into participation in the IMO meetings, organisation of workshops by EMSA and conducting of relevant studies as necessary.

meeting) and Air Emissions (one meeting). The Agency also hosted one of the plenary sessions.

- Technical support was provided to the Commission within the context of the Sulphur Committee foreseen by Directive 2012/33/EU (Art.9).
- The Agency prepared contribution to IMO (Amendments to the 2015 EGCS Guidelines, Proposal for amendments to the 2015 Guidelines for exhaust gas cleaning systems, Guidance on accidental breakdown, instrument malfunction and perceived temporary non-compliance and transient performance of exhaust gas cleaning systems) and supported the Commission and the Member States in deliberations in IMO on the 0.5% Sulphur Limit for 2020 (Proposals for the consistent implementation of regulation 14.1.3 of MARPOL Annex VI).

4. Ship recycling:

- A study on the two hazardous substances (PFOS and HBCDD) included in the annexes of Regulation (EU) 1257/2013 on ship recycling was concluded.
- Technical support to the Commission was provided within the context of the Ship Recycling Committee.
- A standard procedure was developed for DG ENV to receive through an automated process Information on Current position, Destination(s), Last port of call and Track of the last 7 days of ships suspected of using non approved recycling facilities.

5. Ballast water and anti-fouling systems:

- Technical assistance was provided to the Commission on the preparation of a Draft IMO submission on cybutryne in relation to the AFS Convention.
- Technical assistance was provided to the Commission for task Force 33 – Guidelines for Port State Control Officers on the BWM Convention.

6. Other:

- The Commission requested EMSA to develop an eLearning module (for 2018) for maritime Spatial Planning. No requests were received in the areas of Conservation and Management Tools in Areas beyond National Jurisdiction.
- No requests for assistance were received in relation to liability and compensation.

Project: SAFEMED III and new project for technical assistance in the Mediterranean Sea (SAFEMED IV)

In 2017 SAFEMED III was successfully completed and SAFEMED IV was launched, for a period of four years, until February 2021. The relevant action plan was agreed during the Steering Committee held in September 2017, and the implementation phase started on the nine components identified as relevant for the Project: Flag State, Port State, VTMS, Human Element, ISPS, Protection of the marine environment, Mediterranean Coast Guard Functions Forum, Bilateral Activities and Communication activities. The beneficiary countries are Algeria, Egypt, Jordan, Israel, Libya, Lebanon, Morocco, Palestine and Tunisia and the project has an overall budget of 4 million Euros. In 2017 six trainings with 30 participants took place. The Agency supported also three Maritime Coast Guard Functions Forum secretariat meetings, and a bilateral meeting with Libya laying down possible areas of cooperation and synergies under the umbrella of the SAFEMED IV project. Furthermore the Agency in cooperation with the Italian Coast Guard, invited the SAFEMED IV beneficiary countries who are taking part or are willing to take part in the pilot project on AIS information sharing to attend the 14th MAREΣ Experts Working Group meeting held in Rome on 6-7 December 2017. Finally the Agency participated in the annual committee meeting of the Med MoU where it received the endorsement for two proposals (standard training scheme for PSCOs to be developed and delivered by EMSA and the development of the inspection database namely THETIS-MED).

In addition in 2017 the maritime administrations of the Project's beneficiaries got access to RuleCheck and MAKCs. One dedicated eLearning module was developed for the MED MoU. Finally the Agency participated in the plenary conference of the Mediterranean Coast Guard Functions Forum held on the 12-13 October 2017 in Antalya (Turkey) and the 1st UFM Stakeholder Conference on the Blue Economy organised by DG MARE in Naples.

As maritime safety, maritime security and protection of the marine environment are common concerns of the EU Member States and non-EU countries bordering the Mediterranean Sea, SAFEMED IV will contribute to raising the safety, security and protection of marine environment standards in the region.

Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
SAFEMED III	DG NEAR	2013-2016 (extended to March 2017) 3,000,000	1,096,951	2 CAs + 1/2 SNE
New project for technical assistance in the Mediterranean Sea		2017-2021 4,000,000		
Legal basis				
<ul style="list-style-type: none">Regulation (EC) N° 1406/2002 as amended, Art. 2.5				
Expected outcome 2017				
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.				
Multi-annual strategic objectives				
<ul style="list-style-type: none">To support EU strategies on regional sea basins. (D1)To become the implementing body of maritime safety related projects for IPA and ENP countries. (D2)To prepare IPA and ENP countries for association to EMSA's traffic monitoring services and for use of EMSA's pollution response services. (D3)To consolidate its role as training provider including the use of modern techniques. (D6)				

Annual objectives 2017

Conclude the work on the implementation of the SAFEMED III project.

- Start 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.
- Continuing to provide Beneficiary countries with access to RuleCheck; developing appropriate modules and providing access to Beneficiary countries for the Distance Learning Package (DLP) for PSCOs.
- Continue with the implementation of the pilot projects to extend the cooperation on AIS related issues and the provision of CleanSeaNet services to interested beneficiary countries according to the project's 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.
- Develop a harmonised scheme for the training and assessment of competences of port state control inspectors.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Up to five technical meetings per year (seminars, workshops, training sessions). 2. Up to six activities per year (studies, technical support, exercise, etc.). 3. Provision of RuleCheck and MaKCs for relevant authorities of the beneficiaries as relevant. 4. Provision of pilot service on cooperation on AIS matters and CleanSeaNet. 	<ol style="list-style-type: none"> 1. Six trainings were organised and delivered with 30 participants. 2. Seven activities were performed (support to three meetings of the Med CGFF secretariat, participation in the annual committee meeting of the Med MoU, the MAREΣ Experts Working Group, one Steering Committee and participation to the MCGFF plenary meeting). 3. PSC officers and members of the Maritime Administrations (Flag States) from the beneficiaries have access to RuleCheck and MaKCs. Furthermore any eLearning module developed to address an international instrument (for MSs) is automatically made available to beneficiaries. 4. Beneficiary countries can join the pilot project on sharing AIS information. During the first phase the pilot project aims to bring beneficiary countries to share AIS information with other project beneficiaries while the second phase should bring them to share with selected EU MSs. In 2017, Jordan and Tunisia participated as SAFEMED IV beneficiaries. CSN services are provided to the SAFEMED IV beneficiaries under the condition that the CSN Conditions of Use are signed. In 2017 Jordan, Morocco and Tunisia were provided with CSN images.

Output Indicators		Target 2017	Result 2017
Implementation of the new Project for assistance in the Mediterranean Region (SAFEMED IV)	number of training sessions per year	Up to 5	6
	number of activities per year	Up to 6	16
	number of ENP experts attending per year	90	30 ²⁷
	level of customer satisfaction	>80%	>80%

²⁷ The SAFEMED III and the TRACECA II projects ended, respectively, on 15 March 2017 and 31 January 2017, so no training sessions were held. The inception phases of the new projects have only recently been concluded and so the number of meetings and training sessions, and therefore attendees, has been limited.

Project: TRACECA II and new project for technical assistance to the eastern EU neighbouring countries (Black and Caspian Sea)

In 2017 TRACECA II was successfully completed and the new Black and Caspian Sea Project started, for a period of four years until January 2021. The relevant action plan was agreed during the Steering Committee and the implementation phase started on the eight components identified as relevant for the Project: Flag State, Port State, VTMIS, Human Element, ISPS, Protection of the Marine Environment, Bilateral Activities and Communication activities. The beneficiary countries are Azerbaijan, Georgia, Iran, Kazakhstan, Moldova, Ukraine, Turkey and Turkmenistan and the project has an overall budget of 4 million Euros.

In 2017, one training with 38 participants took place. In addition the Agency organised a coordination meeting with the BS MoU secretariat to discuss the supporting activities (including the standard training scheme), the First Steering Committee of the Black and Caspian Sea Regions Project, a fact finding mission in Azerbaijan and Moldova, a PSC Seminar for PSCOs from the BS MoU.

Furthermore the Agency in cooperation with the Italian Coast Guard, invited the SAFEMED IV beneficiary countries who are taking part or are willing to take part in the pilot project on AIS information sharing to attend the 14th MAREΣ Experts Working Group meeting held in Rome on 6-7 December 2017.

In addition in 2017 and under component 1 of the Project (FS) staff of the maritime administrations of the project beneficiaries got access to RuleCheck and MaKCs, where a dedicated module was developed for the BS MoU. Finally the Agency ensured its presence in the Stakeholder Conference on Blue Economy in the Black Sea in Batumi, Georgia.

Project financed input				
Project	Funding source	Time frame and envelope	Financial input 2017	Staff
TRACECA II	DG NEAR	2013-2016 (extended to 31 January 2017) 850,000	788,747	2 CAs +1/2 SNE
New project for technical assistance to the eastern EU neighbouring countries (Black and Caspian Sea)		2017-2021 4,000,000		
Legal basis				
<ul style="list-style-type: none">Regulation (EC) N° 1406/2002 as amended, Art. 2.5				
Expected outcome 2017				
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.				
Multi-annual strategic objectives				
<ul style="list-style-type: none">To support EU strategies on regional sea basins. (D1)To become the implementing body of maritime safety related projects for IPA and ENP countries. (D2)To prepare IPA and ENP countries for association to EMSA's traffic monitoring services and for use of EMSA's pollution response services. (D3)To consolidate its role as training provider including the use of modern techniques. (D6)				

Annual objectives 2017

- Conclude the work related to complementary activities in the implementation of the TRACECA II project.
- Start 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 the EU RuleCheck; developing appropriate modules and providing access to Beneficiary countries for the (DLP for PSCOs).
- Launch a pilot project to extend the cooperation on AIS related issues and continue the provision of CleanSeaNet services 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 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Up to five technical meetings per year (seminars, workshops, training sessions). 2. Up to six activities per year (studies, technical support, practical exercises etc.). 3. Provision of EU RuleCheck and DLP for PSCOs as relevant. 4. Provision of CleanSeaNet services. 	<ol style="list-style-type: none"> 1. One Steering Committee took place, mainly because the implementation phase started only in the second half of the year. 2. Five activities were performed (two fact finding missions, coordination meeting with BS MoU, the MAREΣ Experts Working Group, AIS Information Sharing). Beneficiary countries can join the pilot project on sharing AIS information. During the first phase the pilot project aims to bring beneficiary countries to share AIS information with other project's beneficiaries while the second phase should bring them to share with selected EU MSs. In 2017, only Georgia was available to share data. 3. PSC officers and members of the maritime administrations (Flag States) from the beneficiaries have access to RuleCheck and MaKCs. Furthermore any eLearning module developed to address an international instrument (for MSs) is automatically made available to beneficiaries. 4. CSN services are provided to the BCSEA beneficiaries subject to the signature of the CSN Conditions of Use. In 2017 Azerbaijan and Georgia were provided with CSN images

Output Indicators		Target 2017	Result 2017
New Project for technical assistance to the Eastern EU neighbouring countries (Black and Caspian Sea)	number of training sessions per year	Up to 5	1 ²⁸
	number of activities per year	Up to 6	17
	number of ENP experts attending per year	70	38 ²⁹
	level of customer satisfaction	>80%	>80%

²⁸ The SAFEMED III and the TRACECA II projects ended, respectively, on 15 March 2017 and 31 January 2017, so no training sessions were held. The inception phases of the new projects have only recently been concluded and so the number of meetings and training sessions, and therefore attendees, has been limited.

²⁹ See previous footnote.

Pollution preparedness, detection and response

5.1 OPERATIONAL POLLUTION RESPONSE SERVICES

At the end of 2017, 17 fully equipped Oil Spill Response Vessels were available for mobilisation. Four vessel arrangements are also equipped for seaborne dispersant application, with associated dispersant stocks of 200 tonnes each. 70 quarterly and acceptance drills were undertaken in order to check and maintain the quality of the service at an appropriate level.

The vessel contracted at the end of 2016 covering the southern Black Sea entered into operational service. After expiration of the first term of the contract for the Bay of Biscay, following a procurement procedure, a new oil recovery vessel was contracted to replace the response capacity for this area. In addition, three vessel contracts, covering the southern Atlantic, western and central Mediterranean Sea, were renewed for an additional four-year period.

Implementation of the Action Plan for Response to Marine Pollution from Oil and Gas Installations continued in 2017. Following a procurement procedure, the EAS service was further strengthened through the establishment of a third equipment depot in the Adriatic Sea. 11 Equipment Condition Tests (ECTs) to assess equipment readiness and performance were conducted by EAS contractors.

In order to integrate the pollution response services into the response mechanisms of coastal States, 12 EMSA contracted vessels and two EAS arrangements were deployed in operational exercises. In addition, in 23 occasions service activation and channels of emergency communication were tested with vessel contractors and EAS operators during table-top exercises.

Within the context of cooperation between EU Agencies on coast guard functions as part of the new article in EMSA's Founding Regulation, and following an urgent request from the European Fisheries Control Agency (EFCA), the back-up vessel *Aegis I* was made available to EFCA to perform fisheries inspections and ancillary SAR duties in Mediterranean waters from August to December 2017. EMSA monitored the implementation of this charter in close collaboration with EFCA.

Planned Input		Actual input
Commitment appropriations in EUR	18,508,042	19,819,388
Payment appropriations in EUR	15,845,657	17,771,406
Staff	11 AD, 2 AST, 1 SNE, 3 CA	10 AD, 2 AST, 1 SNE, 3 CA
Legal basis		
▪ Regulation (EC) N° 1406/2002 as amended, Art. 1.2, 2.3(d) and 2.5		
Expected outcome 2017		
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. EMSA's 'toolbox' of response methods will include equipment especially designed and adapted for response operations to marine pollution from oil and gas installations.		

Multi-annual strategic objectives

- To contribute to the protection of the marine environment in the EU. (C4)
- To maintain pollution preparedness and response capability to assist Member States to effectively respond to marine pollutions from ships. (C6)
- Subject to financial and human resources availability the Agency shall extend its scope of activities to include marine pollutions from oil and gas installations. (C7)
- To support EU strategies on regional sea basins. (D1)
- To prepare IPA and ENP countries for association to EMSA's pollution response services. (D3)
- To continue developing its role as forum for discussion of best practices. (D5)

Annual objectives 2017

- 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;
 - EAS, through the provision of specialised stand-alone equipment;
 - limited stocks of dispersant;
 - technical expertise.
- Foster 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 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Manage the current stand-by service contracts, including supervision of vessel and equipment performance as well as crew capability for oil pollution response. 2. Organise the participation of EMSA's pollution response services in regional and national ship source and offshore installation oil pollution response exercises, using the mobilisation procedure of the ERCC. 3. Re-tender the stand-by oil spill response service for the Northern Baltic Sea, to replace the non-renewable contract ended in 2016. 4. Renewal of four vessel availability contracts covering the Bay of Biscay, Southern Atlantic Coast, Western Mediterranean Sea and Central Mediterranean Sea for an additional 4-year period. 5. Following the signature of the new Vessel Availability Contract for the (South) Black Sea in 2016, the vessel will undergo the preparation phase in 2017. 6. Manage EAS contracts for the North Sea and the Baltic Sea. 7. Award and implement a new EAS contract, based on the procurement procedure launched in 2016, to strengthen the response capacity in Southern Europe. 8. Implementing improvement projects to adapt and/or upgrade the capabilities and/or capacities of existing response arrangements. 9. Replace, overhaul, sell, scrap or donate ageing or obsolete oil spill response equipment, in line with the 'Equipment Policy' of the Agency. 	<ol style="list-style-type: none"> 1. The network of vessels was maintained and 17 operational vessel arrangements were in place at the end of 2017. 70 quarterly and acceptance drills were performed. 2. EMSA participated in 11 operational pollution response exercises with 12 vessels and 2 EAS systems as well as in 15 table-top exercises with 21 vessel contractors and 2 EAS contractors. 3. The procurement for a new vessel contract in the northern Baltic Sea was not successful due to the lack of bids complying with the requirements and therefore no contract was awarded. 4. Three contracts covering the Southern Atlantic Coast, Western Mediterranean Sea and Central Mediterranean Sea were renewed for an additional 4-year period. The contract for the Bay of Biscay was not renewed at the request of the contractor and following a procurement procedure, a new oil recovery vessel based in Brest, France, was contracted at the end of the year. 5. The vessel <i>Galaxy Eco</i> based in Varna, Bulgaria, successfully completed the preparation phase and entered into service. 6. The two EAS stockpiles in the Baltic Sea and the North Sea were maintained and enhanced through a new "hands-on" training programme. 8 equipment condition tests were performed. 7. A new EAS contract was awarded. The arrangement based in Ravenna, Italy, became fully operational and 3 equipment condition tests were performed. 8. The response capacity of EAS North Sea arrangement was improved through delivery of

<p>10. Management of existing dispersant stockpiles.</p> <p>11. Coordinate the mobilisation procedures for pollution response services in case of requests for assistance.</p> <p>12. Provision of expertise to Member States or the Commission in case of pollution incidents.</p>	<p>one additional current buster system.</p> <p>9. One boom system was replaced due to its deteriorated condition. Overhauling of aging equipment included two sweeping arm sets and one offshore skimmer system.</p> <p>10. EMSA managed four dispersant stocks of 200 tonnes each, in Malta (Valletta), Cyprus (Limassol), Portugal (Sines) and Spain (Las Palmas).</p> <p>11. The pollution response services were activated by Greece to support the response actions to the pollution incident resulted from the sinking of the product tanker <i>Agia Zoni II</i> in the vicinity of Piraeus. The EMSA contracted vessel <i>Aktea OSRV</i> was timely mobilised and performed two weeks oil spill response operations under the command of the Hellenic Coast Guard.</p> <p>12. At all times the expert service was available. There was no request for expertise.</p>
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Output Indicators		Target 2017	Result 2017
Stand-by Oil Spill Response Vessel Network	number of fully equipped vessels for mechanical recovery	18	17 ³⁰
	number of fully equipped vessels for dispersant application	4	4
New vessels pre-fitting	number of newly contracted vessels pre-fitted	1	1
Equipment Assistance Service (EAS)	number of stockpiles	3	3
Vessel/Equipment replacement/adaptation/upgrade	number of projects completed per year	3	5
Vessel/Equipment drills and exercises	number of drills (acceptance drills and quarterly drills) per year	70	70
	number of operational exercises per year	10 ³¹	14
	number of Equipment Assistance Service (EAS) drills	6	11

³⁰ Following a successful re-tendering for the Bay of Biscay area, pre-fitting of the new vessel is currently on-going.

³¹ EMSA participates in operational exercises which are organised by Member States. Targets and results for EMSA participation are affected by this.

	number of notification exercises per year	10	23
Response to requests for vessel/equipment services	mobilisation time in hours	max 24	24
Dispersant stockpiles	number of stockpiles	4	4
	minimum quantity of dispersants available at any time	800 tonnes	800 tonnes

5.2 CLEANSEANET AND ILLEGAL DISCHARGES

CleanSeaNet is based on permanent monitoring of coastal waters through the near real time analysis of Earth Observation (EO) Synthetic Aperture Radar (SAR) images. It is available to 28 coastal States: all of the 23 EU coastal Members; two EFTA coastal States and three candidate countries. During 2017, the service was also provided on a project financed basis to Greenland. Through the SafeMed and BCSEA cooperation programmes of the Commission, it was available across the Mediterranean, the Black and Caspian Seas to the project beneficiary countries.

In 2017, 4,066 images were delivered: 3,816 for coastal States; 177 for Greenland; 73 for the SafeMed and BCSEA programmes. A total of 4,899 possible oil spills were detected, half of which with the highest level of confidence regarding the probable detection of hydrocarbons. Seven requests for additional support were received from coastal States regarding accidental spills and emergencies. Nine operational pollution response exercises were supported by CleanSeaNet.

EMSA also began delivering services from the European Space Agency (ESA) managed satellite Sentinel-1B. This enabled the Agency to rely mostly on the Sentinels (1-A / B) to acquire the EO data needed for the service. The Sentinel 1 data license is provided to EMSA free of charge allowing for clear economic benefits and maximization of output: EMSA pays service providers for the near real time acquisition and additional processing which is required for the provision of the service. Additionally EMSA undertook comprehensive tests with ESA and industry on the operational use of the European Data Relay Satellite (EDRS), towards enabling near real time Sentinel-1 data acquisitions outside European waters.

Planned Input		Actual input
Commitment appropriations in EUR	7,214,794	5,053,936
Payment appropriations in EUR	7,150,696	4,640,991
Staff	6 AD, 1 AST	6 AD ³²
Legal basis		
<ul style="list-style-type: none"> 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 		
Expected outcome 2017		
<p>The Agency provides a 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.</p> <p>The Earth Observation Data Centre (EODC) also supports other maritime surveillance services, such as detection of targets by satellite radar (Vessel Detection System, VDS). 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.</p>		
Multi-annual strategic objectives		
<ul style="list-style-type: none"> To increase the effectiveness and efficiency of EMSA's integrated maritime information services to its full potential based on existing applications such as SafeSeaNet. (B1) To explore, at reasonable cost, in a sustainable and viable way, new capabilities offered by technology in the field of maritime surveillance for the benefit of the Commission and the EU Member States with added value for maritime safety and security. (B2) Subject to the provision of financial and human resources the Agency shall engage in supporting other communities and enhance its role as central EU data provider of maritime related information as defined by its Founding Regulation. (B4) To contribute to the protection of the marine environment in the EU. (C4) To maintain pollution preparedness and response capability to assist Member States to effectively respond to marine pollutions from ships. (C6) Subject to financial and human resources availability the Agency shall extend its scope of activities to include marine pollutions from oil and gas installations. (C7) 		

³² 1 AD for the European cooperation on coast guard functions (in actual input only).

Annual objectives 2017

- 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 considering a cost benefit perspective.
- 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.
- Support the implementation of the Action Plan for Response to Marine Pollution from Oil and Gas Installations as appropriate.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Provide CleanSeaNet satellite images and alerts to coastal States on a regular basis for the monitoring of seas and detection of illegal discharges and polluting vessels. 2. Provide assistance to coastal States and the Commission in case of accidental spills. 3. Provide training to coastal States on CleanSeaNet. 4. Organise meetings of the EMSA CleanSeaNet User Group at least once per year. 5. Develop activities with enforcement authorities to promote effective follow-up to CleanSeaNet detections. 6. Extend the EODC capabilities to support the needs of integrated maritime services. 7. Offer RPAS services to interested Member States for oil spill detection (see chapter 2). 	<ol style="list-style-type: none"> 1. Satellite images and spill alerts were provided as planned at the required level of timeliness and quality. Overall, 3816 processed and analysed images were delivered to coastal State users. 2. CleanSeaNet provided support to 7 emergency requests from Member States and the EU Commission. A total of 32 Earth Observation images were ordered to support these emergencies. 3. Two 1.5 day training sessions for Duty Officers were provided. 4. The User Group meeting was held on the 17th of May 2017. The CleanSeaNet 10 Year Anniversary event was held on the 14th and 15th of November 2017. 5. A review of the EMSA consolidated guide on "Addressing Illegal Discharges in the Marine Environment" was launched. 6. The EODC supported the planning, ordering, and delivery of EO services for multiple user communities and functions. The EODC was improved with the deployment of a new processing engine that greatly expands its capabilities. 7. RPAS operations for marine pollution detection and monitoring and emissions monitoring began in two countries in the fourth quarter of 2017 (see activity 2.1.a).

Output Indicators		Target 2017	Result 2017
Satellite images	number of images ordered and analysed per year	2800	3816
Assistance for accidental spills	percentage response rate to assistance requests	100	100
EODC operational availability	percentage per year availability of CleanSeaNet	97.5	99.7
RPAS monitoring	Flight hours	200	51 ³³

³³ Due to delays in setting up by industry and thus a limited availability of Remotely Piloted Aircraft Systems (RPAS), operations could not be provided to users with the expected number of flight hours.

5.3 COOPERATION AND INFORMATION RELATING TO POLLUTION PREPAREDNESS AND RESPONSE

The Agency continued to provide information services in the field of Hazardous and Noxious Substances (HNS) in accordance with the HNS Action Plan. More specifically, the MAR-ICE Cooperation Agreement was amended ensuring the continuation of the service up to 2022. In 2017, the MAR-ICE Network was activated five times for drills and exercises and once for a real release during a national exercise. Access to the MAR-CIS (Marine Chemical Information Sheets) information via EMSA's webportal was enhanced through a new application for mobile devices (tablets and smartphones) for offline use.

In late 2017, EMSA procured new licenses for spill modelling software to ensure continued capabilities to predict the fate and trajectory of oil and chemical spills. Support continued for the Dispersant Usage Evaluation Tool (DUET).

In order to facilitate competent use of EMSA new Equipment Assistance Service (EAS) specific on-site hands-on training was provided to equipment operators of Member States. In addition, an e-learning tool was developed for all aspects of the technical details of the equipment as well as detailed instruction on the requesting procedure.

The dissemination of information on EMSA's pollution response services also continued with the 7th Pollution Response Service (PRS) User Group workshop. Furthermore, the 13th Inter-Secretariat meeting with DG ECHO and the secretariats of the Regional Agreements took place in Lisbon. In addition, the 11th CTG MPPR (Consultative Technical Group for Marine Pollution Preparedness and Response) meeting was held in early 2017, bringing together at EU level marine pollution experts. The work on the development of guidelines and a training curriculum for oil sampling for oil "fingerprinting" continued under the CTG MPPR Rolling Work Programme. One marine pollution response expert exchange was completed under the EMPOLLEX umbrella.

The Agency also participated in HELCOM Response and OTSOPA meetings. Furthermore, EMSA actively participated in the INTERSPILL Committee meeting in preparation of the 2018 INTERSPILL Conference and Exhibition.

In addition, EMSA participated in a workshop of the DG ECHO co-financed OpenRisk project and a meeting of the Offshore Authorities Group (OAG) on behalf of DG ENER and supported DG ECHO in the organisation of the TEC-MI training workshop as well as providing a trainer for the week long course.

Planned Input		Actual input
Commitment appropriations in EUR	924,895	932,852
Payment appropriations in EUR	1,099,043	964,765
Staff	4 AD, 1 SNE	4 AD
Legal basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 1.2 and 2.3(d) 		
Expected outcome 2017		
<p>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.</p> <p>The Agency aims to assist Member States dealing with spills involving hazardous and noxious substances by providing relevant information and expertise regarding operational response to chemical spills in the marine environment.</p>		

Multi-annual strategic objectives

- To contribute to the protection of the marine environment in the EU. (C4)
- To become a reliable source of information and statistics for the EU on maritime matters. (D4)
- To continue developing its role as forum for discussion of best practices. (D5)
- To consolidate its role as training provider including the use of modern techniques. (D6)
- To use available technical knowledge to analyse research projects with a maritime safety or environmental, protection interest, where appropriate. (D7)

Annual objectives 2017

- Implementing the HNS Action Plan to facilitate the proper operation, maintenance and development of the MAR-ICE service and the MAR-CIS database.
- Cooperate with coastal States and existing 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 IMO, and relevant Regional Agreements.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Implement the HNS Action Plan: <ol style="list-style-type: none"> a. Renew the network of specialised chemical experts (MAR-ICE Network). b. Maintain and update database/datasheets of chemical substances for marine pollution response (MAR-CIS 2). 2. Develop and update marine pollution preparedness and response related information, studies, tools, reports and inventories. Maintain the Dispersant Usage Evaluation Tool (DUET). 3. Complete/ improve the linking of MAR-CIS to SafeSeaNet Central HAZMAT Database. on the basis of user feedback and new business requirements; develop/revise datasheets; 4. Coordinate the Pollution Response (PRS) User Group (formerly Vessel User Group – VUG) meeting and the CTG MPPR meetings, workshops, and expert exchange programme (EMPOLLEX), and implement the CTG MPPR Rolling Work Programme. 5. Development of an e-learning course on the activation of the Agency's pollution response services. 6. Provide operational training to Member States response teams on deployment and operation of EAS equipment. 7. Support activities of Regional Agreements, the IMO and other relevant bodies/organisations (including participation in the Arctic Council) where appropriate. 	<ol style="list-style-type: none"> 1. Implemented the HNS Action Plan: <ol style="list-style-type: none"> a. The cooperation Agreement was amended extending the service up to 2022. In 2017, the network was activated five times for drills and in one case for a release during a national exercise. b. Four new datasheets were added to the MAR-CIS database and the information of 29 existing datasheets was improved and revised. 1. New information sheets of the equipment pool of the EAS were developed and published and the DUET software tool was maintained. 2. A new version of the MAR-CIS website was launched with new functionalities and an application for mobile devices was made available for offline access to MAR-CIS information. 3. All workshops and projects were executed as planned. 4. The e-learning course on EAS was completed and is available on EMSA Extranet. 5. Two hands-on 3-day training sessions on several EAS equipment systems were provided to MS equipment operators respectively at EAS Baltic and EAS North Sea arrangements. 6. EMSA participated in the meetings of HELCOM Response and OTSOPA of the Bonn Agreement. In addition, the Unit participated in a workshop of the DG ECHO co-financed OpenRisk project and a meeting of the Offshore Authorities Group on behalf of DG ENER. Furthermore, assistance in the organisation and provision of a trainer for DG ECHO's TEC-MI workshop and participation at six meetings of the INTERSPILL Committee. The Unit also organised the 13th InterSecretariat meeting.

Output Indicators		Target 2017	Result 2017
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	33
Cooperation, coordination and information			
Coordination of the CTG MPPR	number of CTG MPPR/ InterSec meetings and workshops	3	3
Coordination of PRS meeting	number of PRS meetings	1	1
Development of e-learning courses	number of e-learning courses	1	1

Horizontal activities

6.5 COMMUNICATION, DOCUMENT MANAGEMENT, MISSIONS AND EVENTS SUPPORT

Communication

EMSA's communication activities aim to rapidly deliver objective, reliable and easy-to-understand information to the general public and any interested parties. These activities include: updating the website, extranet and intranet; answering external enquiries; supporting EMSA workshops and events; media relations; and publications. Data visualisation is increasingly used for awareness-raising of key activities on multiple channels.

In 2017, EMSA published several key publications (e.g. EMSA Outlook 2017, EMSA Facts & Figures 2016, Annual Overview of Marine Casualties & Incidents), released videos (e.g. Remotely Piloted Aircraft Systems, Equipment Assistance Service, Copernicus Maritime Surveillance), prepared branded material (e.g. roll-up stands, general EMSA posters, constellation-satellite-ship umbrella) and created data visualisations (e.g. Firesafe study, Copernicus, Automated Behaviour Monitoring).

Document Management

The Records Management Policy, revised records management practices and the creation of EMSA's historical archives were implemented in 2017. The latest was delivered, in order to meet Council Regulation (EU) 2015/497 amending Regulation (EEC, Euratom) 354/83, as regards the deposit of the historical archives of the institutions at the Historical Archive of the European Union based in Florence.

A deep revision of the filing plan of the Agency was carried out at the beginning of the year in order to be validated by the Secretary General of the European Commission and incorporated into its filing plan. At the same time, the EMSA specific retention list, the tool that helps to define which files will be part of our Historical Archives, was created and approved by the Executive Director. Both represent cornerstone instruments of the Records Management System which were published as new annexes of the Records Management Policy.

Missions

The Missions cell is in charge of the preparation and reimbursement of operational and administrative missions for EMSA staff in line with the provisions in place (Mission Guide, EMSA Financial Regulations), using an electronic missions management tool, MiMa. It continues to provide an efficient service to EMSA staff members, allowing them to fulfil their professional obligations by processing requests and claims in a timely manner.

Events support

The events support coordinates and makes necessary administrative, financial and logistic arrangements for meetings, trainings, workshops, seminars or any other event organised by EMSA (internal and external). Furthermore it manages the Agency's Conference Centre (including the implementation of the SLA with the EMCDDA for use of the space), and handles the reimbursement of experts participating in EMSA events as well as the operational management of the various service framework contracts for the cafeteria, catering, translation, etc.

Planned input		Actual input
Commitment appropriations in EUR	1,399,441	1,496,104
Payment appropriations in EUR	1,404,196	1,433,565
Staff	3 AD, 3 AST, 6 CA	3 AD, 3 AST, 7 CA

Expected outcome 2017
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).
Legal Basis
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 4 and 7
Multi-annual strategic objectives
<ul style="list-style-type: none"> To become a reliable source of information and statistics for the EU on maritime matters. (D4)
Annual objectives 2017
<ul style="list-style-type: none"> 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 management.

Planned output 2017	Actual output 2017
<ol style="list-style-type: none"> 1. Prepare regular publications and completing/updating brochures and leaflets including the new EMSA general brochure. 2. Continue to improve internal communication through the Agency's intranet. 3. 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. 4. Deliver presentations at meetings, exhibitions and conferences. 5. Support the organisation of events/meetings in the Agency. 6. Provide for timely organisation and reimbursement of missions. 	<ol style="list-style-type: none"> 1. Several publications were prepared in 2017, including the EMSA Outlook 2017 and EMSA Facts & Figures 2016 which are both geared towards a general audience. 2. Internal communication continued to improve with, for example, regular updates of newcomer interviews. 3. Data visualisation has been used in several instances to enhance the promotion of EMSA activities. 4. Several visits to EMSA took place over the course of 2017 where introductory presentations were delivered. 5. Provided necessary support for the organisation of a wide range of meetings, workshops and training at the Agency, including issuing 1328 expert reimbursements. 6. Preparation and reimbursement of 789 operational and administrative missions.

Output Indicators		Target 2017	Result 2017
Publications	number of publications/leaflets/brochures produced per year	16	21.5
Events	number of meetings/workshops organised by EMSA per year	40	49
	number of participants at EMSA meetings/workshops per year	1250	1246

6.1, 6.2, 6.3 AND 6.4 OVERHEAD/HORIZONTAL TASKS

Management team

The Agency's management team aims to deliver added value to EMSA's key stakeholders and to develop further in terms of competitiveness, customer orientation, and sound and resource-efficient management. In 2017 the Executive Director was directly supported by three Heads of Department and the Head of the Executive Office.

Organisational changes were made in 2017 to strengthen horizontal functions related to legal and financial affairs, planning and monitoring and human resources and ultimately enhance management information and oversight, in response to the additional tasks and related staff and budget assigned the Agency following the revision of its mandate towards the end of 2016, and to the steady growth over the years in project-financed activities.

The comprehensive, periodic exercise to monitor the implementation of the work programme was conducted twice, in April and in October, reporting on the delivery of planned outputs per activity and providing a qualitative assessment of performance and potential risks per activity.

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 linked to assessing the implementation of and providing input to the future revision of the Roadmap on the follow-up of the Common Approach on EU decentralised agencies, and other Agency-wide exercises. In addition, the Agency actively participates and contributes to the Standing Working Party on Implementing Rules giving effect to the Staff Regulations.

Human resources and Protocol

Following the implementation of the general provisions on the engagement of 2(f) temporary agents, a significant number of internally published positions were launched aiming at potential redeployment of staff with a view to responding more effectively to both the increased work load and the staff cuts in 2017.

The Agency also phased in, through recruitment, the new posts granted for the European cooperation on coastguard functions tasks, in line with Regulation (EU) No 2016/1625 of the European Parliament and of the Council amending Regulation (EC) No 1406/2002 establishing a European Maritime Safety Agency.

The Human Resources Unit continues to make efforts to automatize, digitalise and streamline procedures to enhance its efficiency and effectiveness. This has been apparent in 2017 with the changes in procedures following the adoption of new implementing rules, as well as through the further development of the e-personal files and electronic requests.

Training is used to strengthen EMSA staff in developing their capabilities, expanding their knowledge and their competences, in order to better achieve EMSA's objectives. A wide variety of courses were made available to staff, including e-learning and online development opportunities allowing greater flexibility and contributing to the personal and professional development of EMSA staff skills. Cooperation with the EMCDDA was further enhanced through their participation at training sessions organised by EMSA. Furthermore, new framework contracts were signed for management training and personal and professional skills training.

Protocol activities focused on assisting the Agency and its staff in the application of the EU Protocol of Privileges and Immunities and the Protocol between EMSA and the Portuguese Government. EMSA successfully worked together with the Portuguese authorities in finding solutions to apply the existing Protocol between EMSA and the Portuguese Government.

Legal and financial affairs, Facilities and Logistics

Ex-ante verification of all budgetary and legal commitments and other financial operations was carried out, thus ensuring legal and financial assistance and advice. More than 11,300 verification files were handled and 77 procurement procedures were initiated in 2017.

Internal Rules, guidelines and templates were maintained and updated. In addition, helpdesk assistance and in-house trainings were provided. The administrative procedures were further streamlined and all preparatory work was executed in order to implement EMSA e-procurement as from 1st January 2018 (encompassing and internal tool and external e-procurement modules i.e. e-notices, e-tendering and e-submission).

The main focus in the field of Facilities and Logistics was to further enhance safety procedures, to complete several projects related to the fitting out of EMSA premises taking into account security, safety, environmental and occupational health aspects.

Operations support (ICT)

Focusing on ICT service operation, high availability measures were achieved on infrastructure global availability for EMSA hosting (100%) and BCF hosting (99,9%) and on corporate services internal availability (99,9%). The infrastructure, application support and corporate teams handled more than 500 ITIL events (questions, fixes, incidents and problems), the ICT service desk handled more than 2.500 requests (tickets), and the application and project team handled more than 200 applications release deployments.

Cyber-security was also addressed through concrete steps to improve EMSA protection. An EUCI (European Opinion Classified Information) secure network was designed and implemented for the exchange of information with the Commission in a secure and efficient manner. CERT EU (Computer Emergency Response Team for the EU institutions) tests for newly released applications were implemented. Work on IT infrastructure perimeter logs in cooperation with CERT EU was finished and logs are now consistently monitored by CERT EU.

E-recruitment was rolled out and horizontal applications to support Maritime applications were delivered (LDAP and sFTP). Development on a new Identity Management (IdM v2) horizontal platform continued.

Infrastructure for teleworking and staff e-learning was prepared for execution in 2018, including making Skype for Business and Jabber (telephone software) available for all EMSA users.

Staff ³⁴		Actual input
Management/bureau/horizontal tasks ³⁵	10 AD, 7 AST, 1 CA	10 AD, 8 AST
Human Resources	3 AD, 5 AST, 5 CA	4 AD, 5 AST, 6 CA
Legal and Financial Affairs, facilities and logistics	6 AD, 4 AST, 6 CA	5 AD, 4 AST, 6 CA
Operations support (ICT)	1 AD, 8 AST, 2 CA	1 AD, 8 AST, 2 CA
Expected outcome 2017		
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 the Financial and Staff Regulations.		
Legal Basis		
<ul style="list-style-type: none"> Regulation (EC) N° 1406/2002 as amended, Art. 5, 6, 13.7, 15, 18 and 19 		

³⁴ Financial resources not applicable here as already distributed across the activities.

³⁵ This number includes the Executive Director and his staff, Heads of Department and their staff, Heads of Horizontal Units as well as the ICC and accountancy functions.

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).
- Achieve efficiency gains, streamline organisational structures and build flexibility, agility.
- Further develop effective, innovative and results oriented solutions.
- Maintain good corporate governance and transparency.

Annual objectives 2017

- Monitor the implementation of the annual programme 2017 (Section III of the Single Programming Document 2017-2019).
- Further implementation of remaining requirements and principles emanating from the revision of the Framework Financial Regulation, the Joint Statement of the European Parliament, the Council of the EU and the 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 and records management policy and the archiving policy and relevant ICT tool(s).
- Maintain good relations with the Portuguese Authorities to allow for a smooth implementation of the existing Protocol between EMSA and the Government of Portugal.
- Provide business continuity and advanced ICT services.

Planned output 2017

Management team

1. Work programme, including staff and budget planning (Single Programming Document).
2. Action Plan for Pollution Preparedness and Response.
3. 5 year Strategy implementation.
4. Annual report (Consolidated Annual Activity Report) and accounts.
5. Preparation of meetings of the Administrative Board, decisions, minutes.
6. Regular monitoring of on-going projects.
7. Quality Management development.
8. Internal Control Standards.
9. Monitoring and reporting on the implementation of the work programme and the budget.

Human resources and Protocol

1. Management of the establishment plan (new recruits, redeployment, turnover, etc.).
2. Management of staff related budget.
3. Preparation and Implementation of rules giving effect to the Staff Regulations.
4. Implementation of rights and obligations of EMSA staff members.
5. Improvement and updating of e-HR tools.
6. Implementation and improvement of existing HR policies.
7. Implementation of the Staff Development Policy.
8. Staff Helpdesk on HR matters and communication on staff related issues.

Actual output 2017

Management team

1. Preparation of required programming documents (Single Programming Document and Financial Statement) in line with applicable legal basis, multi-annual resource framework (Commission Communication) and strategic framework (5-year Strategy and Action Plan for Pollution Preparedness and Response).
2. Annual programming and reporting on the Action Plan for Pollution Preparedness and Response is achieved through the relevant SPDs and CAARs.
3. The 5-year Strategy is reflected in the SPD with a reporting on the status of strategic objectives in the multiannual section and a link to activities and annual actions supporting the strategic objectives.
4. Timely submission of the Consolidated Annual Activity Report 2016 and accounts.
5. Effective preparation of and follow-up to Administrative Board meetings and decisions including support in 2017 for the High Level Steering Committee for the External Evaluation of the Agency .
6. Monitoring of on-going projects through monthly reports and further development of supporting tools.
7. The V&I QMS was audited and remains in compliance with ISO 9001:2015 requirements.
8. Internal Control Standards maintained, keeping a high and efficient level of internal controls.
9. Bi-annual agency-wide exercise to monitor the implementation of the work programme.

9. Implementation of the National Experts on Professional Training programme and traineeship policy.
10. Implementation of the Protocol Agreement.

Legal Financial and Facilities Support

1. Verification of commitment and payments files.
2. Organising and executing transfers.
3. Budget follow-up.
4. Providing budget overviews.
5. Advising on and verifying contracts and procurement procedures.
6. Providing legal advice to the Executive Director and the units.
7. Managing facilities and support services of the Agency.

Operations support (ICT)

1. Maintaining and enhancing a state-of-the-art Data Centres to host maritime applications.
2. Providing advanced business continuity and ICT security services.
3. Maintain the Business Continuity Facility.
4. Providing 24/7 ICT Operations for hosting of maritime applications.
5. Providing technical expertise to support operational maritime applications.
6. Providing technical support to the development and rollout of new maritime applications and major upgrades to existing ones.
7. Providing Horizontal ICT Service Platforms for Maritime Applications.
8. Providing solutions to share and exchange documents more efficiently and in a secured fashion with the Commission.
9. Providing EMSA's Corporate Services Platforms (email, Electronic Document Management System, file & print, etc.) and associated Business Continuity Platforms and Services
10. Providing advanced ICT desktop, mobility and collaboration services to staff.

Human resources and Protocol

1. During 2017, EMSA recruited 20 Temporary Agents. Against an establishment plan of 212 posts, the occupation rate at the end of 2017 was 98.58%, which includes 4 offer letters that were sent out for candidates joining at the beginning of 2018. The occupation rate without these offer letters is 96.7%. The turnover for statutory staff for 2017 was 4.51%. In addition, 12 contract agents, 7 Seconded National Experts, 13 trainees and 2 National Experts on Professional training were recruited.
2. The staff related budget amounted to € 22 145 313€ and was managed effectively.
3. The Agency has adopted various implementing rules in the course of 2017 and will continue to develop and adapt the existing ones.
4. The implementation of staff rights and obligations is carried out on a continuous basis.
5. Further developments on the time management application (TIMA) were carried out, as well as on the e-personal file application in 2017. Staff can now submit more different types of electronic requests related to their professional and personal situation.
6. Staff of the Agency carried out 615 days of training in 2017 (not including coaching, mentoring or language training) corresponding to an average of 2.5 days of training per staff member.
7. Two National Experts on Professional Training came to EMSA in 2017 and 13 traineeships took place.
8. Continued implementation of the Protocol Agreement in cooperation with the Portuguese authorities for the benefit of the Agency, its staff and their families.

Legal Financial and Facilities Support

1. Over 11,300 verification files and 750 helpdesk requests were handled. The number of commitments a posteriori was established at a very low level and the portion of payments carried out within time limit stabilised at a high level.
2. Budget transfers were organised and executed.
3. Publishing the Monthly Report on Budget and Financial Management that includes information on budget execution, expiring contracts, negotiated procedures, expiring bank guarantees etc.
4. Budget overviews provided on request.
5. Support provided for the initiation of 77 procurement procedures and several trainings on procurement delivered and new set of trainings developed and delivered on EMSA E-procurement.
6. Internal Rules, guidelines and templates were kept updated; legal and financial advice was provided to EMSA in various areas as well as ensuring external legal support, when required.
7. Management of facilities was ensured and further projects related to security, safety and fitting out premises were implemented. Over 1,200 helpdesk requests were handled.

Operations support (ICT)

1. Modern computing technology in place (Hyperconvergent computing).
2. Security log consolidation finished, CERT-EU monitors

	<p>the log on daily bases, CERT-EU penetration tests for application releases in place, EUCI network developed and implemented.</p> <ol style="list-style-type: none"> 3. Business continuity certification for Maritime Applications ongoing. 4. Global availability on EMSA hosting – 100%, Global availability on BCF hosting – 99,9%. 5. Events handled - > 500, ICT service desk tickets handled - > 2500. 6. Application release deployments - > 200. 7. ENC, sFTP, LDAP, horizontal platforms rolled-out, IdM v.2 project ongoing. 8. EU CI network designed, implemented and certified 9. Corporate services internal availability – 99,9%. 10. PCM and e-Recruitment applications rolled-out, Skype for business, Jabber (software telephone) rolled-out and support the teleworking.
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Output Indicators		Target 2017	Result 2017
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 100%	<i>High level of implementation with the exception of RPAS services delay. A budget amendment was adopted to return unused subsidy to EU budget</i>
Establishment plan execution rate	execution rate establishment plan	as close as possible to 100%	96.7% ³⁶
Budget execution rate - commitment appropriations	execution rate commitment appropriations	as close as possible to 100%, and in any case above 95%	98%
	execution rate payment appropriations	as close as possible to 100%, and in any case above 95%	96%

³⁶ This result does not include the 4 offer letters sent which, if included, would result in an execution of the establishment plan of 98.58%.

Part II Management

2.1 Administrative Board

Meetings

EMSA's Administrative Board held three meetings in 2017 and each was preceded by meetings of the Administrative and Finance committee where technical, financial and administrative agenda items were reviewed in detail. Recommendation 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.

The Administrative and Finance Committee's mandate was renewed without amendment at the November 2017 Administrative Board meeting.

Steering and assessing 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.

In terms of planning, the Draft Single Programming Document 2018-2020, and the associated Draft Budget 2018 and Establishment Plan 2018 were adopted at the November 2017 meeting, subject to the outcome of the budgetary procedure. This represented the conclusion of the second cycle of the multi-annual programming requirements in line with the EMSA Financial Regulation, notably the integration in a single document of both annual and multiannual programming, as well as quantitative and qualitative information formerly included in the Multi-Annual Staff Policy Plan, and detailed financial information from the Financial Statement for the year $n+1$. The second cycle of the new programming approach was initiated at the same November meeting with the consideration of the very first version of the Draft Single Programming Document 2019-2021, followed by its adoption by written procedure launched in December 2017 and ending early January 2018, ahead of the transmission of the planning document to the institutions on 31 January 2018 in the context of the establishment of the budget 2019.

In relation to reporting, the Administrative Board adopted the EMSA Consolidated Annual Activity Report (CAAR) 2016, and provided a positive assessment, covering strategic and operational achievements as well as the management of the Agency.

Monitoring ongoing operational and administrative developments

In addition to multi-annual programming for future years and assessing past performance, the Administrative Board kept abreast of the Agency's ongoing work through regular updates provided by the Agency on a wide range of activities and issues. Standard items such as the update on vessel and equipment procurement under the Anti-Pollution Measures throughout the year, in view of possible implications for future programming, resulted in an amendment of programming for 2018 by written procedure in December 2017, in which the Administrative opted for the establishment of a second Equipment Assistance Service (EAS) for the Northern Baltic, instead of a third attempt to contract an oil recovery vessel for covering that area.

The EMSA Administrative Board took note of the Study on the cost-effectiveness and efficiency of EMSA oil pollution response services and of the status of the RPAS operations, which were experiencing delays linked to the pioneering nature of the civilian maritime RPAS services, notably technical issues faced by the contractors, such as the complexity of mounting sensors on small aircraft, and issues related to the legal framework such as difficulties obtaining the permits to fly from the national authorities. The delay in the deployment of RPAS operations resulted in a budget amendment which included a reduction of the EU subsidy corresponding to the amount that could not be consumed in 2017 and that related to the European cooperation on coast guard functions.

The Administrative Board also continued to be informed throughout the year of funds cashed for project-financed activities.

Administrative Agreements

In 2017, 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 revised Founding Regulation:

- Tripartite Working Arrangement between the European Border and Coast Guard Agency (FRONTEX), the European Fisheries Control Agency and the European Maritime Safety Agency determining precise forms of cooperation on coast guard functions;
- MoU between EMSA, the International Oil Pollution Compensation Funds and the International Group of Protection and Indemnity Clubs relating to the hire rates and charges of EMSA pollution response assets;
- SLA between the Joint Research Centre of the European Commission (JRC) and EMSA regarding the hosting, operation of, and data transfer from the ECCAIRS/EMCIP Platform;
- Cooperation Agreement between the European Commission (DG ENV) and EMSA 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;
- SLA between the NCA and EMSA for the hosting, maintenance and operation of the North Sea/Atlantic and HELCOM AIS Regional servers and their connection with SafeSeaNet;
- SLA between the ICG and EMSA for the hosting, maintenance and operation of the Mediterranean AIS regional server and its connection with SafeSeaNet;

Following the Agency's practice, the administrative arrangements considered by the Administrative Board by written procedure, were presented at the planning stage at Administrative Board meetings preceding the launch of the required four-week consultation process.

Written procedures

In 2017, the Administrative Board continued to use the "written procedure" as an efficient means of consultation and decision making in relation to both Administrative Arrangements and Implementing Rules, given possible operational or administrative time constraints that are not synchronised with the actual convening of Administrative Board meetings. The Agency's practice of informing the Administrative Board of developments prior to the written procedures, in the case of Administrative Arrangements, and of providing an accompanying explanatory note in the case of Implementing Rules, continued.

External Evaluation

In line with article 22 of its Founding Regulation 1406/2002, the EMSA Administrative Board commissioned an independent external evaluation on the implementation of the Agency's Founding Regulation.

The final evaluation report was approved by the EMSA Administrative Board at its 48th meeting in June 2017.

On the EU added value, the evaluation is positive, concluding that while EMSA is providing relatively greater value to the small Member States than to the large ones, (contributing to a more uniform level of maritime safety) this evaluation concludes that, overall, by working at an EU level, EMSA is providing added value in all its areas and for all its stakeholders."

The cost effectiveness of the Agency's activities is also 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."

More details of the outcome of the evaluation are provided in this document in section II (b) "External Evaluations".

Administrative Board Recommendations

In line with article 22.3 of its Founding Regulation 1406/2002, following the adoption by the EMSA Administrative Board of the final external evaluation Report of the Agency, at its November meeting the Administrative Board issued its recommendations regarding changes to the Regulation, the Agency and its working practices.

While highlighting that in the current financial and political framework, any new tasks assigned to the Agency should be supported by the necessary human and financial resources in an efficient manner, the Recommendations cover the following Agency's activities:

- European Maritime Transport Space Without Barriers;
- EMSA's information systems;
- Methodology for Visits to Member States;
- Oil pollution response services;
- Relations with Stakeholders;
- Internal communication;
- Capacity Building;
- Supporting EU policies, and helping export EU solutions, internationally.

The Agency has drawn-up an Action Plan for the implementation of these recommendations.

Chairmanship of the EMSA Administrative Board

The November 2017 meeting was the last EMSA Administrative Board meeting under the Chairmanship of Mr Frans Van Rompuy, a longstanding representative for Belgium at the EMSA Administrative Board and its Chairman since November 2011.

Under his Chairmanship, several key achievements have benefited the Agency's governance, staff and ultimately, its stakeholders:

- development of the EMSA Administrative Board Handbook in November 2012;
- revision of mandate of the Budgetary Committee, renamed Administrative and Finance Committee with "A" and "B" items allowing the Administrative Board to focus on strategic orientations for the Agency's activities and discussions on substance;
- revisions of the EMSA's mandate in 2013 and 2016;
- development of procedures following the 2013 revision of the EMSA Founding Regulation: procedures for the implementation of Articles related to the technical assistance in relation to core and ancillary tasks and the procedure for consideration by the Board of legal commitments;
- adoption of the Conflict of Interest Policy of the EMSA Administrative Board in November 2013;
- adoption of the EMSA Communication Strategy in March 2014;
- adoption of the EMSA Fraud prevention and detection strategy in November 2015;
- adoption in November 2013 of the update of the 5-year strategy;
- transition towards the Single Programming Document and the Consolidated Annual Activity Report;
- the new Methodology for Visits to Member States in 2015;
- chairmanship of the High Level Steering Group on the external evaluation and the adoption of the recommendations issued by the EMSA Administrative Board in November 2017.

Following their election by acclamation in November 2017, the new Chairman and Deputy Chairman of the EMSA Administrative Board, Mr Andreas Nordseth (DK) and Mr Nicola Carlone (IT), took up their positions as of 5 December 2017.

2.2 Major events

Organisational changes

In 2017, the Agency continued to seek the best possible response, in terms of organisational structure, to the evolving business needs and services provided to Member States, the Commission and its stakeholders in general. In order to ensure maximum efficiency, and making use of internal mobility and redeployment measures which also serve to foster motivation amongst staff, two reorganisations took place in 2017.

The first reorganisation, in May 2017, related mainly to: reinforcing the Planning and Monitoring function within the Executive Office in particular in relation to budget planning and monitoring; improving the distribution of tasks within Department A by strengthening financial and procurement support in the Financial and Legal affairs Unit A.2 creating a dedicated sector for that purpose, and clarifying the distribution of tasks and responsibilities between two distinct sectors within the Human Resources and Internal Support Unit.

The second reorganisation, in November 2017, related to the integration of the Accounting function into the Executive Office, recognising the special role within the Agency.

Publication of vacancy for Executive Director of EMSA

Following the renewal, based on the proposal by the Commission, of the mandate of the Executive Director Markku Mylly by the EMSA Administrative Board in March 2017, the Commission published the vacancy notice for his successor in December 2017.

Accounting function

As of November 2017, the Accounting function was integrated into the Executive Office, recognising the special role within the Agency. During the last months of the year, the Accounting Officer *ad interim* (appointed by the Administrative Board on 16 March 2017) was absent due to a prolonged sick leave. As a contingency measure for the good functioning of the Agency and to ensure business continuity EMSA set up a task-force composed of staff with relevant profiles to ensure the day-to-day tasks related to the accounts (payments, treasury, etc).

The Single Resolution Board (SRB - an EU Decentralised Agency based in Brussels) agreed to enter into a Cooperation Agreement to assist EMSA and to provide consultancy services in the area of accounting. The SRB Accounting Officer was therefore appointed EMSA Accounting Officer *ad interim* by the EMSA Administrative Board by written procedure on 12 December 2017.

EU Subsidy reduction

In order to allow for returning EU subsidy appropriations which could not be consumed, a reduction of the EU subsidy related to the cooperation on coast guard functions and in particular delays in the setting up civilian maritime RPAS services (see 2.1 "Monitoring ongoing operational and administrative developments" above) and amounting to -9,852,910.76 € of CA and -8,532,144.22€ of PA (in combination with a minor increase for aligning with the Commission's budget loading) was carried out via the first amending budget, adopted in November 2017.

2.3 Budgetary and financial management

In 2017, the Agency executed 63,396,275 € in Commitment Appropriations (CA)³⁷, representing 98.04% of the total budget of the year, and 55,133,787 € in Payment Appropriations (PA)³⁸, amounting to 96.25% of the total budget when only counting C1 Funds (appropriations voted in the current budget). After taking into account automatic carry-overs of payment appropriations (C8 Funds, appropriations carried over automatically), the Agency reached 97.32% of payment execution.

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 programme of work. Actions in Title 3 and 4 can have a multi-annual dimension, extending over more than one financial year. Title 4 – Anti-Pollution Measures with its multiannual funding for the action of EMSA in the field of response to pollution caused by ships and to marine pollution caused by oil and gas installations had 22,800,000 € in commitment appropriations of which 97.57% were committed³⁹ and 20,245,132 € in payment appropriations of which 98.41% were paid. The multi-Annual Schedule of Payments and specific follow-up on Anti-Pollution Measures were regularly reported to the Administrative Board and the Commission.

Planning and monitoring tools and processes were in place to ensure a 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 control and transparency were also in place to support sound financial management throughout the year and across the Agency. Each operation was subject to at least one ex-ante verification, and ex post verifications were organised on a sample basis using risk analysis or on an ad-hoc basis.

Transfers were kept a low level, nine in total, and managed in line with the relevant rules (Article 27 & 28 of the EMSA Financial Regulation and Article 10 of EMSA Implementing Rules). 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.

The Administrative Board adopted EMSA Amending Budgets (Article 34 of EMSA Financial Regulation) in order to record extra income generated during the course of the financial year for SAFEMED, Black and Caspian Sea Project, EU Funds for IPA countries, FRONTEX Service Level Agreement, EFCA Service Level Agreement, CleanSeaNet (services to Greenland), COPERNICUS, EQUASIS, THETIS-MRV, Emissions Inventories, LRIT and Miscellaneous Revenue. These funds could only be loaded once cash payment was received by the Agency in the bank account.

A number of appropriations were carried over to 2017, mostly related to the multi-annual operations of the Agency. Out of the 33,951,343 € of C8 funds (appropriations coming from previous years) carried over, 57% were consumed, 2% were de-committed (reserved appropriations that were cancelled), and 41% were left as open amount to be consumed in the following years. The breakdown per title of carry-over cancelled is provided below.

Carry-over cancelled		
	Commitment Appropriations (C1)	Carry-over cancelled
Title 1	22,371,549	57,808
Title 2	3,956,487	74,691
Title 3	15,537,790	427,968
Title 4	22,800,000	231,716
Total	64,665,826	792,182

³⁷ 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.

³⁸ Payment appropriations cover expenditure arising from commitments of the current year and/or earlier years, which are due for payment in the current year.

³⁹ A budgetary commitment is money reserved for payments to be executed at a future date.

2.4 Human Resources management

Implementing Rules

Implementing rules in the following areas were adopted in 2017:

- Middle management appraisal;
- Implementation of telework at EMSA;
- Assistance with home care and care for a sick child.

Human Resources' policies and processes were adapted to comply with the adopted rules. In addition, the Human Resources Unit continued to develop new Implementing Rules in close cooperation with the Standing Working Party on Implementing Rules and the EMSA Staff Committee, which will come into force in the course of 2018.

Mobility

During 2017 internal mobility has become an integral part of the HR dynamics in EMSA, as a follow up of the adoption of the general implementing rule on the engagement of CEOS Article 2(f) temporary agents and in order to ensure that the Agency can fulfil its tasks whilst being able to meet the required staff cuts. A significant number of positions were published internally in 2017.

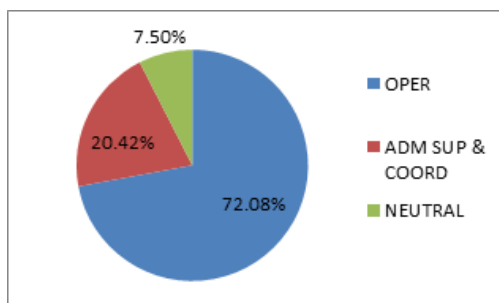
eHR Tools

The Agency carried out further developments to make the IT applications used to implement the recording of working hours for its flexible working time system more user friendly. Developments were also made to the e-personal file application to enable staff to submit even more different types of electronic requests related to their professional and personal situation in the e-personal file application. Management and HR can electronically approve these requests and the respective supporting documents are automatically stored in the relevant section of the personal file. This application continues to result in time savings for both staff members and the HR team.

Benchmarking

The Framework Financial Regulation establishes the obligation for Agencies to carry out a benchmarking exercise to provide justification of administrative expenditure in a more structured way. At this stage, the implementation of these provisions consists of a job screening exercise, which is an essential element of the wider benchmarking exercise, with a special focus on the ratio of jobs in the area of administration and coordination. Screening also improves transparency on how jobs are assigned and facilitates better informed strategic decisions on resource allocation. The common screening methodology for Agencies was developed by the Sub-Working Group on Benchmarking set up by the EU Agencies Network, in close cooperation with the relevant Commission services.

For 2017 the methodology was applied for the fourth time to EMSA's situation in order to identify a screening type and a screening category for each EMSA post at 31/12/2017. The results are as follows:



The total 'overheads' figure (corresponding to the 'administration and coordination' category) in EMSA at 31/12/2017 is 20.42%, slightly lower than the figure of 21.80% reported for 2016.

The detailed results broken down by screening type and category can be found in Annex IV.

2.5 Assessment by management

The Agency's operational and administrative activities in 2017 were carried out in accordance with the work programme for the corresponding year, with the necessary guidance and support of the Administrative Board. Regular consultations through the Administrative Board meetings and the written procedure mechanism allowed for transparent and constructive exchange of information between the Agency and its governing body.

The Agency focused on delivering core tasks and maintaining a high level of quality alongside the implementation of the "redeployment pool" cuts on the one hand, with minus 4 posts on existing tasks, and the phasing in of the new tasks related to cooperation on coastguard functions and the resources assigned to it, plus 14 posts for new tasks. This was achieved through efficient planning, deployment and monitoring of financial and human resources. Organisational adjustments in 2017 focused on key horizontal tasks to support and enhance management information, and the new budget structure effective from 2016 continued to have a positive impact on the Agency's performance.

The budget was implemented in accordance with the principle 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 systems 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.

2.6 Budget implementation tasks entrusted to other services and entities

Not applicable.

2.7 Assessment of audit results during the reporting year

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 2017 were addressed and there were no pending actions that could have a negative influence on the risks linked to the Agency's activities in 2017. In particular, all action plans stemming from past audits were implemented within the agreed time frame; by 31 December 2017 all action plans were closed with the exception of one audit recommendation which was ready and forwarded to IAS for review and 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 or external, and the EMSA follow-up", the outcome of the different audits as well as the state-of-play of the implementation of the different action plans to address detected shortcomings were reported on a regular basis throughout the year to EMSA's Administrative Board.

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 3 times per year by these auditing bodies and their audits cover all identified audit risks.

2.7.1 IAS

IAS Audit on Project Financed Actions at EMSA

In line with the IAS "Strategic Audit Plan for the European Maritime Safety Agency", during the course of 2016, IAS performed an audit on Project Financed Actions at EMSA. The final audit report for this audit was issued early 2017.

The overall objective of the audit was to assess the design and the effectiveness and efficiency of the management and control systems put in place by EMSA to implement project-financed actions under the delegation agreements with the Commission and via SLAs with other cooperation partners. The scope of the audit covered the design and implementation of the procedures and workflows for managing and implementing project-financed actions.

IAS concluded that the services offered by EMSA under project-financed actions comply with the applicable rules and agreements in force and EMSA delivers agreed, high-quality services to its stakeholders, which are adapted to their business needs. In addition, the IAS acknowledged that EMSA faces specific challenges as regards the agreements concluded with several Directorates-General of the European Commission, which are not harmonised and could be interpreted differently. IAS stated further that the European Commission and the decentralised Agencies have not agreed on common principles to cover and/or charge project overhead costs and to calculate these costs.

Taking into account this background, the IAS concluded that, overall, EMSA's management and control systems for project-financed actions are adequately designed and effectively and efficiently implemented. However, the IAS identified areas for improvement related to the availability of management information on the planning and use of resources for project-financed actions.

IAS issued three recommendations of which one was accepted by the Agency. The Agency prepared an action plan for the accepted recommendation.

The rejected findings are closely related to the fact that a standard full-cost-reimbursement methodology for Project-Financed Actions (PFAs) which can be applied by all Agencies is not available. The financial contribution to be paid for a PFA is the result of a negotiation between the Agency and the Commission. The rejection of two out of three findings, both categorised as Very Important, was justified by the fact that EMSA considered that instead of developing its own approach it would be more efficient to deal with this at a horizontal level for all decentralised agencies who have signed PFA

agreements. EMSA stated that it was willing to participate together with other Agencies and relevant parties in a working group/task force, established by the Commission, aiming at the development of common principles to calculate, cover and charge project overhead costs to PFAs.

The IAS report was presented by representatives of the IAS and discussed at the EMSA Administrative Board meeting in June 2017. The Commission, represented at the meeting by the Director-General of DG MOVE, recognised the need for transparency on the use of resources for PFAs, the development of a common methodology, and the provision of horizontal guidance.

The Board took note of the report and the points of view of the IAS and EMSA, and welcomed the suggested next steps to ask the Commission to provide horizontal guidance on PFAs and the calculation of agencies' costs relating to PFAs. As a result, IAS has requested the Secretary General of the Commission to develop horizontal guidance following the results of an audit on Project Financed Actions in EMSA (Common Approach).

IAS Audit on Human Resources Management at EMSA

The "Human Resources Management" at EMSA was included in the 2017 audit plan, which was prepared in coordination with the Agency.

The overall objective of this audit was to assess the design and the effectiveness and efficiency of the management and control systems put in place by EMSA to implement "Human Resources Management". The scope covered the design and implementation of the procedures and workflows for human resource management. In particular, the areas covered were: HR implementing rules; policies and procedures; the general management of the HR function; the strategic and operational HR planning; monitoring and reporting; staff selection and recruitment; training; performance management; ethics and fraud prevention. The audit focused on the period 2015-2017.

Following this audit IAS concluded that EMSA has set up a strong and experienced team for the human resources management and the team is adequately staffed and supported by tailor-made tools developed by the Agency. IAS also stated that the procedural framework is well advanced and ensures consistent application of the rules in force. Based on these factors the IAS concluded that EMSA's management and control systems put in place for human resource management are adequately designed, efficient and effectively implemented and they adequately support the Agency in achieving its strategic objectives.

In arriving at the above conclusion, no critical or very important risks that may affect the achievement of the business objectives for the processes audited were identified. IAS identified three important and two desirable recommendations. The Agency accepted all recommendations and has developed an action plan to address all suggested improvements.

2.7.2 ECA

Following its audit for the financial accounts for 2016 the European Court of Auditors issued the opinion that the Agency's annual accounts were reliable and the transactions underlying the annual accounts were legal and regular in all material aspects. Following the audit performed, the ECA issued two observations which do not call the Court's opinion into question. All observations are fully addressed by the Agency and there are no outstanding actions to be taken in relation to the comments from the Court.

In accordance with Article 107 of the Agency's Financial Regulation, the audit on the Agency's financial accounts 2016 was partially performed by an external audit firm, Ernst and Young. To this end, the Agency launched, early 2017, a tender procedure. The costs for the audit performed by the external audit firm (27,663.65 EURO covering the audit on the Accounts 2016 and 2017) were borne by the Agency.

2.7.3 QMS Audit

The annual verification audit of the Agency's Visits & Inspections Quality Management System (V&I QMS) was successfully performed by TUV Rheinland Portugal without any non-conformity. The audit concluded that the V&I QMS is effectively established and maintained in line with the Quality Policy and objectives and in full compliance with ISO 9001:2015 requirements.

2.8 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 2017, all audit recommendations issued by 31/12/2017 and earlier had been implemented.

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 2015, the Agency confirmed that it has implemented all the necessary actions to address previously identified areas for improvement.

Although the Agency did not receive individual questions, the Agency provided information on the general questions, as described below. The follow up regarding the European Parliament's general questions concerning all Agencies is ensured by the Coordination of Agencies.

Conflicts of interest and transparency

The Agency has adopted a policy for whistleblowers which provides staff with all relevant information on whistleblowing and at the same time ensures that members of staff who report serious wrongdoings or concerns in good faith are afforded the outmost confidentiality and greatest degree of protection against any retaliation as a result of their whistleblowing. The policy also addresses the protection of the personal information of the whistleblowers, the alleged wrongdoers, the witnesses and any other persons involved in the reported case.

No cases were reported in 2015, 2016 or 2017.

Prevention and management of conflicts of interests and transparency

The Rules of Procedure of the EMSA Administrative Board, in particular Article 12 thereof, stipulate that, upon taking up duties, all members and alternates of the Administrative Board must sign a 'Declaration of Commitment and Confidentiality' ('the Declaration') and must provide their CVs.

The Agency reminds all persons concerned to update the Declaration on a regular basis. Furthermore, Members and Alternates of the Agency's Administrative Board are requested, at the beginning of each meeting of the Administrative Board, to declare any interest which might be considered prejudicial to the treatment of any item on the agenda.

EMSA has made available on its website the Model Declaration, from which each individually signed Declaration does not deviate, the list of all members/alternates of the Administrative Board who have signed this Declaration, as well as their CVs.

It should be noted that the majority of the members of the Administrative Board are either officials of the Member States' transport administration or of the European Commission, posts which are invested with the duties, obligations, and responsibilities associated with public service and institutional representation. It is thus important to highlight that any conflict of interest is also declared by the members/alternates of the Administrative Board to their sending authorities/institution.

As a final remark, EMSA's tasks concentrate on technical as well as operational assistance and the Agency rarely takes decisions which directly affect third parties or have significant economic impact. While EMSA may be indeed exposed to the risk of conflict of interest, the risk is assessed as being much lower than in some other agencies.

Contacts with stakeholders and lobbyists

EMSA did not take specific initiatives related to contacts of the Agency with lobbyists as, due to the nature of its activities, contacts with lobbyists are not part of its remit.

Although not in EMSA's founding Regulation, the Agency will further look into this matter.

Gender imbalance of 20 % / 80 % within the Agency's Management Board members and alternate members

Members/alternates of the Agency's Administrative Board are nominated by the Commission and the Member States. The issue of gender balance was discussed during the Agency's Administrative Board meeting. The Agency encouraged Member States and the Commission to take the issue into account when appointing members to the Administrative Board.

Part II (b) External Evaluations

In line with article 22 of its Founding Regulation 1406/2002, the EMSA Administrative Board commissioned an independent external evaluation on the implementation of the Agency's Founding Regulation. The final evaluation report was approved by the EMSA Administrative Board at its 48th meeting in June 2017.

Concerning the EU added value, the overall conclusions drawn by the evaluators (Ramboll) are the following: "The evaluation identifies many areas and mechanisms through which EMSA is reinforcing EU or national initiatives by coordinating and aggregating expertise and knowledge (e.g. information systems, trainings, visits), harmonising the implementation of legislation and practices (e.g. inspections), and topping up the Member States' capabilities (e.g. oil pollution response).

Overall, the evaluation finds that the results of EMSA's work could not have been fully achieved through efforts made at a national and/or international level. This is particularly the case in the area of Monitoring, Surveillance, and Information Sharing. The findings are more nuanced in the area of Environmental Challenges and Response, where until recently the tasks have been carried out solely by the Member States.

While EMSA is providing relatively greater value to the small Member States than to the large ones, (contributing to a more uniform level of maritime safety) this evaluation concludes that, overall, by working at an EU level, EMSA is providing added value in all its areas and for all its stakeholders."

In its Final Assessment, Ramboll concludes: "The challenges faced by the maritime sector cannot be overcome at national level. By operating at EU level, EMSA is providing significant added value to the Member States. EMSA has become an important and respected player in the maritime community, providing world-class services that enhance the ability of stakeholders to respond to the challenges and, ultimately, make the EU maritime sector safer and more secure.

In the absence of EMSA, the activities the Agency undertakes would not be carried out at the same level (or would not be conducted at all). A discontinuation or reduction of EMSA's mandate would have significant negative impacts on maritime safety and security in Europe: standards and practices in the field would be significantly less harmonised, there would be less sharing of data, information and practices, and this would ultimately have a negative impact on maritime safety and security."

In particular, in relation to efficiency and cost effectiveness, the evaluation assesses that: "EMSA's subsidy from the European Commission has remained relatively static over the years, despite an increase in the scope of the tasks allocated to the Agency. The evaluation finds that the efficiency of the Agency has been increasing, as evidenced by a lower share of overhead expenditure, the take-up of new tasks without additional resources. This improvement is partially due to the positive effect of 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."

In line with article 22.3 of its Founding Regulation 1406/2002, following the adoption by the EMSA Administrative Board of the final external evaluation Report of the Agency, at its November meeting the Administrative Board issued its recommendations regarding changes to the Regulation, the Agency and its working practices, and the Agency has drawn-up an Action Plan for the implementation of these recommendations.

More detail is provided under section II.2.1 "Administrative Board" and the full evaluation report is available on the agency's website: <http://emsa.europa.eu>

Part III Assessment of the effectiveness of the internal control systems

3.1 Risk Management

Risk

EMSA adopted in 2012 a Risk Management Policy 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 an action plan to reduce the potential consequence of each identified risk to an acceptable level.

The Agency continued with the further development regarding risk management more in particular with its alignment and integration with the Agency's Quality Management System for Visits & Inspections. As part of the audit of this Quality Management System, the Risk Process was fully audited and no non-conformities were found.

In accordance with the Risk Management Policy the risk register was fully updated in 2017. The update of the Agency's risk register did not result in any major changes and no critical risks that could lead to a formal reservation to the Authorising Officer's annual declaration of assurance were identified.

During 2017 none of the previously identified risks materialised.

Data protection

With a view to achieving compliance with the requirements of the upcoming Data Protection legislation, and as recommended by the European Data Protection Supervisor (EDPS) and the inter-Agency subnetwork of DPOs (Data Protection Officers), a draft 'Gap analysis and action plan on the reform of the Data Protection legal framework' was launched, to be finalised and made available to all staff in 2018. In 2017 EMSA staff were kept informed of the upcoming amendments by the EMSA DPO.

3.2. 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.

In order to formalise the internal control system, the Agency has implemented a full set of Internal Control Standards (ICS) and minimum requirements which were adopted by the Administrative Board (November 2009). These Internal Control Standards are based on, and fully in line with, equivalent standards established by the European Commission for its own departments.

Examples of measures already in place are: implementation of organisational structures; development of several staff policies and operational procedures; provision of training in various areas; setting of clear objectives and monitoring them through well-developed management reporting and monitoring tools including performance indicators, risk management and business continuity plan. Taken together, these measures constitute the internal control system of the Agency.

The effectiveness of the Agency's internal control system is subject to an annual assessment. To this end the Internal Control Coordinator provides a detailed report to the Executive Director.

One of the key elements of EMSA's internal control system is the control and registration of exceptions to established regulations, policies, (implementing) rules and procedures. An exception is any transaction, financial or operational, which requires an approach that deviates from EMSA's regulations, policies, (implementing) rules and procedures.

A total of 12 of such exceptions were registered during the course of 2017, of which eight ex-ante (approval for a future foreseeable deviation) and four ex-post (approval after the deviation had occurred) exceptions. The areas in which exceptions were reported mainly concerned: contract management and payments (three exceptions) and exceptions related to the reimbursement of experts (six exceptions). 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. All exceptions were categorized as low risk. The value of the exceptions with financial impact varied between 50 and 8000 EUR. Where necessary, corrective actions were carried out or clarifications were given in order to avoid similar situations occurring in the future.

As from 2017 the a-posteriori commitments are incorporated in the register of exceptions. During the course of 2017 three a-posteriori commitments were recorded in the register of exceptions.

The Annual risk analysis carried out by the Agency's Internal Control Coordinator did not reveal any risks that could lead to a reservation in the Annual Declaration of Assurance.

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 2017 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; and various progress reporting exercises at unit and department level. In addition, a comprehensive exercise to consolidate existing data and assess the overall level of implementation of the Work Programme, as well as signal potential risks, was exercised in 2017. The exercise was conducted twice, in April and in October, and the Agency remained on track towards a high level of implementation of the Work Programme 2017. 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. 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 *ad interim*'s certification of the provisional accounts by 1 March 2018 (Art. 98 and 99, EMSA Financial Regulation) provided 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 Standards (as reported under 3.1. and 3.2 respectively).

The work of the Internal Audit Service and the European Court of Auditors concerning the Agency in 2017 and the follow-up by the Agency is reported in section 2.7.

The Internal Control Coordinator ensures and assesses, on a yearly basis, the effectiveness of the Agency's key internal control systems, including the process carried out by implementing bodies, if any (Internal Control Standard No. 15). 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 ISO⁴⁰ 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 for organising and performing its visits and inspections activities (V&I). The V&I QMS was certified by TUV Rheinland Portugal in 2016 and the annual verification audit of 2017 revealed a very good level of efficiency and effectiveness of the system, thus providing additional assurance that the Agency's core tasks are performed at highest management standard.

Based on the positive experience of using ISO QMS Standard (9001:2015), the Agency has decided to initiate a new project for using ISO Standard 20001:2011 – IT Service Management System (IT SMS) as the main framework for organising and performing its IT based activities and maritime information systems.

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.

⁴⁰ ISO – International Organization for Standardization - <https://www.iso.org/home.html>

Part V Declarations of assurance

Internal Control Coordinator



Declaration of assurance

Declaration of the EMSA Internal Control Coordinator

I declare that in accordance with the Commission's communication on clarification of the responsibilities of the key actors in the domain of internal audit and internal control in the Commission, I have reported my advice and recommendations to the Executive Director on the overall state of internal control at EMSA.

I hereby certify that the information provided in Part III of the present Consolidated Annual Activity Report is, to the best of my knowledge, accurate and exhaustive.

Internal Control Coordinator

Place Lisbon..... date 12.04.2018^I

Signed:


Tom Van Hees



Declaration of assurance

Declaration of the Executive Director

I, undersigned, Markku Mylly, Executive Director of the European Maritime Safety Agency, 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 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 assessment of internal controls, the work of the Internal Control Coordinator, the observations of the Internal Audit Service and the Court of Auditors and the recommendations from the European Parliament's Committee for Budgets 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 and the institutions in general.

Executive Director

Place Lisbon date 30/9/2018

Signed:

Annexes

Annex I. Core business statistics

EMSA Key Performance Indicators 2017

Activity/service/ product	Performance Indicator		Target 2017	Result 2017
2.1 EU vessel traffic monitoring				
SafeSeaNet system operational, including requirements under the Reporting Formalities Directive (2010/65/EU)	1	percentage per year availability of the central SSN system	99%	99.61%
	2	hours maximum continuous downtime of the central SSN system	12h	9h20m
	3	reports per year AIS	1800 million	5,641,759,824
	4	notifications per year (Port +, Incident reports + MRS)	4.5 million	7,211,826
SafeSeaNet system reporting performance, including requirements under the Reporting Formalities Directive 2010/65/EU	5	percentage of responses to Member States' requests delivered in accordance with SafeSeaNet IFCD (time) requirements	99%	100%
IMDatE availability	6	percentage per year availability of IMS platform	95%	99.37%
	7	hours maximum continuous downtime of IMS platform	12h	9h59
Integrated Maritime Services Availability	8	percentage per year availability to Member States	95%	99.27%
	9	percentage per year availability to EU NAVFOR	95%	99.24%
	10	percentage per year availability to EFCA	95%	99.24%
2.2 EU LRIT Cooperative Data Centre and LRIT IDE				
EU LRIT CDC System operational	11	percentage per year availability	99%	99.88%
	12	hours maximum continuous downtime of EU LRIT DC	4h	1h18
EU LRIT CDC reporting performance	13	percentage position reports delivered according to IMO requirement (periodic reports: 15 min; polls: 30 min)	99%	99.74%
EU LRIT CDC Web user interface	14	percentage per year of availability to users	99%	99.84%
LRIT-IDE System operational	15	percentage per year availability of LRIT IDE in accordance with IMO requirements	99.9%	99.93%
	16	hours maximum continuous downtime of LRIT IDE	4h	4h
2.3 THETIS Information System				
System operational	17	percentage per year availability of THETIS	96%	99.96%
	18	hours maximum continuous downtime	6h	0
Helpdesk	19	percentage of requests closed in less than 5 days	75%	not available ⁴¹

⁴¹ The statistics required to report on KPIs 19, 25, 26, 60 and 64 have not been available since November 2016, following a change of contractor and ticketing tool. The capability to support these KPIs is expected to be re-established by mid-2018. In the meantime, working methodologies and procedures remain in place and are stable, indicating that the targets continued to be met.

Activity/service/ Product	Performance Indicator		Target 2017	Result 2017
7.71 THETIS MRV				
THETIS MRV	20	Timely delivery of tasks foreseen by the Cooperation Agreement	THETIS MRV operational	yes
	21		Minimum one workshop/training organised	yes
7.72 Emission Inventories				
Emission inventories	22	Inventories of shipping emissions based on shipping activity data will have to be attributed per Member State in their relevant sea areas EEZ (Exclusive Economic Zone), PCZ (Preferred Conservation Zone), SECAs (Sulphur Emission Control Areas) for the period 2012-2017	New functionality in THETIS-EU operational	yes
	23		Calculation and analysis of inventories of shipping emissions for the period 2016	no ⁴²
	24		Minimum of one workshop organised	yes
2.4 Maritime Support Services				
MSS 24/7 availability	25	average time in hrs for feedback or resolution of issues relating to emergencies, incidents in maritime applications or urgent helpdesk requests	<2	not available ⁴³
	26	average time in working hrs for feedback or resolution of issues relating to non-urgent helpdesk requests or scheduled interventions	<8	not available ⁴⁴
	27	reporting on the SafeSeaNet implementation and data quality (overall and per Member State)	20 reports	25
7.5 COPERNICUS				
Copernicus services availability	28	percentage per year availability of Copernicus services	95%	99.37%
7.2 FRONTEX SLA				
Frontex service availability	29	percentage per year availability to Frontex	95%	99.83%

⁴² The delivery of the technical solution was postponed, meaning that calculation and analysis were delayed.

⁴³ See footnote for KPI 19.

⁴⁴ See footnote for KPI 19.

Activity/service/ product	Performance Indicator		Target 2017	Result 2017
3.1 Classification societies				
Inspections	30	number of RO inspections per year	16-20	16
	31	percentage of planned inspections and visits completed	100%	100%
Reports	32	number of reports per year	16	19
End-of-cycle reports and draft assessment reports	33	number of reports per year	5-7	4 ⁴⁵
3.2 STCW				
Inspections and visits	34	number of inspections and visits per year	7-9	8
	35	percentage of planned inspections and visits completed	100%	114.3% ⁴⁶
Reports	36	number of reports per year	7-9	7
STCW Information System	37	percentage per year availability	95%	99.66%
3.3 Visits to Member States to monitor implementation of Union law				
Visits	38	number of visits per year	16-18	17
	39	percentage of planned visits completed	100%	106.25% ⁴⁷
Reports	40	number of reports per year	16-18	12 ⁴⁸
3.4 Maritime Security				
Inspections	41	number of missions per year	12-15	10 ¹
	42	percentage of planned missions completed	100%	83.3% ¹
Reports	43	number of reports per year	30-35 min	18 ¹
3.6 Horizontal analysis and research				
Analyses on the basis of full or part cycles or series of visits and inspections	44	number of horizontal analyses per year	2-3 min	2
	45	percentage of planned analyses completed	100%	100%

⁴⁵ One End-of-Cycle report planned for 2017 was issued early, in December 2016, and another was produced by the Commission without EMSA involvement.

⁴⁶ Achievement is measured against the bottom of the number range.

⁴⁷ Achievement is measured against the bottom of the number range.

⁴⁸ The new Methodology for Visits to Member States provides that draft reports of new cycles of visits are sent to the visited Member State for factual corrections before they are finalised. This has increased the time for a final report to be sent after a visit has been completed, so reporting is lower than expected.

Activity/service/product		Performance Indicator	Target 2017	Result 2017
4.2 Accident investigation				
EMCIP meetings	46	number of meetings per year	2 min	3
Accident database	47	number of occurrences notified in EMCIP during the year	4000	6130
PCF meetings	48	number of PCF meetings per year	1	2
4.3 Technical assistance (training and cooperation)				
Training for Member States	49	number of MS training sessions per year	Up to 18 min	18
	50	number of MS experts attending per year	360	431
Training for enlargement countries	51	number of AC training sessions per year	Up to 6	16
	52	number of AC experts attending per year	50	117
Client Satisfaction	53	level of customers' satisfaction	>80%	>80%
4.4 Marine equipment and ship safety standards				
MARED Database	54	percentage per year availability of MARED DB	99% min	99.73%
4.5 Ship Inspection Support				
Equasis Availability of the system	55	percentage per year availability of Equasis	99.50%	99.92%
Equasis Users	56	number of users per month	35 000	33 819
Equasis Contributors	57	number of contributing members	9-10	10
RuleCheck	58	availability in percentage	85% min	99.97%
	59	maximum continuous downtime in days	9 max	0
RuleCheck Helpdesk Service	60	percentage of requests closed in less than 9 days	75% min	not available ⁴⁹
MaCKs	61	percentage of requests closed in less than 9 days	85% min	99.87%
	62	maximum continuous downtime in days	9 max	0.12 days
	63	number of modules developed	5 min	14
MaCKs Helpdesk Service	64	percentage of requests closed in less than 9 days	85% min	not available ⁵⁰
7.1 SAFEMED III and New Project for assistance in the Mediterranean Region				
Implementation of the SAFEMED III and the new Project for assistance in the Mediterranean Region	65	number of training sessions per year	Up to 5 min	6
	66	number of activities per year	Up to 6 min	16
	67	number of ENP experts attending per year	90	30 ⁵¹
	68	level of customers' satisfaction	>80%	>80%
7.4 TRACECA II & New Project for technical assistance to Eastern EU neighbouring countries (Black and Caspian Sea)				
Implementation of the TRACECA II and the New Project for technical assistance to the Eastern EU neighbouring countries (Black & Caspian Sea)	69	number of training sessions per year	Up to 5 min	1 ⁵²
	70	number of activities per year	Up to 6 min	17
	71	number of ENP experts attending per year	70	38 ⁵³
	72	level of customers' satisfaction	>80%	>80%

⁴⁹ See footnote for KPI 19.

⁵⁰ See footnote for KPI 19.

⁵¹ The SAFEMED III and TRACECA II projects ended, respectively, on 15 March 2017 and 31 January 2017, so no training sessions were held. During the inception phases of the new projects, the number of meetings and training sessions, and therefore attendees, was limited.

⁵² See footnote for KPI 67.

⁵³ See footnote for KPI 67.

Activity/service/ product	Performance Indicator		Target 2017	Result 2017
5.1 Operational Pollution response services				
Stand-by Oil Spill Response vessel network	73	number of fully equipped vessels for mechanical recovery	18	17 ⁵⁴
	74	number of fully equipped vessels for dispersant application	4 min	4
New vessels pre-fitting	75	number of newly contracted vessels pre-fitted	1	1
Equipment Assistance Service (EAS)	76	number of stockpiles	3	3
Vessel equipment replacement/adaptation/upgrade	77	number of projects completed per year	3	5
Vessel/Equipment drills and exercises	78	number of drills per year (acceptance and quarterly drills)	70	70
	79	number of operational exercises per year	10	14
	80	number of Equipment Assistance Service (EAS) drills per year	6	11
	81	number of notification exercises per year	10	23
Response to requests for airplane services	82	mobilisation time in hours	24h max	24
Dispersants	83	number of stockpiles	4	4
	84	minimum quantity of dispersants available at any time (tonnes)	800 min	800
5.2 CleanSeaNet and illegal discharges				
Satellite images	85	number of images ordered and analysed per year	2800	3816
Assistance for accidental spills	86	percentage response rate to requests for assistance	100%	100%
EODC operational availability	87	percentage per year availability of CSN	97.50%	99.7%
RPAS monitoring	88	Flight hours per year	200	79 ⁵⁵
5.3 Cooperation, Coordination and Information				
Response to requests for assistance to MAR-ICE	89	percentage of responses within 2 hrs	>75%	100
	90	percentage of responses within 4 hrs	<25%	0
Developing datasheets	91	number of datasheets produced	25	33
Coordination of the CTG-MPPR	92	number of CTG MPPR meetings and workshops	3	3
Coordination of PRS meeting	93	number of PRS meetings per year	1	1
Development of e-learning courses	94	number of e-learning courses per year	1	1

⁵⁴ Following a successful re-tendering for the Bay of Biscay area, pre-fitting of the new vessel is on-going.

⁵⁵ Due to delays in setting up the service by industry and thus a limited availability of Remotely Piloted Aircraft Systems (RPAS), operations could not be provided to users with the expected number of flight hours.

Activity/service/ product	Performance Indicator		Target 2017	Result 2017
6.5 External communication, protocol and events support				
Number of publications/ leaflets/brochures produced	95	number of publications/leaflets/brochures produced per year	16	21.5 ⁵⁶
Events	96	number of meetings/workshops organised by EMSA per year	40	49
	97	number of participants at EMSA events per year	1250	1246 ⁵⁷
6.1, 6.2, 6.3 and 6.4 Overhead/horizontal tasks				
Audit	98	ECA recommendations implemented in time	100%	100%
	99	IAS recommendations implemented in time	100%	100%
Planning	100	Implementation of the Work Programme	as close as possible to 100%	High level of implementation with the exception of RPAS services delay. A budget amendment was adopted to return unused subsidy to EU budget.
Establishment plan execution rate	101	execution rate establishment plan (percentage of occupied posts against the Commission's 2018 proposal)	as close as possible to 100% (multi- annual target)	96.7% ⁵⁸
Budget execution rate - commitment appropriations	102	execution rate commitment appropriations	as close as possible to 100% and in any case 95	98%
Budget execution rate - payment appropriations	103	execution rate payment appropriations	as close as possible to 100% and in any case above 95	96%

⁵⁶ The weighting of the publication is dependent on the man hours involved in the production. This can vary from 0.33 for a one-sided A4 page layout to 1.5 for the more lengthy corporate documents.

⁵⁷ The definition for this KPI does not allow taking into consideration all the events organised by the events cell. This has been corrected for 2018.

⁵⁸ This result does not include the 4 offer letters sent which, if included, would result in an execution of the establishment plan of 98.58%.

Operational Agreements active in 2017

Contractor	Subject	Start Date	End Date
CEDRE - CEFIC	MAR-ICE Network	17/10/2014	16/10/2022
Danish Maritime Authority	HELCOM and North Sea AIS Server	11/12/2016	31/01/2017
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 development of inventories of shipping emissions based on shipping activity data for domestic, short sea and international shipping through a functionality in THETIS-S including the relevant technical assistance	06/10/2015	05/10/2018
DG ENV	Cooperation Agreement for the support of the implementation of Directive 2012/33/EU as regards the sulphur content of marine fuels and relevant technical assistance	03/09/2014	02/09/2017
DG GROW	Implementation of the maritime surveillance component of the Copernicus security service	03/12/2015	31/12/2026
DG MARE	Creation of a European coastguard function	15/09/2016	31/12/2017
DG MOVE	Provision by EMSA of technical assistance for maritime security 1	29/10/2013	No end date
DG NEAR	Grant contract for the implementation of the Action "TRACECA Maritime Safety & Security II"	16/06/2014	31/01/2017
DG NEAR	Grant Contract for the implementation of the SAFEMED III Action	16/06/2013	15/03/2017
DG NEAR	Preparatory measures for the participation of enlargement countries in EMSA's work	23/10/2015	22/04/2018
DG NEAR	Maritime Safety, Security and Environmental Protection in the Black and Caspian sea Regions	01/11/2016	28/03/2021

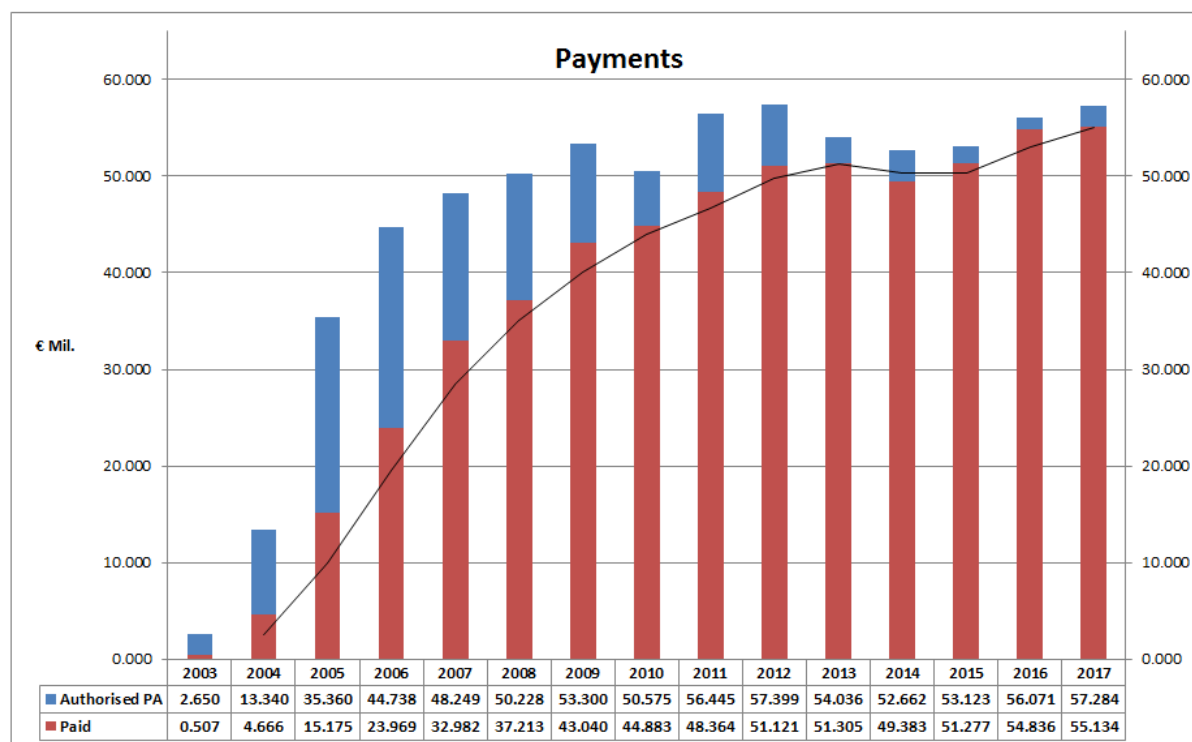
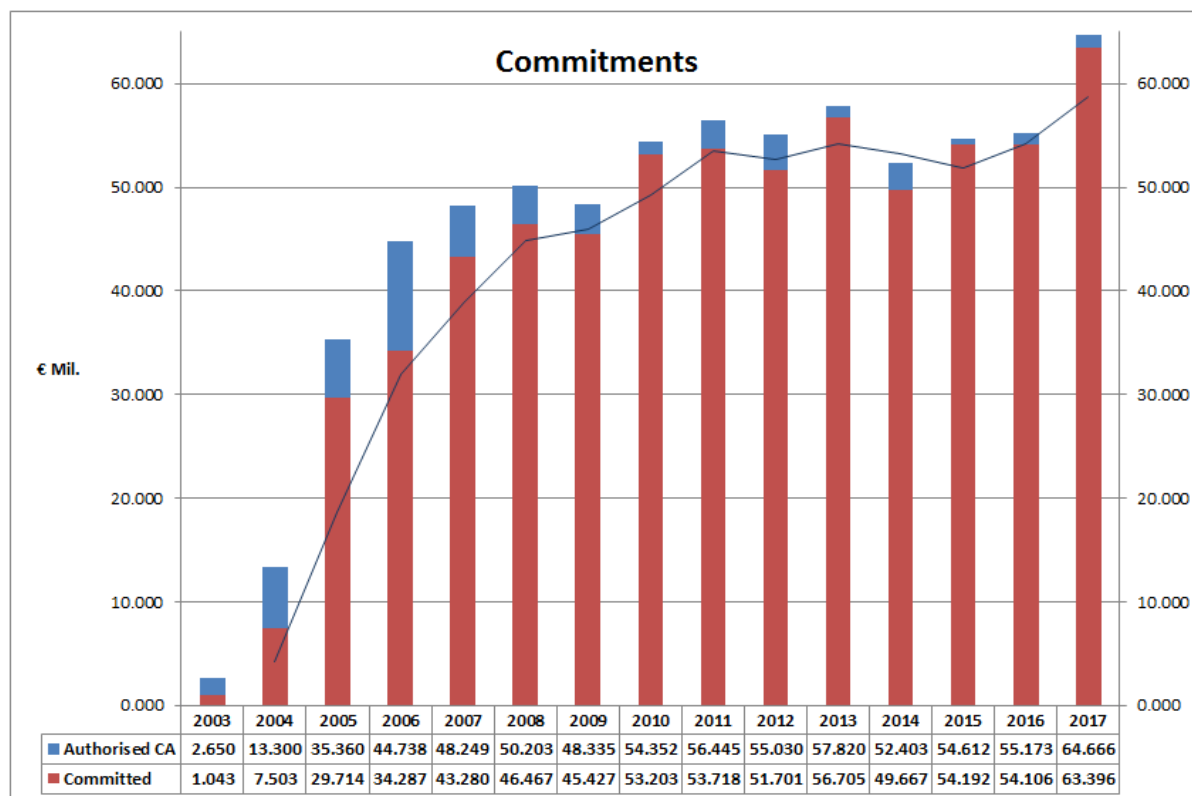
Contractor	Subject	Start Date	End Date
DG NEAR	SAFEMED IV, EuroMed Maritime Safety Project	01/01/2017	21/03/2021
EFCA - European Fisheries Control Agency	EFCA MARSURV	26/06/2015	25/06/2018
EFCA - European Fisheries Control Agency	MARSURV-3 EFCA	17/12/2012	16/12/2018
EQUASIS members	MOU on the establishment 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	01/07/2020
ESA - European Space Agency	SAT-IAS Data Processing Centre (DPC) Block 2 software	18/02/2015	No end date
ETSI - European Telecommunications Standards Institute	MOU ETSI - EMSA for collaboration in the field of marine equipment	26/05/2014	25/05/2017
EUNAVFOR - Athena Atalanta	Delivery of an integrated maritime monitoring service	06/04/2011	05/04/2019
EUROCONTROL	NAVIGATION SAFETY FOR RPAS	13/12/2016	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	30/04/2019

Contractor	Subject	Start Date	End Date
FRONTEX and EFCA	Interagency cooperation between Frontex, EFCA and EMSA on coast guard functions	17/03/2017	16/03/2021
International Mobile Satellite Organization	IMSO AUDIT	18/02/2016	30/06/2017
International Mobile Satellite Organization	IMSO AUDIT – LRIT-IDE	06/06/2017	No end date
Interspill LTD	Interspill Series of Conferences and Exhibitions - Memorandum of Understanding	13/12/2016	No end date
Italian Coast Guard - Comando Gen.del Corpo delle Capitanerie di Porto	SLA EMSA ICG REGIONAL SSN SERVER (16/17)	22/10/2016	21/10/2017
Italian Coast Guard - Comando Gen.del Corpo delle Capitanerie di Porto	SLA EMSA ICG REGIONAL SSN SERVER (16/17)	25/10/2017	28/02/2018
Italian Coast Guard - Comando Gen.del Corpo delle Capitanerie di Porto	MEDITERRANEAN REGIONAL SSN SERVER	22/10/2015	28/02/2019
JRC - Joint Research Centre	Hosting, Maintenance and Enhancement of EMCIP Platform	04/12/2013	03/12/2017
JRC - Joint Research Centre	Hosting & Maintenance of EMCIP Platform	02/09/2016	01/09/2017
JRC - Joint Research Centre	Hosting and operation of EMCIP Platform and support for the transfer of ECCAIRS/EMCIP relevant data from the JRC to the EMSA	14/12/2017	13/12/2018
MAOC - Maritime Analysis and Operations Centre	Operational assistance and training	12/08/2014	11/08/2019
MARine Environmental and TEchnology Centre - Instituto Superior Tecnico	Cooperation agreement MARETEC-IST - EMSA Oil Spil Modelling	15/06/2014	14/06/2019
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	28/02/2019

Contractor	Subject	Start Date	End Date
Norwegian Coastal Administration	SLA EMSA NCA REGIONAL SSN SERVER	20/12/2016	19/12/2017
Norwegian Coastal Administration	SLA EMSA NCA REGIONAL SSN SERVER	20/12/2017	28/02/2018
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
Royal Belgian Institute of Natural Sciences	Development and implementation of an operational capability between oil spill models and CNS DC	09/12/2013	08/12/2018
Swedish Meteorological and Hydrological Institute, Gov. Agency	Develop and implement an operational capability to set to a data exchange mechanism between the oil spill model and the EMSA CDC	21/06/2013	20/06/2018

Annex II. Statistics on financial management

Evolution of budget execution



Negotiated procedures

Article 23 of the Implementing Rules to the Financial Regulation of EMSA stipulates the obligation to report on negotiated procedures without publication of a contract notice referred to in Article 134(1) (a) to (f) RAP, i.e. “special negotiated procedures”. The Agency shall send a report on negotiated procedures to the budgetary authority, preferably as an annex to the annual activity report.

According to Article 53 RAP (“Report on negotiated procedures”):

“Authorising officers by delegation shall record, for each financial year, contracts concluded by the negotiated procedures referred to in points (a) to (f) of Article 134(1) and Article 266 of this Regulation. If the proportion of negotiated procedures in relation to the number of contracts awarded by the same authorising officer by delegation increases appreciably in relation to earlier years or if that proportion is distinctly higher than the average recorded for the institution, the authorising officer responsible shall report to the institution setting out any measures taken to reverse that trend. Each institution shall send a report on negotiated procedures to the European Parliament and Council. In the case of the Commission, that report shall be annexed to the summary of the annual activity reports referred to in Article 66(9) of the Financial Regulation.”

In 2017 the following negotiated procedures based on Article 134(1) (a) to (f) RAP were initiated:

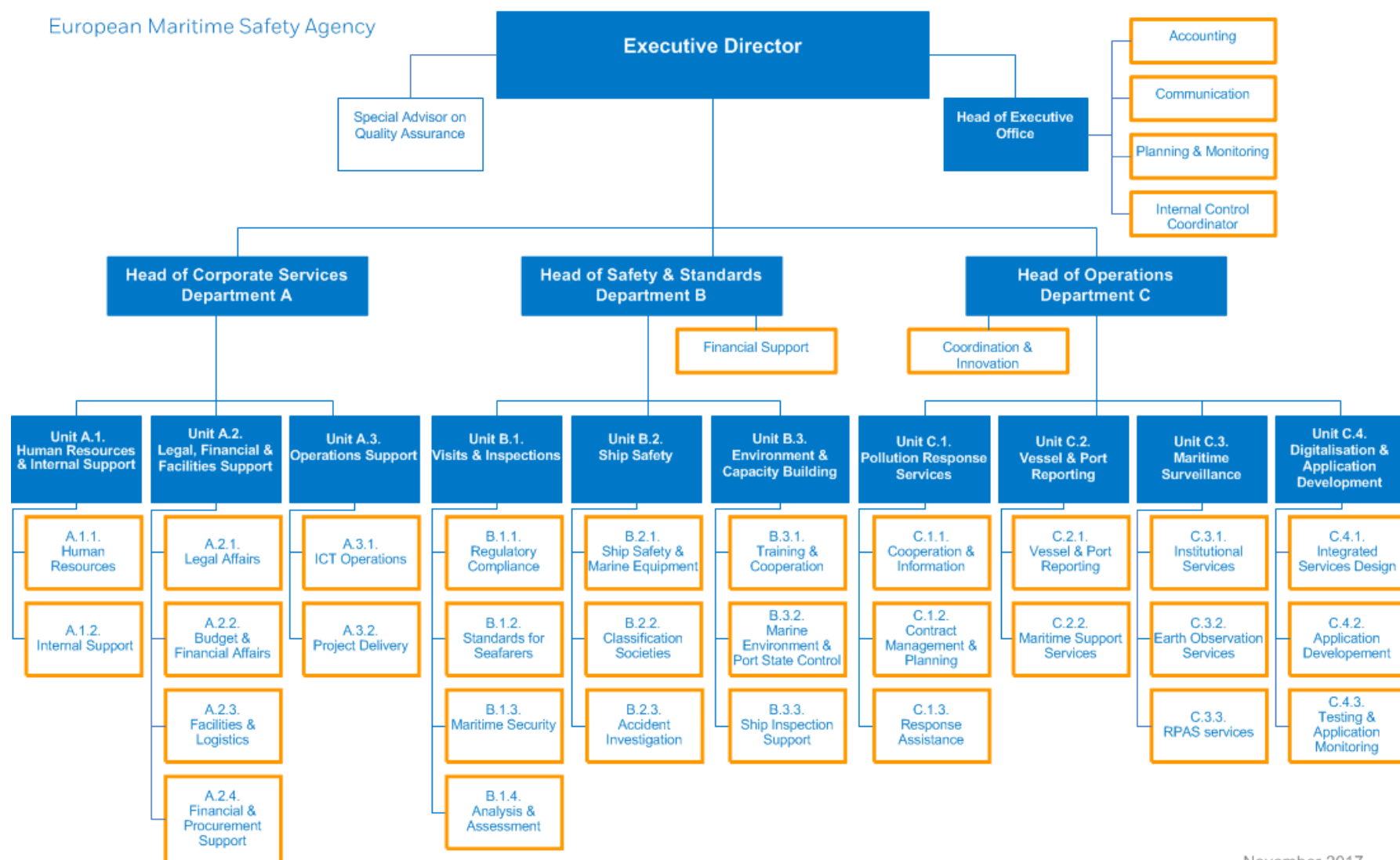
Reference number	Project	Status
Contracts concluded by the negotiated procedures under Art. 134(1)(a)-(f) RAP		
EMSA/NEG/05/2017	Star gate	Cancelled
EMSA/NEG/25/2017	Licenses for the LL casualty reporting	Awarded
EMSA/NEG/38/2017	2017 improvement Mureoil HC skimmer	Awarded

NB: In EMSA/NEG/38/2017 the procedure did not result in the conclusion of a new contract, but only in an amendment to an already existing contract

Annex III. Organisational chart



European Maritime Safety Agency



November 2017

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

Establishment plan

Function Group and Grade	2016 Authorised		2017 Authorised	
	Permanent	Temporary	Permanent	Temporary
AD15	0	1	0	1
AD14	0	1	0	1
AD13	1	3	1	4
AD12	1	10	1	10
AD11	0	14	0	14
AD10	1	18	1	19
AD9	0	28	0	28
AD8	1	24	0	29
AD7	0	24	0	26
AD6	0	12	0	12
AD5	0	0	0	5
Total AD	4	135	3	149
AST11	0	0	0	0
AST10	0	1	0	1
AST9	0	0	0	0
AST8	0	1	0	1
AST7	0	4	0	4
AST6	0	11	0	15
AST5	0	18	0	20
AST4	0	16	0	16
AST3	0	12	0	3
AST2	0	0	0	0
AST1	0	0	0	0
Total AST	0	63	0	60
Total AD+AST	4	198	3	209
Grand Total	202		212	

Entry level for type of post

Key functions (examples)	Type of contract	Function group, grade of recruitment	Function is dedicated to administration support or policy (operational) or mixed
CORE FUNCTIONS			
Head of Department (level 2)	TA	AD12	Operational
Head of Unit (level 3)	TA	AD9, AD10, AD11 or AD12, related to the mandate and dimension of the Unit	Operational
Head of Sector (level 4)	TA	AD8	Operational/Support/Mixed
Senior Officer	TA	AD8	Operational
Officer	TA	AD6 or AD7 depends on the functions that will be allocated	Operational
Junior Officer	TA	AD5	Operational
Senior Assistant	TA	AST10	Operational
Junior Assistant	TA	AST1 or AST3 depends on the functions that will be allocated	Operational/Mixed
SUPPORT FUNCTIONS			
Head of Administration (Level 2)	TA	AD12	Support
Head of Human Resources (Level 3)	TA	AD9	Support
Head of Finance (Level 3)	TA	AD9	Support
Head of Communication	TA	AD8	Mixed
Head of IT (Level 3)	TA	AD10	Mixed
Senior Officer	TA	AD8	Support
Officer	TA	AD6	Support
Junior Officer	TA	AD5	Support
Webmaster- Editor	TA	AST3	Mixed
Secretary	CA	FGII	Support
Mail Clerk	CA	FGI	Support
SPECIAL FUNCTIONS			
Data Protection Officer	TA	AD8	Mixed
Accounting Officer	TA	AD8	Mixed
Internal Auditor	TA	AD8	Mixed
Secretary to the Director	TA	FG II	Mixed

Results of the screening exercise

Job type (sub) category	Year N (%)	Year N-1 (%)
Administrative support and Coordination		
<i>Administrative support</i>	15.83%	16.46%
<i>Coordination</i>	4.58%	5.34%
Operational		
<i>Top Level Operational Coordination</i>	2.17%	2.28%
<i>Programme Management & Implementation</i>	53.88%	52.81%
<i>Evaluation & Impact assessment</i>	11.81%	12.01%
<i>General Operational</i>	4.22%	3.82%
Neutral		
<i>Finance/Control</i>	7.50%	7.26%
<i>Linguistics</i>	0%	0%

Annex V. Human and financial resources by activity

Planned and Actual Resources 2017*	Planned Human Resources					Actual Human Resources					Planned Financial Resources		Actual Financial Resources	
LIST OF ACTIVITIES EMSA	MANPOWER					MANPOWER					Total allocated costs Commitments	Total allocated costs Payments	Total allocated costs Commitments	Total allocated costs Payments
	TEMPORARY AGENTS		END	CA	TOTAL	TEMPORARY AGENTS		END	CA	TOTAL				
	AD	AST				AD	AST							
2100 Union maritime information and exchange system (integrated maritime services; SafeSeaNet; Improving internal market and maritime transport efficiency) ¹	32	12	3	4	51	34	12	3		49	25,429,504	19,403,501	15,027,014	10,496,725
2200 EU LRIT Cooperative Data Centre and LRIT International Data Exchange	6	7			13	7	7			14	3,418,710	3,561,712	3,632,584	3,590,235
2300 Information System for PSC (THETIS)	5	1		1	7	5	1	1		7	2,043,475	1,929,999	2,282,433	2,152,497
2400 Maritime Support Services	8	2	3	2	15	5	1	4	4	14	1,839,326	1,866,810	1,594,141	1,542,942
3100 Classification Societies	10	1	1		12	10	1	1		12	1,778,181	1,782,936	1,832,524	1,764,818
3200 STCW	6	2	1	1	10	6	2	1		9	1,404,091	1,400,179	1,303,359	1,285,119
3300 Visits to Member States to monitor implementation of Union Law <i>Formerly "Implementation of PSC Directives in Member States and EFTA"</i>	6	2	1		9	6	2	1		9	1,342,946	1,331,512	1,426,198	1,294,000
3400 Maritime Security	3				3	3		1	1	5	490,855	492,044	661,239	638,655
3600 Horizontal analysis and research ²	3			1	4	3				3	536,000	537,585	461,649	447,886
4100 Port State Control	3				3	3				3	690,855	713,914	689,397	709,473
4200 Accident investigation	4	1	1		6	4	1	1		6	1,318,971	1,296,349	1,376,273	1,216,814
4300 Technical assistance (training and cooperation) ³	6	1	2	1	10	5	1	2		8	2,256,713	2,242,675	1,904,178	1,651,718
4400 Marine equipment and ship safety standards (including IMO) ⁴	7	1	2		10	7	1	1		9	1,899,419	1,743,382	1,801,234	1,591,577
4500 Ship Inspection Support ⁵ <i>Formerly "Maritime Information, Equasis and statistics"</i>	4		2		6	4		1	1	6	1,107,993	1,088,500	1,166,954	1,055,817
4600 Prevention of pollution by ships	5				5	5				5	940,758	942,740	934,816	884,785
6500 Communication, document management, missions & events support	3	3		6	12	3	3		7	13	1,399,441	1,404,196	1,496,104	1,433,565
5100 Operational Pollution Response Services	11	2	1	3	17	10	2	1	3	16	18,508,042	15,845,658	19,819,388	17,771,406
5200 CleanSeaNet and illegal discharges	6	1			7	6				6	7,214,794	7,150,696	5,053,936	4,640,991
5300 Cooperation and information relating to pollution preparedness and response	4		1		5	4				4	924,895	1,099,043	932,852	964,765
6100 Management/bureau/horizontal tasks	10	7		1	18	10	8			18				
6200 Human Resources	3	5		6	14	4	5		6	15				
6300 Legal and Financial Affairs, facilities and logistics	6	4		5	15	5	4		6	15				
6400 Operations support (ICT)	1	8		2	11	1	8		2	11				
6100, 6200, 6300,and 6400 Total Overhead/horizontal tasks	20	24		14	58	20	25		14	59				
Subtotals	152	60	18	33	263	150	59	18	30	257				
Copernicus staff financed by EMSA budget*									3	3				
TOTAL	152	60	18	33	263	150	59	18	33	260				
Total EMSA subsidy	212				263	209					74,544,969	65,833,431	63,396,275	55,133,787

Planned and Actual Resources 2017	Planned Human Resources	Actual Human Resources		Planned Financial Resources		Actual Financial Resources	
LIST OF EMSA PROJECT FINANCED ACITIVITIES	Contract Agents	END	CA	Commitments	Payments	Committed	Paid
7000 IMP (Integrated Maritime Policy Project)				p.m.	p.m.		
7100 SAFEMED III	1.8	0.5	2	p.m.	p.m.	1,096,951	431,009
7200 FRONTEX SLA	4		7	p.m.	p.m.	12,116,819	8,112,495
7210 EFCA SLA						935,836	592,486
7300 CSN GREENLAND				p.m.	p.m.	330,311	240,984
7310 CSN Dutch Islands				p.m.	p.m.	13,519	0
7400 BC Sea	1.2	0.5	2	p.m.	p.m.	788,747	165,655
7500 COPERNICUS				p.m.	p.m.	11,083,810	6,109,236
7600 EQUASIS (R0 FUNDS)				p.m.	p.m.	514,198	254,640
7700 THETIS EU (formerly THETIS-S)				p.m.	p.m.	43,984	43,984
7710 THETIS MRV				p.m.	p.m.	265,670	41,420
7720 Emissions Inventories Project				p.m.	p.m.	15,000	113,374
7800 EC Funds for candidate and potential candidate				p.m.	p.m.	155,336	0
7900 CG Pilot Project						219,180	219,180
Total Project Financed Activities	7	1	11			27,579,359	16,324,463
Grand total Contract Agents/SNEs (Operational + PFA)	40	19	44				
Grand Total Financial Resources						90,975,633	71,458,250

* ABB methodology: The Agency implements an activity based approach to budgeting and reporting on all activities funded by the EMSA subsidy. The lifecycle stretches from initial planning of the draft budget preparation which starts towards the end of year N-2 to the final presentation of actuals in the Consolidated Annual Activity Report in year N+1. Activity Based Budgeting (ABB) codes are tagged to commitments and payments, tracking the cost of both direct and indirect activities. Direct staff is allocated to one operational activity according to the prevailing function of the staff. Indirect staff and overhead and administrative costs are ventilated across operational activities, based on the number of direct staff allocated to each activity.

** For the purposes of the ABB exercise, the 3 Contract Agents foreseen for the project-financed activity Copernicus but financed by the EMSA Budget are treated as indirect staff.

Footnotes planned resources 2017:

1. 7 ADs and 1 AST for the European cooperation on coast guard functions
2. 1 AD for the European cooperation on coast guard functions
3. 3 ADs for the European cooperation on coast guard functions
4. 1 AD for the European cooperation on coast guard functions
5. 1 AD for the European cooperation on coast guard functions

Footnotes actual resources 2017:

1. 7 ADs and 1 AST for the European cooperation on coast guard functions
2. 1 AD for the European cooperation on coast guard functions
3. 2 ADs for the European cooperation on coast guard functions
4. 1 AD for the European cooperation on coast guard functions
5. 1 AD for the European cooperation on coast guard functions
6. 1 AD for the European cooperation on coast guard functions

Annex VII. Specific annexes related to Part III - Assessment of the effectiveness of the internal control systems

Not applicable.

Annex VIII. Annual accounts

Economic outturn account

	2017	2016
Revenues from administrative operations	8,979,955	4,775,959
Other operating revenue	63,830,938	61,419,722
TOTAL OPERATING REVENUE	72,810,894	66,195,682
Administrative expenses	-35,718,754	-32,600,639
All Staff expenses	-19,976,298	-18,809,212
Fixed asset related expenses	-8,216,369	-8,919,461
Other administrative expenses	-7,526,087	-4,871,966
Operational expenses	-39,604,640	-31,359,711
TOTAL OPERATING EXPENSES	-75,323,395	-63,960,350
SURPLUS/(DEFICIT) FROM OPERATING ACTIVITIES	-2,512,501	2,235,332
Financial revenues	0	164
Financial expenses	-2,560	-146
SURPLUS/ (DEFICIT) FROM NON OPERATING ACTIVITIES	-2,560	18
ECONOMIC RESULT OF THE YEAR		-2,515,061

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)

	2017	2016
NON CURRENT ASSETS	32,276,626	33,267,517
Intangible fixed assets	8,546,264	8,060,318
Tangible fixed assets	23,440,226	24,917,063
Long-term pre-financing	290,136	290,136
Long-term receivables	0	0
CURRENT ASSETS	28,849,420	22,312,215
Inventories	2,137,960	2,137,960
Short-term pre-financing	1,259,044	595,608
Short-term receivables	3,193,658	3,048,354
Cash and cash equivalents	22,258,758	16,530,293
TOTAL ASSETS	61,126,046	55,579,732
NON-CURRENT LIABILITIES	105,510	105,510
Provisions for risks and charges	0	0
Other long-term liabilities	105,510	105,510
CURRENT LIABILITIES	25,005,598	16,944,222
Provisions for risks and charges	0	0
Accounts payable	25,005,598	16,944,222
TOTAL LIABILITIES	61,126,046	55,579,732
TOTAL NET ASSETS		36,014,938

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

EMSA CAAR 2017 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 and the Equipment Assistance Service (EAS), 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 MAR-ICE (Marine-Intervention in Chemical Emergencies) Information Service in case of chemical spills at sea;
- Cooperation and coordination with the European 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.

At the end of 2017, seventeen fully equipped vessels for mechanical recovery were available for mobilisation, with four of these vessel arrangements also equipped for seaborne dispersant application including dispersant stock.

The vessel contracted at the end of 2016, covering the area of southern Black Sea, successfully completed the preparation phase and entered into operational service mid-2017. After the expiration of the first term of the contract for the Bay of Biscay, following a procurement procedure, a new oil recovery vessel was contracted to replace the response capacity for this area. Three vessel contracts, covering the southern Atlantic, western and central Mediterranean Sea, were renewed for an additional four-year period.

Following the sinking of the product tanker *Agia Zoni II* in the vicinity of Piraeus, EMSA's oil pollution response services were activated by Greece.

Furthermore, an EMSA contracted vessel *Aegis I* (*back-up vessel for Aktea OSRV*) was made available to the European Fisheries Control Agency (EFCA) within the context of cooperation with EFCA and Frontex on coast guard functions.

In order to ensure a high level of preparedness 68 quarterly drills were conducted on board EMSA contracted vessels. In addition, two acceptance drills related to entrance of new contracted vessels in service and/or improvement projects were carried out. A third Equipment Assistance Service (EAS) arrangement was contracted in the Adriatic Sea (Ravenna, Italy), becoming fully operational in the second half of 2017. This new arrangement

complements the existing EAS stockpiles in the Baltic and North Sea and provides specialised stand-alone equipment for Vessels of Opportunity (VOO), primarily for southern Europe.

A total of eleven EAS Equipment Condition Tests (ECTs) were completed by EAS contractors and Member States were introduced to the new equipment during dedicated training sessions.

The equipment policy, providing a framework for the management of the EMSA oil spill response equipment, was implemented through a number of actions including overhauling and/or replacement of aging equipment sets purchased in 2006-08.

To further strengthen the operational cooperation with Member States and marine pollution Regional Agreements¹, 12 EMSA contracted vessels and two EAS systems were deployed in 11 operational exercises covering all European seas.

In addition, 15 notification exercises aiming at the signature of 21 Incident Response Contracts with vessel contractors and two EAS contractors were conducted.

CleanSeaNet, the satellite oil pollution and vessel detection monitoring service, provided daily monitoring over European waters to detect and deter marine pollution. In addition, the Agency also supported periodic operations or exercises such as Coordinated Extended Pollution Control Operations (CEPCO) and 'Tour d'Horizon'² aerial operations. The inclusion of the European Space Agency's Sentinel-1B satellite in CleanSeaNet operations marked a major improvement to the availability of appropriate sensors for oil spill detection.

The Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR), established in 2007, continued its work in 2017 on the rolling work programme. The 11th meeting of the CTG MPPR was held in March 2017.

The MAR-ICE (Marine-Intervention in Chemical Emergencies) network, which provides expert information and advice during hazardous and noxious substance (HNS) spills was activated on five occasions for drills and one for a real release. The MAR-ICE cooperation agreement was extended in 2017 and the service will continue through 2022.

MAR-CIS (Marine Chemical Information Sheets), which first went live on EMSA's web portal in December 2016, was updated. In addition, MAR-CIS is available for download as a free-standing app for mobile devices such as tablets and smart phones thus providing all information offline.

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'.

Funding of Actions

The Budgetary Authorities provided EMSA with EUR 22,800,000 in commitment and EUR 20,245,132 in payment appropriations for its pollution preparedness and response task for 2017. In terms of budget execution, 97.57% was achieved for commitments and 98.41% for payments.

Budget execution for Anti-Pollution Measures was challenging in 2017 due to unforeseen events outside the Agency's control. The main reasons were expiration and non-renewal of one contract for an oil spill response vessel in the area of Bay of Biscay that lead to launching a new tender; non-awarding of a vessel contract in the Northern Baltic Sea due to lack of a suitable offer; and delays in the implementation of RPAS (Remotely Piloted Aircraft Systems) services by the contractors.

The table below provides a summary of commitments and payments:

	Commitments	Payments
TOTAL allocation	22,800,000	20,245,132
TOTAL utilisation	22,246,974 (97.57%)	19,922,354 (98.41%)

Table 1 Summary of commitment and payment appropriations in 2017

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 Response³ and the Action Plan for Hazardous and Noxious Substances Pollution Preparedness and Response⁴. With the adoption of Directive 2005/35/EC as amended on ship-sourced pollution⁵, 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 Installations⁶. 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 embedded in the multi-annual Single Programming Document. 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 Perspectives⁷. The financial execution of the Multi-annual Funding (MAF) framework program should be reported as part of the Agency's annual report. A dedicated section is to be included in the Consolidated Annual Activity Report (CAAR) detailing the Agency's pollution preparedness and response activities. This is the third time the MAF reporting is included in the CAAR as an annex, covering the year 2017. 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 four main operational assistance services to coastal States with regard to marine pollution preparedness and response:

- The network of stand-by oil spill response vessels, including dispersants;
- The Equipment Assistance Service (EAS);
- CleanSeaNet, the satellite based oil spill and vessel monitoring and detection service; and
- Pollution response expertise to provide operational and technical assistance for oil and HNS incidents.

3.1 Operational assistance: vessel network, equipment 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. Importantly, the network of pollution response vessels is provided in a cost-efficient manner. 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 2017, seventeen fully equipped oil spill response vessels, four dispersant stockpiles and three 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 State⁹, a Private Entity¹⁰, and/or the European Commission.

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

- Monitoring and evaluating vessel/equipment/crew performance during quarterly drills;
- Participation of the contracted vessels in operational at-sea exercises organised in cooperation with EU Member States and/or Regional Agreements;

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.

- Identifying and implementing appropriate technical improvements to the network, 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, including the establishment of dispersant spraying capacity as well as of dispersant stockpiles, 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 the regional seas of Europe. It should be noted that all vessels are at the disposal of all Member States regardless of their actual area of operation.

At the end of 2017, EMSA maintained contracts for 17 operational fully equipped stand-by oil spill response vessels available, upon request, to assist coastal States in oil spill recovery operations. Four of these vessel arrangements were also equipped for seaborne dispersant application with associated dispersant stockpiles of 200 tonnes each, in Malta, Cyprus, Sines (Portugal), and on the Canary Islands (Spain).

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.

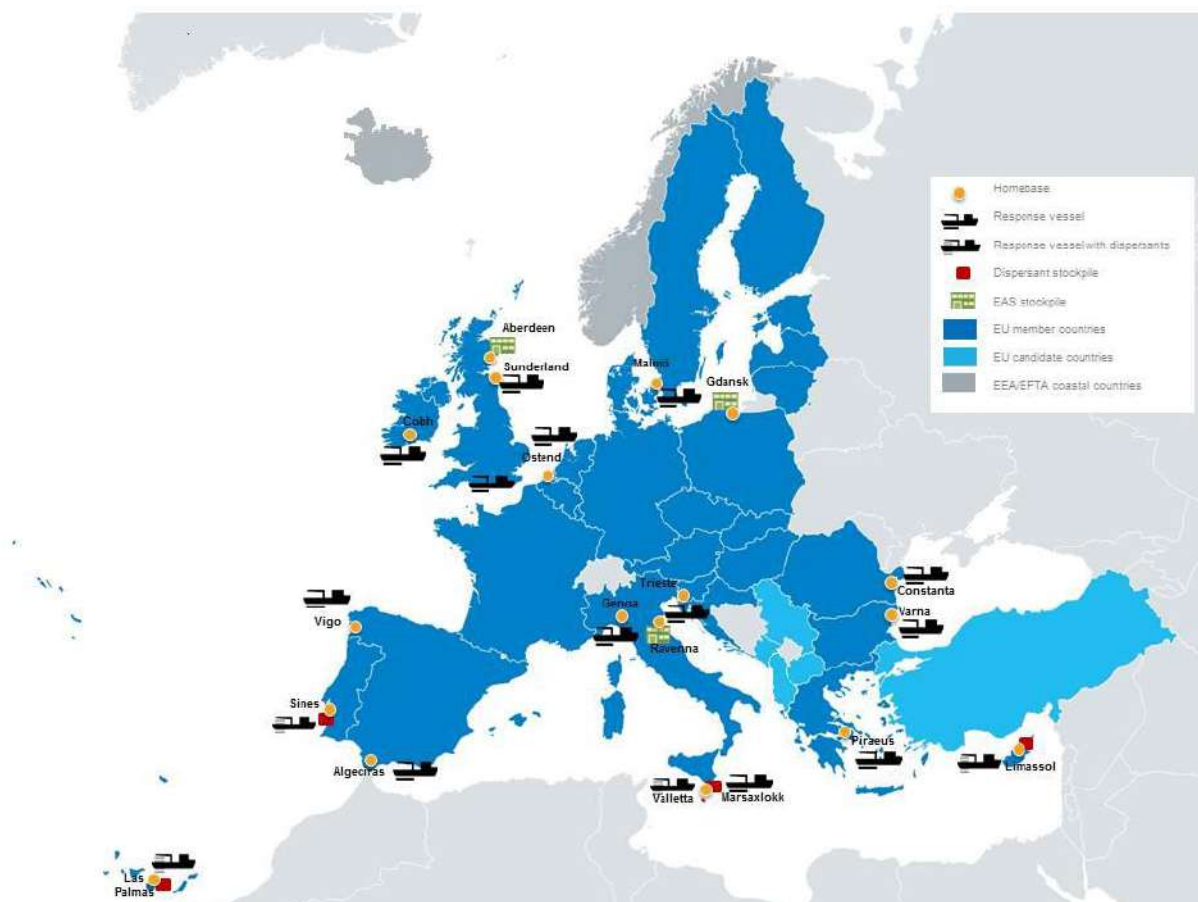


Figure 1 Distribution of EMSA's contracted vessels and EAS arrangements at the end of 2017

There were three main activities in relation to the network in 2017, namely:

- Two vessel contracts for the northern Baltic Sea and the Bay of Biscay expired, respectively, in 2016 and early 2017. Accordingly, procedures following publication of a contract notice in the Official Journal of the European Union (OJEU) to replace the response capacity in those areas were launched. As a result, a new contract for the Bay of Biscay was awarded. Regarding the northern Baltic Sea, the procurement for a new vessel contract was not successful and no contract was awarded.
- The new arrangement contracted end-2016 to re-establish additional capacity for the Black Sea was brought into operation. The tanker *Galaxy Eco*, based in Varna (Bulgaria) successfully completed the preparatory phase and became fully operational in June 2017.
- Contract renewal of the response arrangements for the southern Atlantic coast, western and central Mediterranean Sea, based in Sines (Portugal), Algeciras (Spain) and Valetta (Malta) respectively, for additional four years of service.

- Equipment Assistance Service (EAS)

Following a procurement procedure, the EAS service was further strengthened through the establishment of a third equipment depot in the Adriatic Sea. The new EAS arrangement, based in Ravenna (Italy), became fully operational at the end of 2017 and provides specialised stand-alone equipment for Vessels of Opportunity primarily in southern Europe. This new arrangement complements the existing EAS stockpiles in Gdansk (Poland) and Aberdeen (UK).

The main activity related to the two EAS stockpiles in the Baltic Sea and the North Sea was to enhance the operational integration of the arrangements at national and regional level. Within this context, EMSA continued with the implementation of the EAS training programme and organised two three-day hands-on training sessions, one for each of the two arrangements, for Member States' equipment operators.

In order to inform the Member States how to activate EMSA's Equipment Assistance Service in case of an emergency, the Agency has developed an e-learning tool. The tool contains detailed information on the equipment and its operation. Furthermore, it contains information on the procedure to request the service and how to fill out the contract forms step-by-step. The module has been published on EMSA's e-learning platform Maritime Knowledge Centre (MaKCs).

Detailed information on the contracted vessels, EAS, and the areas covered at the end of 2017 can be found in the table below:

Area covered	Contractor / Contract	Vessel / Assets	Vessel type / storage capacity (m ³) / dispersant stock	Service 2017
1. Contracted vessels				
Southern Baltic	Stena Oil EMSA/NEG/1/2015 Lot 2	<i>Norden</i>	Oil Tanker / 2880	✓
Northern North Sea	James Fisher Everard Ltd EMSA/NEG/1/2013 Lot 1	<i>Mersey Fisher, Thames Fisher</i>	Product Tankers / 5028	✓
Channel and Southern North Sea	DC Industrial S.A. 2014/EMSA/NEG/1/2014 Lot 3.1	<i>Interballast 3</i>	Hopper Dredger / 1886	✓

	DC Industrial S.A. 2014/EMSA/NEG/1/2014 Lot 3.2	<i>DC Vlaanderen 3000</i>	Hopper Dredger / 2744	✓
Atlantic North	James Fisher Everard Ltd EMSA/NEG /1/2013 Lot 2	<i>Galway Fisher, Forth Fisher</i>	Product Tankers / 4754	✓
Atlantic Coast	Remolcadores Nossa Terra S.A. EMSA/NEG/1/2014 Lot 1	<i>Ria de Vigo</i>	Offshore Supply / 1522	✓
Bay of Biscay	Ibaizabal VAC NEG/01/2012 Lot 3	<i>Monte Arucas</i>	Oil tanker / 2952	Contract expired on 04/04/2017. The contractor declined the contract renewal
Southern Atlantic Coast	Mureloil VAC NEG/1/2012 Lot 1	<i>Bahia Tres</i>	Oil Tanker / 7413 / Dispersant 200 tonnes	The contract has been renewed as of 18/07/2017 for another 4 years
Canary Islands and Madeira	Petrogas EMSA/NEG/1/2015 Lot 1	<i>Mencey</i>	Oil Tanker / 3500 / Dispersant 200 tonnes	✓
Western Mediterranean	Naviera Altube EMSA NEG/1/2011 Lot 4	<i>Monte Anaga</i>	Oil Tanker / 4096	✓
	Ciane EMSA/NEG/34/2012	<i>Brezamare</i>	Oil Tanker / 3288	The contract has been renewed as of 27/08/2017 for another 4 years
Central Mediterranean	Tankship EMSA NEG/1/2011 Lot 2	<i>Balluta Bay</i>	Oil Tanker / 2800 / Dispersant 200 tonnes	✓
	SL Ship Management Ltd EMSA NEG/1/2012 Lot 2	<i>Santa Maria</i>	Oil Tanker / 2421	The contract has been renewed as of 26/06/2017 for another 4 years
Adriatic Sea	Castalia EMSA/NEG/1/2013 Lot 4	<i>Marisa N</i>	Oil Tanker / 1562	✓
Aegean Sea	Environmental Protection Engineering S.A. EMSA/NEG/1/2013 Lot 3	<i>Aktea OSRV (Aegis I as a back-up vessel)</i>	Oil Tanker / 3000 Offshore Supply / 950	✓
Eastern Mediterranean	Petronav EMSA NEG/1/2010 Lot 1	<i>Alexandria</i>	Oil Tanker / 7458 / Dispersant 200 tonnes	✓

Northern Black Sea	Petronav EMSA/NEG/1/2014 Lot 2	<i>Amalthia</i>	Oil Tanker / 5154	✓
Southern Black Sea	Cosmos Shipping 2016EMSA/CPNEG/6/2016 – Lot1	<i>Galaxy Eco</i>	Oil Tanker / 2969	Entered into service on 20/06/2017
2. EAS arrangements				
Baltic Sea	Labelpoland.com EMSA/NEG/8/2015 – Lot 2	10 stand-alone equipment sets	Storage area: 800m ² (Gdansk, Poland)	✓
North Sea	Sureclean / NRC EMSA/NEG/8/2015 – Lot 2	9 stand-alone equipment sets	Storage area: 600m ² (Oldmeldrum, UK)	✓
Southern Europe	Ottavio Novella 2017/EMSA/CPNEG/38/2016	10 stand-alone equipment sets	Storage area: 1661m ² (Ravenna, Italy)	Operational as of 11 October 2017

Table 2 Summary of operational pollution response services and contractual information at the end of 2017

3.1.2 Operational Assistance to Member States and EU Agencies

Following the sinking of the product tanker Agia Zoni II in the vicinity of Piraeus, Greece in September 2017 and the release of oil, the Greek authorities requested the services of the EMSA contracted vessel Aktea OSRV. Mobilisation of the vessel was timely and Aktea successfully performed oil spill response operations under the command of the Hellenic Coast Guard for two weeks.

Within the context of the European cooperation on coast guard functions, and following an urgent request from the European Fisheries Control Agency (EFCA), the back-up vessel Aegis I was made available to EFCA to perform fisheries inspections and ancillary search and rescue (SAR) duties in Mediterranean waters from August to December 2017. EMSA monitored the implementation of this charter in close collaboration with EFCA.

3.1.3 Maintaining the Service: Drills and Exercises

3.1.3.1 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 2017, a total of 68 quarterly drills and two acceptance drills were performed by the vessel 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.

With regard to the EAS arrangements, the drills are called 'Equipment Condition Tests' (ECTs) and the contracts have defined a maximum number of six ECTs per arrangement and year. In 2017, eleven ECTs were conducted by EAS contractors in order to verify readiness and performance of the newly acquired stand-alone equipment.

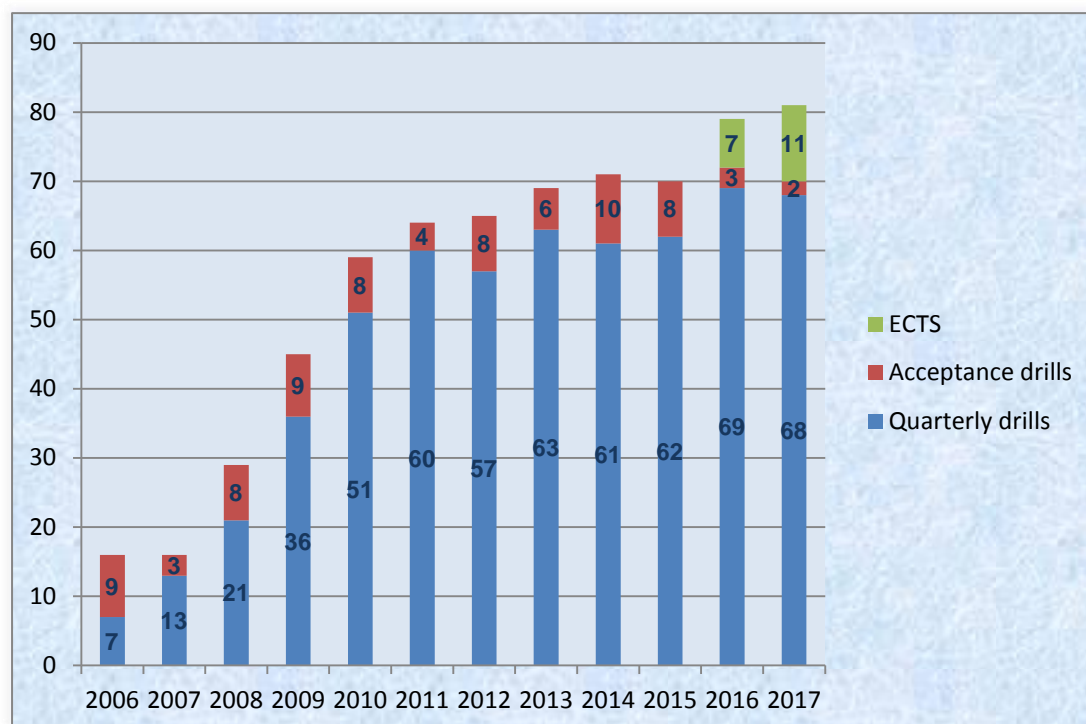


Figure 2 Number of drills 2006 - 2017

Detailed information regarding drills conducted by EMSA contracted vessels in 2017 can be found in the "Network of Stand-by Oil Spill Response Vessels - Drills and Exercises Annual Report 2017" available online on the Agency website www.emsa.europa.eu.

In addition to the abovementioned drills, a range of exercises were conducted. These types of event are, in addition to being a useful method of maintaining pollution response skills, an important tool for identifying 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 of the EMSA vessels with the coastal State response units.

In the course of 2017, 12 EMSA stand-by oil spill response vessels and two EAS arrangements participated in 11 at-sea operational exercises, organised in cooperation with EU Member States and/or Regional Agreements in the Baltic Sea, North Sea, Bay of Biscay, Atlantic Coast, Mediterranean Sea, Adriatic Sea and Black Sea.

The summary of operational exercises performed by EMSA contracted vessels during the 2017 is shown in the table below:

N°	Name	Date	Location	Participating Parties	EMSA vessel(s) / ECT
1	POLLEX 2017	14 March 2017	North Sea near Zeebrugge	The Netherlands, Belgium, EMSA	<i>Interballast 3</i> <i>DC Vlaanderen 3000</i>
2	MORJE 2017	18 - 19 April 2017	Koper, Slovenia	Slovenia, EMSA	<i>Marisa N</i>

3	ANED POLMAR 2017	16 - 17 May 2017	Boulogne, France	France, Belgium, EMSA	<i>Interballast 3</i>
4	COASTEX	23 - 26 May 2017	Troia, Portugal	Portuguese Navy, FRONTEX, EFCA, observers from the coastal States	<i>Ria de Vigo</i>
5	POLEX 24-17	14 - 16 June 2017	Santander, Spain	Spain, EMSA	<i>Ria de Vigo</i>
6	VESIKKO	04 – 08 September	Finland	Finland	<i>EAS Baltic Sea</i>
7	SCOPE	22- 26 September 2017	Langesund, Telemark County, Norway	Norway, Sweden, Denmark, Iceland, Germany	<i>Norden</i> <i>EAS North Sea</i>
8	ADRIATIC 2017	04 - 05 October	Northern Basin Split, Croatia	Croatia, EMSA	<i>Marisa N</i>
9	ATANTIQUE 2017	12 October 2017	Gulf of Gascogne, France	France, EMSA	<i>Galway Fisher</i>
10	NEMESIS	17 October	Cyprus	Cyprus, EMSA	<i>Alexandria</i>
11	ATLANTIC POLEX PT 2017	19 October	Vila Real de Santo Antonio, Portugal	Portugal, EMSA	<i>Monte Anaga</i>
12	RUBIN 1	24 October	Varna, Bulgaria	Bulgaria, EMSA	<i>Galaxy Eco</i>

Table 3 International operational exercises in 2017

Detailed information regarding international exercises with participation of EMSA contracted vessels can be found in the “Network of Stand-by Oil Spill Response Vessels - Drills and Exercises Annual Report 2017” available online from the EMSA website www.emsa.europa.eu

3.1.3.2 Improvements to the Network Service

In 2017 the Equipment Management Policy was implemented to revamp several ageing equipment sets purchased in 2006-08. Main activities consisted of the replacement of the boom sections on board the vessel *Monte Anaga* as well as the overhauling of the skimmer system on board the vessel *Balluta Bay* and of the sweeping arms on board the *Santa Maria* and *Brezzamare*.

Moreover, the response capacity of EAS North Sea arrangement was strengthened through the delivery of one additional current buster system.

Furthermore, the procurement for a framework contract for the purchase of high capacity skimmers was concluded and equipment orders placed to upgrade the response capacity of one contracted vessel and two EAS arrangements. Besides, two procurements for the replacement of ageing booms on vessel arrangements were concluded and several equipment overhauling actions were initiated for completion of the projects in 2018.

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, based on a permanent monitoring of coastal waters through the near real time analysis of Earth Observation (EO) Synthetic Aperture Radar (SAR) images, is 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); two EFTA coastal States (Norway and Iceland); and three candidate countries (Turkey, Montenegro and Albania). During 2017, the service was also provided on a project financed basis to Greenland. Through the SAFEMED 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 potential spill is detected by the service, a pollution alert is sent to national authorities. The alerts are available within 30 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 to support 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 2017

In 2017, on the basis of the 4,066 images delivered by the CleanSeaNet service as a whole (3,816 for coastal States; 177 for Greenland; 73 for the SAFEMED and BCSEA programmes), a total of 4,899 possible oil spills were detected of which 2,455 were Class A and 2,444 were Class B (see explanation below).

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.

CleanSeaNet detections are separated into two classes:

- Class A - the detected spill is most probably oil (mineral or vegetable/fish oil) or a chemical product;
- Class B - the detected spill is possibly oil (mineral/vegetable/fish oil) or a chemical product.

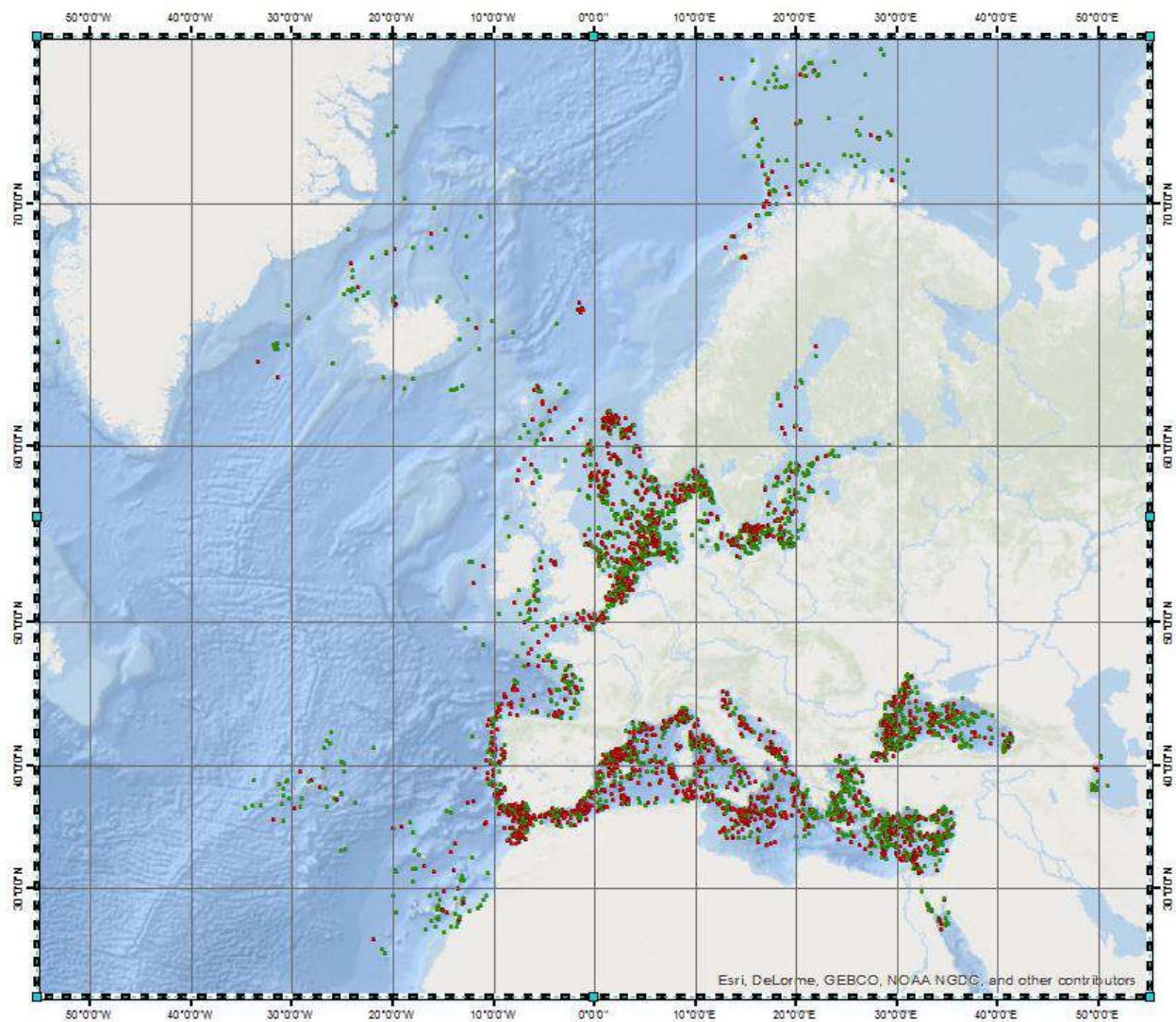


Figure 3 CleanSeaNet Service 2017: map of (probable and possible) spills detected (except French Outermost Regions), (Red: Class A; Green: Class B)

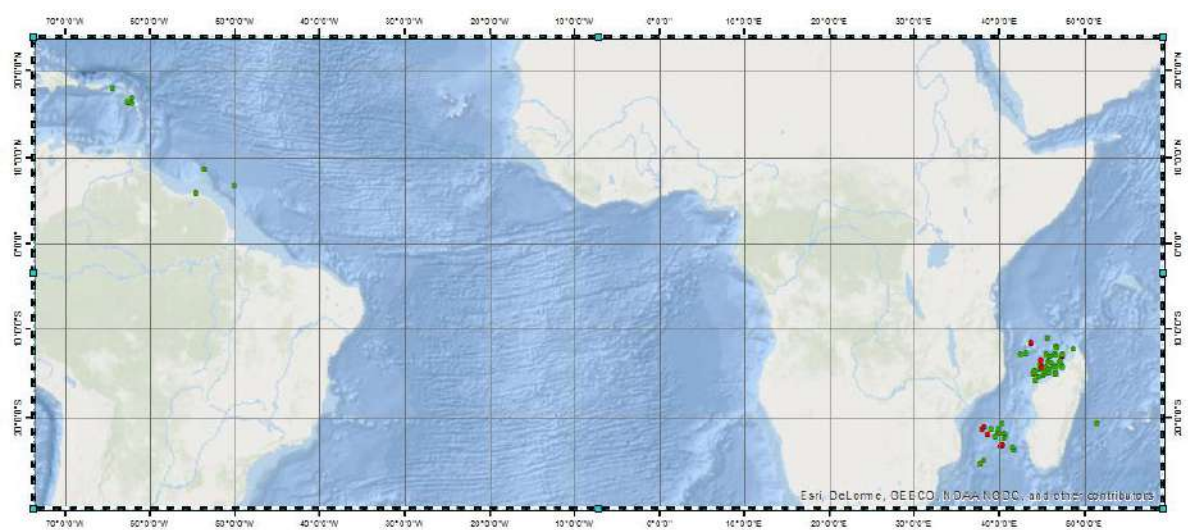


Figure 4 CleanSeaNet Service 2017: map of (probable and possible) spills detected in French Outermost Regions (Red: Class A; Green: Class B)

3.2.2.1 Support to aerial surveillance operations in 2017

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 2017, EMSA supported five “Tour d’Horizon” operations; a planned additional operation was cancelled, and for one no adequate top up images were available. 15 services were delivered to the aircraft crews or national centres supporting the operations.

The Agency also provided additional satellite monitoring support during one Coordinated Extended Pollution Control Operation (Mini - CEPCO), organised by Finland and Sweden in October 2017, by providing one specific EO image. Additionally support was provided to four distinct operations linked with a range of Member State monitoring activities (e.g. wreck monitoring, ship to ship transfer).

Nine additional operational pollution response exercises were supported by CleanSeaNet (COASTEX; POLEX; HEAVEN PRAWN; GROUNDING OF SOMMARIO; SCOPE 2017; NEMESIS; RUBIN-1; POLEX 2017; REMPEC, COASTEX).

3.2.3 CleanSeaNet service improvements in 2017

In 2017 EMSA also began delivering services from the European Space Agency (ESA) managed satellite Sentinel-1B. This enabled the Agency to rely mostly on the Sentinels to acquire EO data needed for the service. The Sentinel 1 data license is provided to EMSA free of charge; EMSA only pays service providers the near real time acquisition and additional processing required for the provision of the service.

A number of changes to the planning approach were agreed with users, introducing a more reliable long-term planning for CleanSeaNet satellite acquisitions. With respect to the Earth Observation Data Centre (EODC), the hub of the CleanSeaNet service, a new module was developed that enables a significantly faster and more reliable processing of all satellite images and products.

Additionally EMSA undertook comprehensive tests with the ESA and Airbus on the operational use of the European Data Relay Satellite (EDRS), towards enabling near real time Sentinel-1 acquisitions outside of European waters. The tests were successful and it is expected that, pending authorisation from the European Commission (DG-GROW), this system can be used operationally in 2018.

3.3 Support to Coastal States and the Commission for Accidental Spills and Emergencies

In 2017, seven requests for additional support from EMSA’s CleanSeaNet service were received from coastal States addressing accidental spills and emergencies.

3.4 Utilising State of the Art Remote Sensing Technology for Oil Spill Detection, Monitoring and Response

At its core, the CleanSeaNet service aims to apply state of the art technology in an efficient and effective manner to the detection of oil spills. Accordingly, EMSA follows the development of new technologies and their potential operational applicability. Within that framework, Remotely Piloted Aircraft Systems (RPAS) have been identified as relevant for remote sensing activities as a complementary tool to satellite imagery.

RPAS with an on-board sensor array can support:

1. Monitoring and detecting illegal discharge by providing:
 - Onsite operational information about a slick, e.g. utilising an electro optical sensor during day and a thermal infra-red camera to identify the size and shape of a slick which is complementary to that gathered by the satellite-based CleanSeaNet service.
 - Complementary onsite identification of the source of the slick, e.g. through electro-optical/infra-red cameras and AIS transponders, to identify potential polluters and gather imagery of the slick and vessel.

The combination of the Near-Real-Time (NRT) delivery of satellite radar images to a Member State authority with subsequent RPAS overflight could provide real-time streaming of on-site operational information i.e. confirmation of an oil spill and/or identification of a potential polluter with court

mandated/recognised technology. This is a cost effective solution for efficient marine pollution monitoring and the associated identification of potential polluters.

2. At-sea response and coastal clean-up operations by:

- Identifying “hot spot” areas as well as providing real time feedback on the efficiency of the clean-up activities;
- Evaluating the efficiency of the application of dispersants by flying the RPAS behind the spraying aircraft;
- Streaming data from different sensors, i.e. thermal infra-red or electro-optical cameras or AIS information, “live” to the people responsible for coordinating the clean-up operations.

Such real time information can greatly facilitate the decision making process regarding the efficient and effective deployment of response resources.

Recognising the technological maturity of RPAS, the Agency has taken a number of important steps in making the technology available to Member States for operational usage. Following a procurement phase, EMSA contracted towards the end of 2016 and the beginning of 2017 a number of RPAS service providers. Through these contracts, EMSA started to gradually phase-in RPAS operational services to support Member States focusing on marine pollution detection and monitoring as well as ship emission monitoring. Since December 2017 RPAS services are operational for oil pollution monitoring and for supporting response operations and made available based on a pre-agreed timetable.

The RPAS service and acquired information (data flows) can be used free of charge by Member States, Iceland, Norway and the European Commission, i.e. the service is paid, via EMSA, from the EU budget.

During a deployment, the RPAS are under the operational command of the relevant Member State. Actual flight control and management is undertaken by qualified pilots from the RPAS service provider. A number of Member States have already expressed their official interest in the RPAS service.

In parallel, an RPAS Data Centre has been developed and became operational in 2017. The RPAS Data Centre provides a web interface to users with the capability to exploit in real time the information/data obtained through the various abovementioned operations. Furthermore, the Data Centre will combine the RPAS data with other sources of maritime related information already available through EMSA.

Chapter 4: Cooperation and Coordination

4.1 Introduction

The work of the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR) continued in 2017. EMSA also continued its cooperation with the pollution response experts of EU Member States, EFTA/EEA coastal Countries, EU Candidate Countries, the Regional Agreements secretariats, the European 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 7th Pollution Response Services User Group meeting took place on 18 October 2017 at EMSA's premises in Lisbon. Recent developments concerning all 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, with several follow-up actions agreed in view of the next PRS User Group Meeting, which will take place on 18 October 2018.

4.2.2 InterSecretariat Meeting (InterSec)

The annual inter-secretariat meetings with the secretariats of the Regional and Sub-Regional Agreements and chairpersons of relevant technical groups of these agreements, the European Commission (DG ECHO) and EMSA focus on facilitating the exchange of information and enhancing the sharing of best practices in marine pollution preparedness and response across the European regional seas. The 13th InterSec meeting was hosted by EMSA on 16 February 2017.

4.2.3 Cooperation within the Consultative Technical Group for Marine Pollution Preparedness and Response (CTG MPPR)

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 rolling work program. This is done through dedicated workshops, training, technical studies, guidelines and reports.

With regard to the ongoing CTG MPPR projects, the following actions were undertaken in 2017:

- Training on incident reporting in SafeSeaNet and CECIS Marine Pollution

The aim of this seminar was to provide practical training to marine pollution response authorities on how SafeSeaNet can be used to support their needs in the event of a marine pollution emergency. Training provided by EMSA included practical exercises and scenarios and also demonstrated the link between SafeSeaNet and the Common Emergency Communication and Information System for Marine Pollution (CECIS MP).

Training on the use of CECIS Marine Pollution including the creation of "new emergencies", the request and provision of assistance as well as how to search and update the redesigned resource tree was provided by trainers from DG ECHO.

- Oil Spill Sampling and the work of the OSINet group of experts

The Correspondence Group (CG) on oil spill sampling established under the framework of the CTG MPPR continued its work to prepare a training curriculum on oil sampling and practical guidelines on oil spill sampling and oil identification, based on the OSINet expertise, under the lead of Germany.

- Claims Management

In June 2017, members of the Claims Management Working Group (CMWG) met with the main purpose to finalise amendments to the EU States Claims Management Guidelines including additional guidance for establishing staff costs, update of the chapter related to the legal framework and insert further developments on the measures for securing a claim such as ship arrest. This meeting was also an opportunity to prepare contributions to the claims management workshop organised by the Norwegian Coastal Administration within the framework of the international pollution response exercise SCOPE2017.

- EMPOLLEX

The EMSA Marine Pollution Expert Exchange Programme (EMPOLLEX) was launched to promote the exchange of best practices and to enhance contacts, networking and cooperation between Member States in the field of marine pollution. In 2017, one exchange took place under the EMPOLLEX Programme.

4.2.4 Cooperation with Third Countries

From the operational perspective and through the SAFEMED and TRACECA / BC SEA cooperation programmes and associated dedicated project financing (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

The revision of the resource tree of Common Emergency Communication and Information System for Marine Pollution (CECIS MP) was completed and published in late 2017. EMSA closely worked with DG ECHO and their external contractor on the revised resource tree of CECIS MP for response capacities and experts. In addition, the Agency populated the resource tree with updated information on its pollution response vessels, stand-alone equipment, dispersant stockpiles and all pollution response resources listed in the Agency's database into CECIS MP.

EMSA also 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 (one meeting in 2017), 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 involvement in the various operational exercises organised around Europe.

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

EMSA engaged with the International Oil Pollution Compensation Funds (IOPCF) and the International Group of Protection and Indemnity Clubs (IGPI) to develop a MoU that covers the methodology for the calculation of EMSA's vessel and equipment hire rates and charges as well as dispersant charges. A draft MoU was presented to and endorsed by the EMSA Administrative Board as well as the Assembly of the IOPC Funds. The signature of the MoU is pending formal approval by the IGPI.

The Agency continues to support the major marine pollution conference and exhibition event in Europe, INTERSPILL, as an active member of the organising committee.

Chapter 5: Information

5.1 Introduction

As part of its support to EU and EFTA/EEA Member States, EU Candidate Countries and the European 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 an agreement signed between the three MAR-ICE parties (Cedre, Cefic and EMSA), consists of a network of experts to support and advise Member States during the response to chemical spills. In 2017, the MAR-ICE Cooperation Agreement was extended through October 2022. The network was activated on five occasions in the context of exercises and once for a real release during a national exercise.

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. Since August 2017 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 2017, a new version of the MAR-CIS information (database) was released with four new datasheets and 29 existing datasheets were fully revised and improved. As of end 2017, there are 217 MAR-CIS datasheets available.

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 renewed its access rights to use the software for simulating the fate and trajectory of oil and chemical spills at sea. This acquisition included access to the environmental data (wind and currents forecast information) needed for the model calculations, maintenance, on-site consultancy services and technical support.

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 the European Commission upon request.

In 2017, these modelling tools started to be used at EMSA in a more systematic way. In May it was used for the COASTEX exercise in Portugal and in June for the Wadden Sea DENGERNETH exercise. Following the oil spill caused by the sinking of the product tanker *Agia Zoni II* near Piraeus, Greece in September, simulations were provided to assess the situation. One of these simulations included the tracking of one oil slick detected in one CleanSeaNet satellite image. In December, the software was used for simulating the drifting of an accidental release of heavy fuel oil in the Solent area in the United Kingdom.

5.3 Activities with regard to dispersants

5.3.1 Dispersant Usage Evaluation Tool (DUET)

Following the enhancement of DUET and the provision of hands-on training to experts from EU/EFTA coastal Member States and coastal EU Candidate Countries in 2016, the Agency kept the tool available throughout 2017.

5.4 List of Member States' pollution response capacities

As part of the Agency's tasks to "maintain a list of the public and, where available, private pollution response mechanisms and associated response capabilities in the various regions of the Union" (Regulation (EU) No 911/2014), EMSA collected updated information of EU/EFTA coastal Member States oil and HNS pollution response capacities. In line with the Regulation (EU) No 911/2014, these data are now captured in the CECIS database.

Annex: Total Expenditures for Pollution Preparedness and Response Activities

Total Expenditures for Pollution Preparedness and Response Activities	Commitments (in EUR)	Payments (in EUR)
Network of Stand-by Oil Spill Response Vessels (Total)	16,414,245	12,385,855
Contracts 2012 (Bay of Biscay, Atlantic South, Central Mediterranean Sea)	0	737,359
Contracts 2013 (Western Mediterranean Sea, Adriatic Sea, Aegean Sea, Atlantic North, Northern North Sea,)	0	2,602,395
Contracts 2014 (Atlantic Coast, Northern Black Sea, North Sea/Channel - 2 Lots)	0	2,012,516
Contracts 2015 (Southern Baltic, Canary Islands and Madeira, renewal Eastern Mediterranean)	0	1,703,616
Contracts 2016 (Southern Black Sea, renewals Western Mediterranean Sea, Central Mediterranean Sea)	0	2,231,261
Contracts 2017 (Bay of Biscay, Atlantic South, Western Mediterranean)	11,604,607	507,513
Improvements (OPR equipment purchase, transportation, storage, overhauling and upgrade, insurance and labelling costs)	4,762,310	2,544,911
Others (external experts, clarification meetings, D&B reports)	47,328	46,284
Equipment Assistance Service	569,801	2,860,385
Oil and Gas installations	239,930	0
Exercises	444,528	431,802
Earth Observation Licenses and Services	2,595,000	2,920,280
Support to CleanSeaNet Users	93,936	83,878
CleanSeaNet Service Developments	1,472,167	523,684
2016 SAT-AIS Data acquisition under CSN		118,855
Remotely Piloted Aircraft Systems setup services		125,312
Cooperation and Coordination Meetings	112,096	98,055
HNS Information and activities	205,271	298,130
Related missions of EMSA Staff	100,000	76,118
TOTAL allocated	22,800,000	20,245,132
TOTAL utilised	22,246,974	19,922,354