



EMSA

FACTS & FIGURES

2018

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FOREWORD

The EMSA Facts and Figures 2018 publication is a shortened account of the Consolidated Annual Activity Report which details how EMSA has implemented the annual tasks set out in the work programme contained in the Agency's Single Programming Document (2017-2019).

EMSA's priorities are shaped by several guiding documents, including the founding Regulation (EC) No 1406/2002 as amended, EMSA's five-year strategy, the European Commission's Communication on the programming of human and financial resources for decentralised agencies 2014-2020, and, finally, on Regulation (EU) No 911/2014 on the multiannual funding for action in the field of response to pollution caused by ships and oil and gas installations.

Our level of performance is linked to the strong relationship we maintain with our partners: the EU Member States, Iceland, Norway, the Paris MoU countries, and the countries bordering the Mediterranean Sea, Black Sea and Caspian Sea under the European Neighbourhood Policy; as well as with the European Commission, European Fisheries Control Agency, European Space Agency, European Border and Coast Guard Agency (Frontex), Maritime Analysis and Operations Centre for Narcotics and EU Navfor.

We hope that, through this overview, our readers will see EMSA's wide-ranging and multi-faceted role in the maritime domain as well as our commitment to providing valuable, targeted services that draw on a broad base of shared knowledge and experience.

As I took up my position on 1 January 2019, I would like to take this opportunity to thank former Executive Director, Markku Mylly for his hard work throughout the year and for maintaining the high level of services the Member States and European Commission have come to expect. A special thanks also goes to our staff who have worked conscientiously to meet the challenges of combining existing tasks with new entrusted tasks, overcoming constraints of resource and budget along the way.

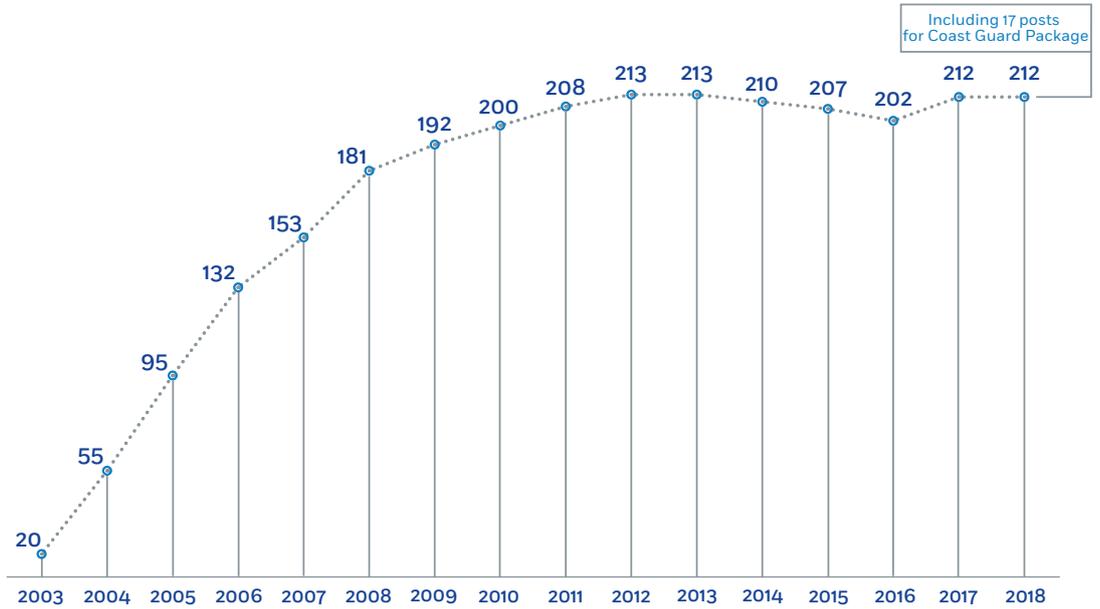
Maja Markovčić Kostelac

Executive Director



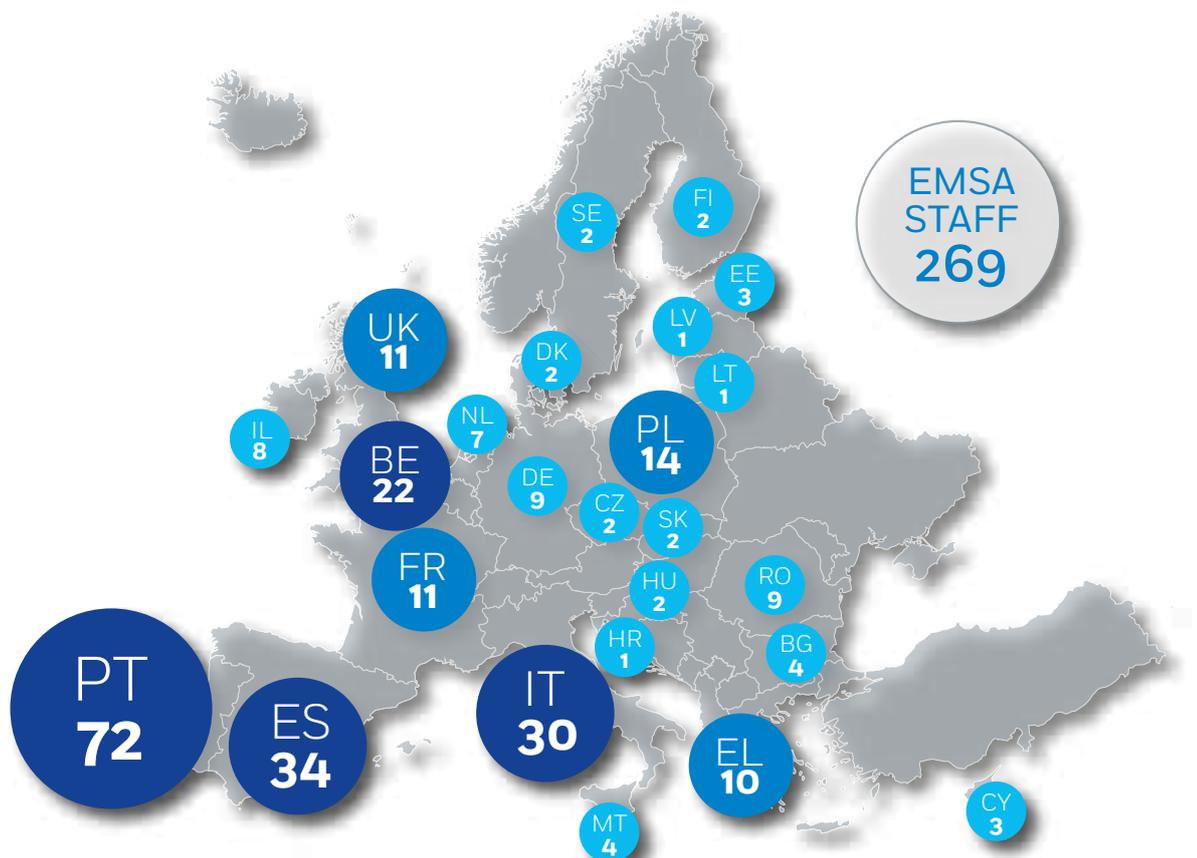
ESTABLISHMENT PLAN FIGURES

EMSA statutory staff from 2003 to 2018



EMSA STAFF BY NATIONALITY 2018

Figures include statutory and non-statutory staff



THE AGENCY IN BRIEF

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 European Commission and the Member States in the field of maritime safety, security and prevention of pollution from ships. The Agency was established by Regulation (EC) No 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 European 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
- building capacity of national competent authorities.

- providing operational assistance, including developing, managing and maintaining maritime services related to ships, ship 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
- at the request of the European Commission, providing technical operational assistance to non-EU countries around relevant sea basins.

The Agency's work reflects the spectrum of initiatives launched by the EU 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

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

VISION

To promote a safe, clean and economically viable maritime sector in the EU

VALUES

Efficiency, effectiveness, transparency, flexibility and creating added value



CHAPTER 1

MARITIME MONITORING AND INFORMATION ON SHIPS AND CARGOES



MARITIME INFORMATION EXCHANGE PLATFORM

Getting a comprehensive overview of activity at sea is a challenge for most countries. To implement maritime policies effectively, governments and authorities need detailed, reliable knowledge about what happens at sea, in real time. Through EMSA's SafeSeaNet Ecosystem Graphical User Interface (SEG), users are being given access to key maritime applications and their data sets and tools whether from mobile and tablet devices or desktop and laptop computers. The SEG interface groups together the information services of SafeSeaNet (SSN), Long Range Identification and Tracking (LRIT), Integrated Maritime Services (IMS), CleanSeaNet (CSN), THETIS and Equasis:

- SSN - Ships transiting EU waters are tracked daily in real-time through SafeSeaNet, the EU's vessel traffic monitoring and information system. This system enables the exchange of data between national systems managed by maritime authorities across Europe
- LRIT - Ships transiting global waters are tracked through the LRIT system, introduced by the International Maritime Organisation in 2006. EMSA operates the LRIT Cooperative Data Centre, through which Member State users can access the LRIT information of their ships worldwide as well as of any third country vessel bound to or sailing within 1000 nautical miles of EU waters
- IMS - EMSA's Integrated Maritime Services allow data from EMSA applications and external sources to be integrated and correlated to provide targeted information services. Through IMS, users also have access to the automatic detection and alert triggering of ship behaviour (ABM)
- CSN - CleanSeaNet is EMSA's satellite-based oil spill surveillance and vessel detection service. Vessels detected by satellite in the vicinity of an oil spill may be correlated with vessel traffic reports to help identify the source of the spill
- THETIS – SEG gives its users access to the information on a ship's inspection history that is publicly available
- Equasis – A link is also provided to Equasis where users can consult information related to a ship's history, classification and owner.



Webinars are provided to support the training of users on the main SEG functions and available data sets

In 2018, development of the SEG interface continued as planned. Several training activities and user consultations took place, as the interface came into operation for more authorised users. Eight SEG training sessions were organised, with 236 participants in total. National training sessions took place in Croatia and in Romania, and one information session on IMS-SEG was given to Danish authorities.

Over 40 training webinars dealing with different aspects of SEG were provided during the year. An e-learning module on EMSA's surveillance services was jointly developed by EMSA and Frontex, and rolled out to users at EUROSUR National Coordination Centres (NCC) and Frontex staff.

MONITORING VESSEL TRAFFIC THROUGH SAFESEANET

The EU's vessel traffic monitoring and information system, SafeSeaNet, was upgraded in June 2018 and support given to users on the new legal reporting requirements (as regards waste, hazardous materials, bunkers, etc.). The quality of data contained in the system remains highly important and EMSA works closely with the Member State users to make improvements in this area.

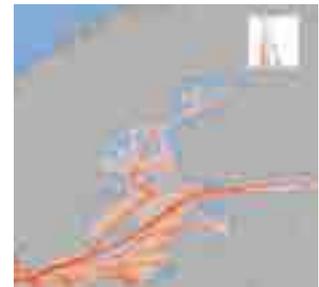
Search and rescue bodies, pollution response centres and vessel traffic services are just some of the user communities accessing the system for reliable data on: ship positions; arrival and departure information; cargo (for vessels carrying dangerous or polluting goods); details of waste and cargo residues; ship security; and, any incident posing a potential hazard to shipping or to the safety of individuals or the environment.

In 2018, EMSA and the European Commission's Directorate General for Civil Protection and Humanitarian Aid Operations (DG ECHO) agreed to develop an e-learning course on SafeSeaNet and the Common Emergency Communication and Information System (CECIS). The link between the two platforms aims to enable a more efficient response following the reporting of a pollution incident.

Traffic Density Maps displaying vessel movement patterns are a new feature in development aimed at contributing to a better understanding of maritime traffic. The European Commission DG for Maritime Affairs and Fisheries and the European Environment Agency have expressed their interest in the service when it becomes available in 2019.

The development of the central databases (ship, hazmat, organisations and locations) continued as planned in 2018. These databases offer a set of web services to enable information sharing via a system-to-system interface with Member State national systems.

EMSA has been looking at the possibility of creating a simplified SafeSeaNet system which would be available to the general public and open up access to vessel positioning data. The proposal for this was put forward to the steering group in December 2018.



Traffic Density Maps are in development, such as the example shown above for the Baltic Sea area

2018

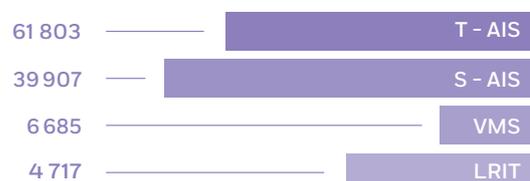
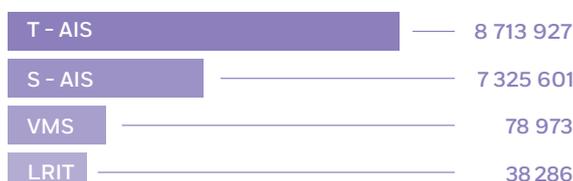
DATA PROCESSED BY EMSA INFORMATION SERVICES

ACTIVITIES COVERING:



16 million
TOTAL MESSAGES RECEIVED BY EMSA IN ONE DAY

96 265
NUMBER OF DISTINCT VESSELS DETECTED IN ONE DAY BY MORE THAN ONE SOURCE



MONITORING VESSEL TRAFFIC THROUGH LRIT

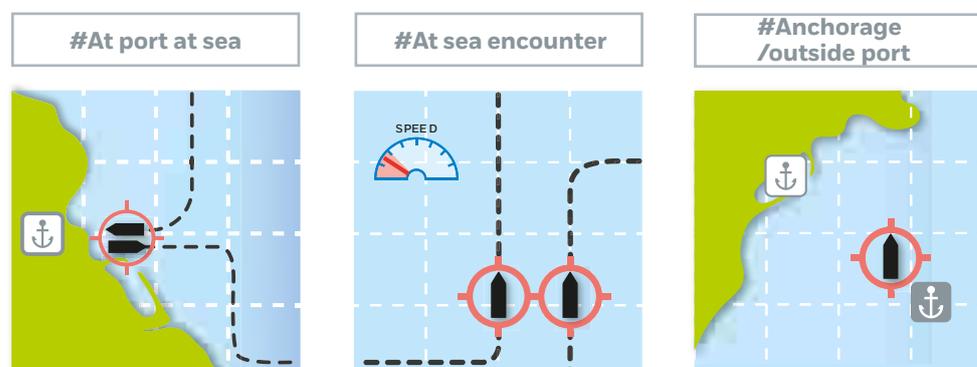
EMSA operates the EU LRIT Cooperative Data Centre (EU LRIT CDC) which disseminates long range identification and tracking information on EU-flagged ships around the world on behalf of all European flag states, and exchanges information with other data centres around the world. The EU LRIT CDC is one of the largest data centres in the LRIT system, tracking over 8 000 ships per day. Associated to this is the global LRIT International Data Exchange which serves 61 LRIT data centres worldwide covering over 120 contracting governments and is hosted and operated by EMSA.

In terms of membership, Tunisia became part of the EU LRIT CDC after its request to join was accepted by the European Commission in 2018. Georgia has made a similar request and this is under consideration. EMSA has also been assisting the UK with its migration from the cooperative data centre to the UK's national data centre, as preparations got underway for the country's withdrawal from the EU.

INTEGRATED MARITIME SERVICES

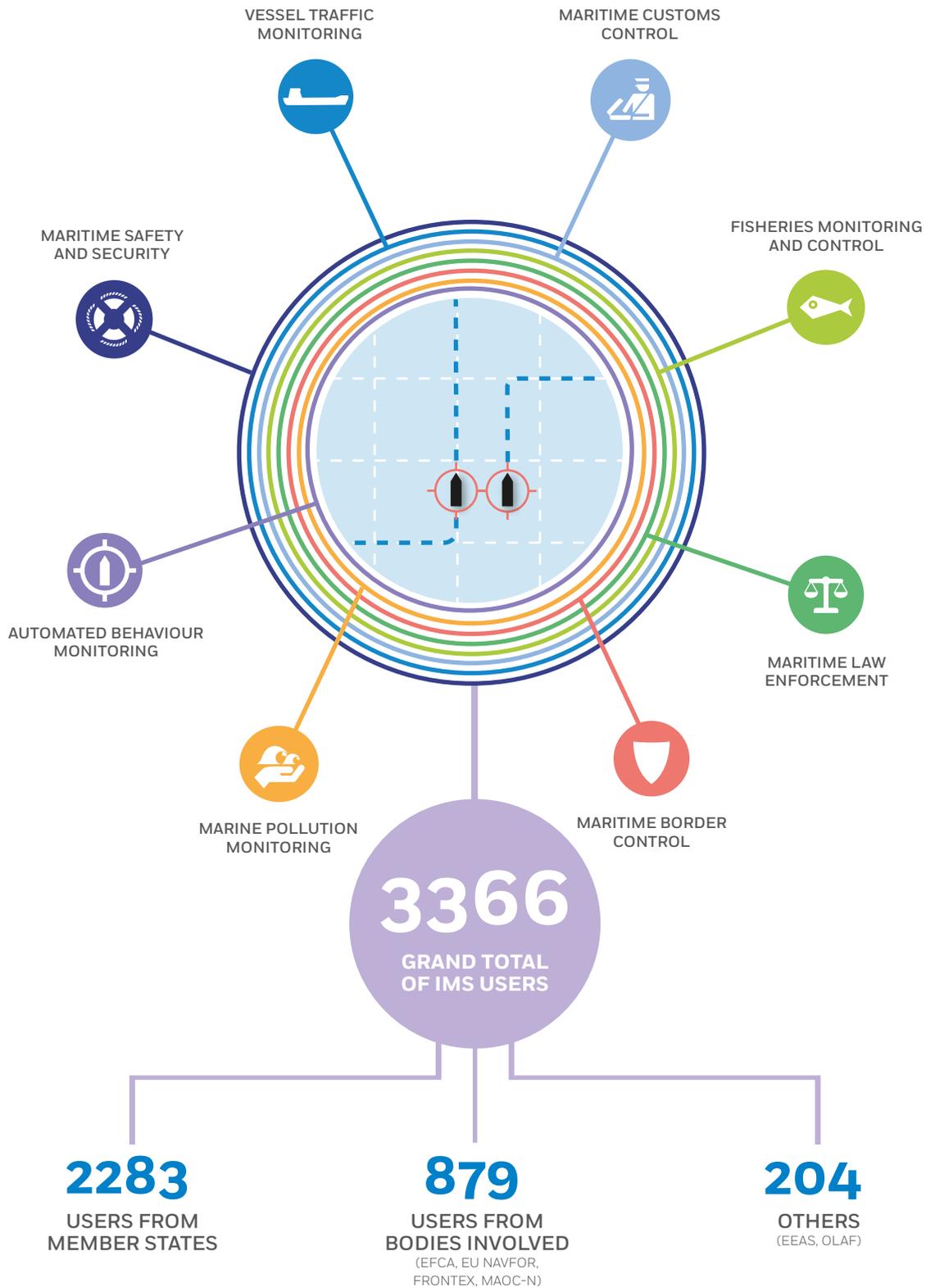
EMSA's Integrated Maritime Services (IMS) have the operational and technical capability to integrate and correlate data from EMSA applications and external sources for a variety of different user needs-based services. Services continued throughout the year to be provided to Member State authorities as well as EU bodies, including Frontex (border control), EFCA (fisheries monitoring), EU Navfor (anti-piracy) and MAOC-N (law enforcement – narcotics). The total number of users more than doubled from 1 500 in 2017 to over 3 300 in 2018, corresponding to some 240 organisations.

Automated Behaviour Monitoring (ABM) tools were also provided to IMS users to support them in their maritime surveillance functions by providing a near real time, enhanced situational picture. Through the different algorithms used, patterns such as entering an area of interest, encounters at sea, approaches to shore, drifting and deviations from usual routes, are detected and operators automatically alerted in real time. The system has over 20 algorithms with the possibility of more being added as the system grows according to user needs. On average in 2018, the system generated 2 000 alerts per day to over 200 recipients for the 300 specific ABM searches which are run on a routine basis.



Examples of ship behaviour patterns for which EMSA provides automatic detection and alert triggering

Satellite AIS capabilities have led to an extended geographical range over which ships can be tracked using the AIS system. EMSA continues to procure a global feed from a commercial SAT-AIS data provider as well as to receive SAT-AIS data from Norway's own national programme. In 2018, EMSA hosted the EU National Satellite AIS Collaborative Forum and agreed on future cooperation on the VHF Data Exchange System (VDES) for exchanging digital data using Norway's space assets.



RPAS MARITIME SURVEILLANCE

For continuous information in areas of particular risk, EMSA has been providing maritime surveillance services based on Remotely Piloted Aircraft Systems (RPAS). Such services were provided in 2018 to Portugal, Spain, Croatia, Greece, and Frontex. The visuals below highlight some of the areas in which maritime surveillance is enhanced due to the specialised technology or payload on board the RPAS. They also show the countries and specific authorities which benefited from these services during the year. Alongside these services, is the RPAS data centre which provides flight data and live video, thereby showing the maritime picture in real time.

SEARCH & RESCUE	EMISSIONS MONITORING	TRAFFIC MONITORING	MARINE POLLUTION	ILLEGAL FISHING	TRAFFICKING
Optical scanner EPIRB AIS	SOx/NOx sniffer EO/IR camera AIS	Radar & optical scanner EO/IR camera AIS	EO/IR camera Radar AIS	Radar & optical scanner EO/IR camera AIS	Radar & optical scanner EO/IR camera AIS
					

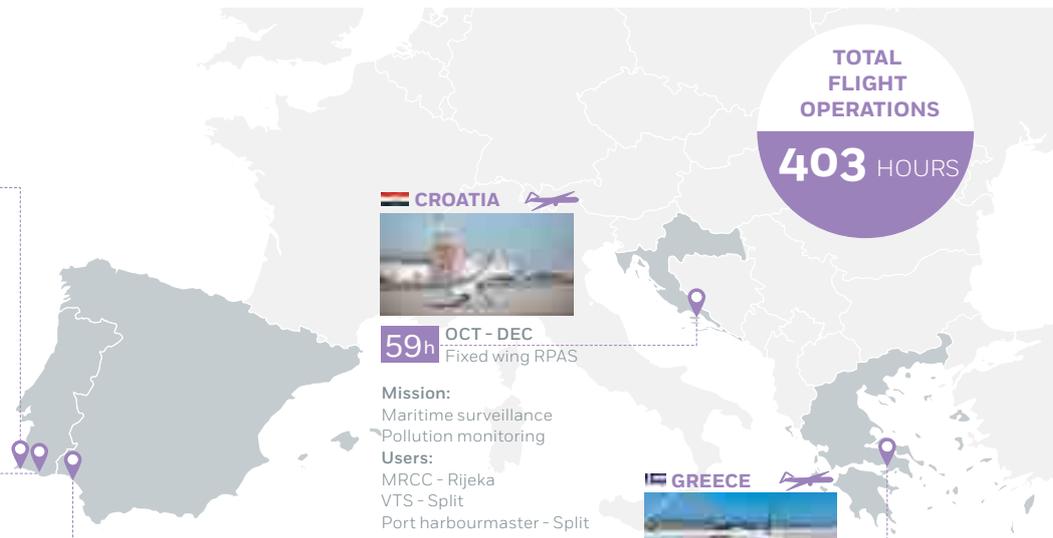


163h JAN - MAR
Fixed wing RPAS

111h OCT - DEC
Fixed wing RPAS

Mission:
Maritime surveillance
Pollution monitoring

Users:
DGRM
GNR
Air Force
Navy
Frontex



59h OCT - DEC
Fixed wing RPAS

Mission:
Maritime surveillance
Pollution monitoring

Users:
MRCC - Rijeka
VTS - Split
Port harbourmaster - Split



6h OCT (preparation for operation)
Fixed wing RPAS

Mission:
Emission monitoring

Users:
Hellenic Coast Guard
General Chemical State Laboratory



65h OCT - DEC
Fixed wing RPAS

Mission:
Maritime surveillance

Users:
SASEMAR

SATELLITE COMMUNICATIONS



Satellite communications boost the capabilities of EMSA's RPAS for far range operations and allow real time data delivery

RPAS DATA CENTRE



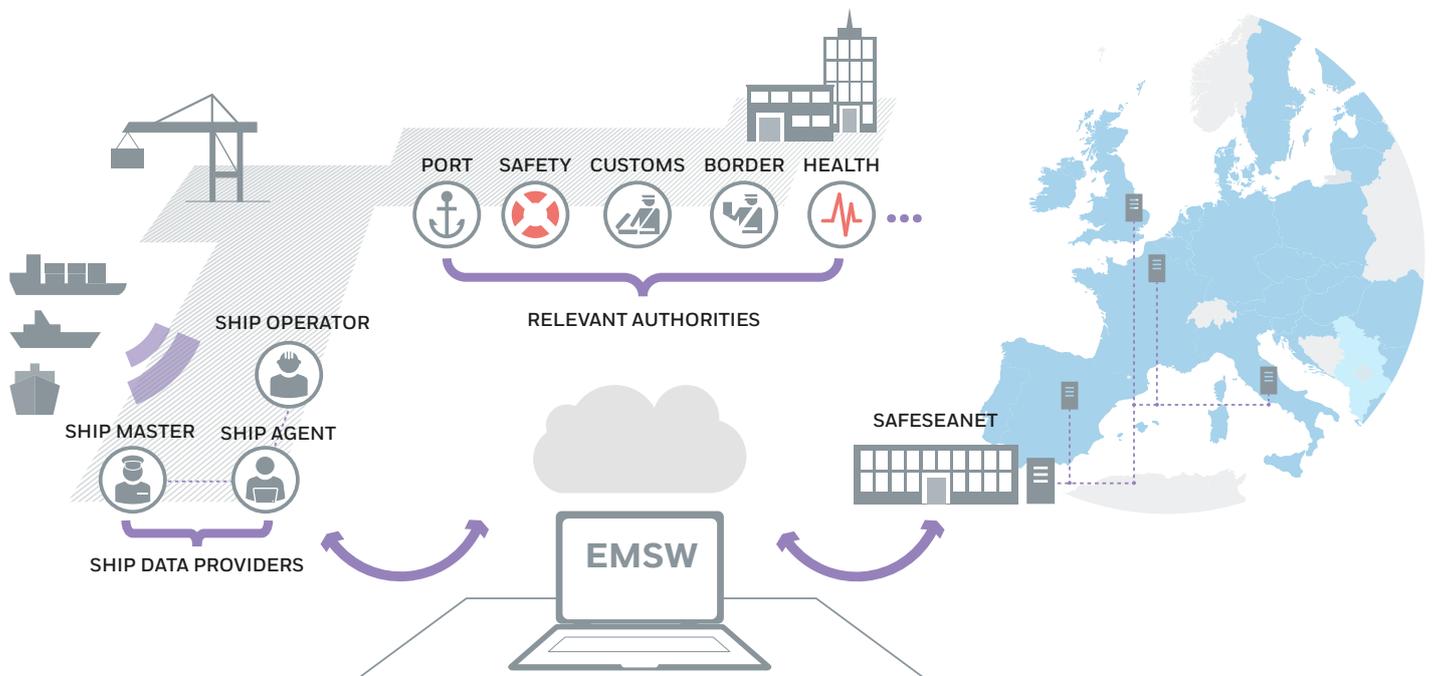
RPAS flights can be monitored via EMSA's RPAS data centre which offers users an online interface displaying flight detail in real time (images, video, flight path, measurements, etc.)

SIMPLIFYING REPORTING FORMALITIES

In 2018 EMSA continued to monitor the implementation of the Reporting Formalities Directive aimed at simplifying the administrative procedures applied to ships arriving in and/or departing from EU ports. The directive set an obligation for Member States to establish National Single Windows through which information would be submitted electronically and made available as necessary to several different authorities. EMSA has been supporting Member States to achieve harmonised implementation and, importantly, greater digitalisation. Pilot projects for the e-Manifest and National Single Window were successfully run, leading to concrete results.

The eManifest pilot project demonstrates how cargo information, required by both maritime and customs authorities, can be submitted together with other reporting formalities in a harmonised manner. As a tool for this pilot project, EMSA tested and improved the European Maritime Single Window (EMSW) in coordination with the European Commission, participating Member States, and shipping industry representatives.

An agreement was also concluded between EMSA and the European Commission Directorate General for Maritime Affairs and Fisheries in 2018 to promote interoperability between industry and the competent authorities in the European Maritime Single Window under the umbrella of the Common Information Sharing Environment (CISE) process.



MARITIME SUPPORT SERVICES

The Maritime Support Services (MSS) centre is a 24/7 service helpdesk for users of the vessel traffic monitoring and surveillance systems hosted by EMSA. It provides non-stop monitoring of these systems to ensure high availability and performance, as well as to facilitate early incident management. The MSS centre is the first point of contact for Member States whenever assistance is required within the context of EMSA's contingency plan. This plan was activated on ten occasions in 2018.



French, Portuguese and Spanish leaders take the opportunity to visit EMSA's Maritime Support Services operations centre following the Energy Interconnection Summit in July 2018



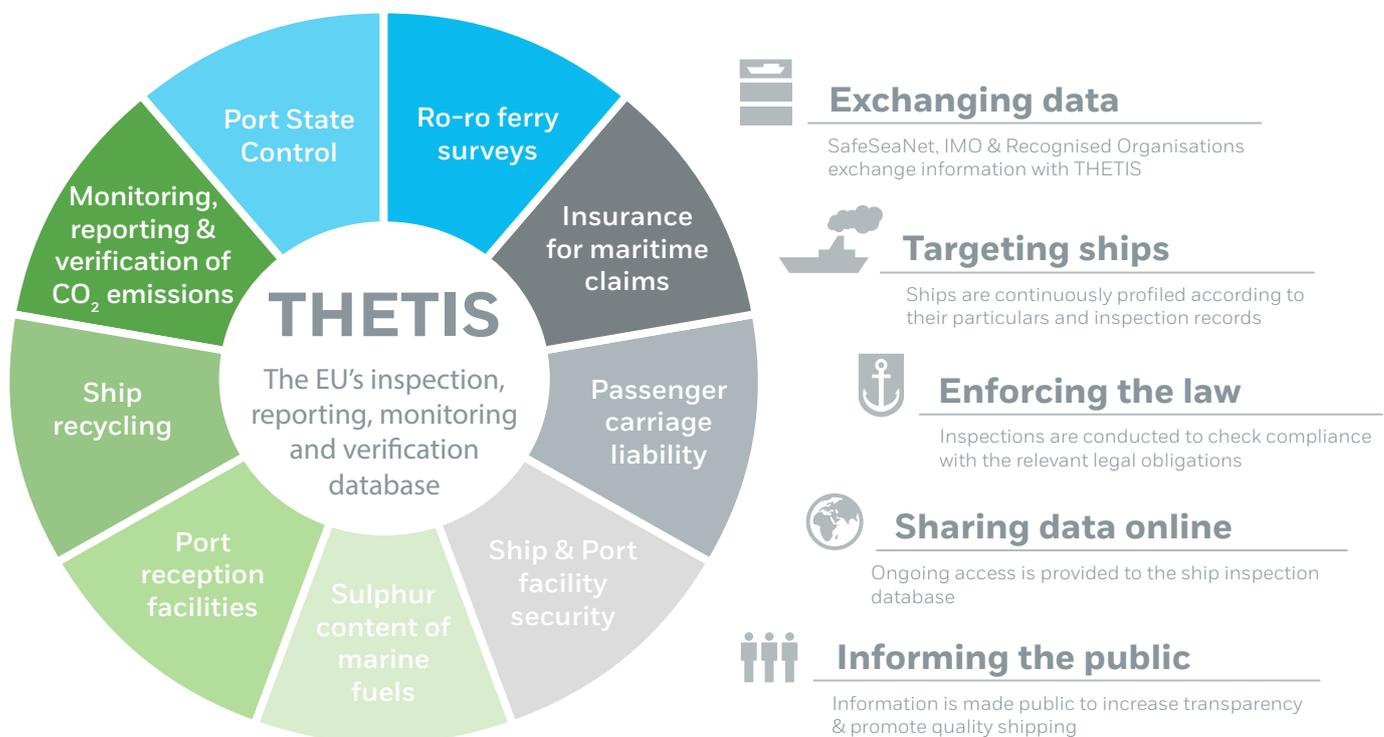
EU Transport Commissioner Ms Violeta Bulc paid a visit to the MSS centre in March 2018, where she had the opportunity to hear about two of EMSA's latest features - THETIS-MRV for CO₂ emissions and RPAS for enhanced maritime surveillance

THETIS INFORMATION SYSTEM AND MODULES

The THETIS information system was originally set up to allow port state authorities in the EU and other Paris MoU countries (Canada, Iceland, Norway and Russia) to manage inspection data in a single window. It enables these authorities to target the right vessels for inspection and assists the European Commission by providing statistics on inspection results. In 2018, some 18500 Port State Control inspections were recorded by 600 users from 28 countries.

New functionalities continue to be added to the system, thereby supporting a wider range of Member State authorities and facilitating the enforcement of a broader set of European laws. The provisions of the Sulphur Directive, the Port Reception Facilities Directive, the CO₂ Monitoring, Reporting and Verification (MRV) Regulation and, most recently, the Security Inspections Regulation are all catered for in this flexible system. Accordingly, some 12030 sulphur inspections and close to 3700 port reception facility related inspections were recorded in the system in 2018.

The MRV module which went live in August 2017 enables companies responsible for the operation of large ships to report their CO₂ emissions. The development is the first of several steps to include maritime transport in the EU's overall policy to reduce greenhouse gas emissions.





One of the features of the CMS service which is most requested by users is vessel detection. Objects resembling vessels are detected on the basic image products and this information is extracted as a separate layer. Vessel detections derived from satellite images are correlated against other vessel position data (e.g. AIS, LRIT and VMS data), providing an overview of which vessels are reporting in a given area, and which vessels are not. This is especially useful for authorities wishing to detect vessels that are not reporting, whether due to an accident or incident, or because the vessel does not wish its location to be known

COPERNICUS

In its capacity as an entrusted entity for the Copernicus Maritime Surveillance Service, EMSA provides satellite images to support a better understanding and improved monitoring of human activities at sea. The services delivered support users in areas such as: fisheries control, maritime safety and security, law enforcement, customs, marine environment (pollution monitoring), and support to international organisations and other activities. In 2018, the overall number of user organisations registered in the system more than doubled. And, by the end of 2018, the total number of EO services had grown by almost 40% from 1924 to 3088, with law enforcement being the biggest area of growth.

The service provides timely, relevant, and targeted information to Member States and EU bodies. Coverage can be provided in areas of European interest across the globe by Synthetic Aperture Radar (SAR) and optical satellites with a variety of different resolutions. In addition to image products, the service provides value-added products, including detection and classification of vessels (e.g. position, vessel type, size, heading) based on automatic algorithms, and object/activity detection (location, type of activity or object, size, information on surrounding area).

Data acquired through Copernicus can be combined with a wide range of other data, both from EMSA's maritime information applications and from external sources. Vessel position and track information overlaid on satellite images, for example, provides a very powerful tool for checking on vessel activity at sea - including the existence and location of vessels that are not reporting their whereabouts. Information is delivered in a customised way through a secure, user-friendly web interface.

CHAPTER 2

VISITS AND INSPECTIONS TO MONITOR THE IMPLEMENTATION OF EU LEGISLATION



INSPECTIONS CONDUCTED IN 2018

16

RECOGNISED ORGANISATIONS

- 📍 Offices
- 3 China
- 2 Germany
- 2 Japan
- 2 Poland
- 2 South Korea
- 1 France
- 1 Italy
- 1 The Netherlands
- 1 Turkey
- 1 USA

5

STANDARD FOR TRAINING, CERTIFICATION & WATCHKEEPING

- Azerbaijan
- Bangladesh
- Indonesia
- Israel
- Ukraine



CLASSIFICATION SOCIETIES

Classification societies develop and apply technical standards to the design, construction and assessment of ships. Some 12 classification societies are recognised by the EU and are inspected by EMSA as part of its core tasks. Based on the reports submitted, the European Commission makes the relevant assessments and takes policy decisions and/or requests corrective measures.

In 2018 EMSA carried out 16 inspections of recognised organisations, the locations and scope of which were determined on a risk basis. Remote auditing techniques were used to prepare the inspections, so that detailed information could be assessed ahead of time. While the inspections themselves focussed on common issues for ships in operation and new builds, they also reviewed corrective measures taken in previous years regarding fire safety particularly in spaces with machinery. Findings were made in all cases and triggered voluntary corrective action. Finally, EMSA submitted draft assessment reports for five recognised organisations to the European Commission in order to facilitate their final, overall assessment.

STANDARDS OF TRAINING, CERTIFICATION AND WATCHKEEPING

Many EU registered ships are manned by seafarers who are not EU nationals. To ensure that these crew members are properly trained, EMSA carries out inspections of the maritime education, training and certification systems of their country of origin. Compliance is assessed on the basis of the International Maritime Organisation's STCW Convention (Standards of Training, Certification and Watchkeeping). In 2018, inspections were carried out in Azerbaijan, Bangladesh, Indonesia, Israel and Ukraine. In addition, three visits were made to Member States on the implementation of the Directive on the minimum level of training of seafarers.

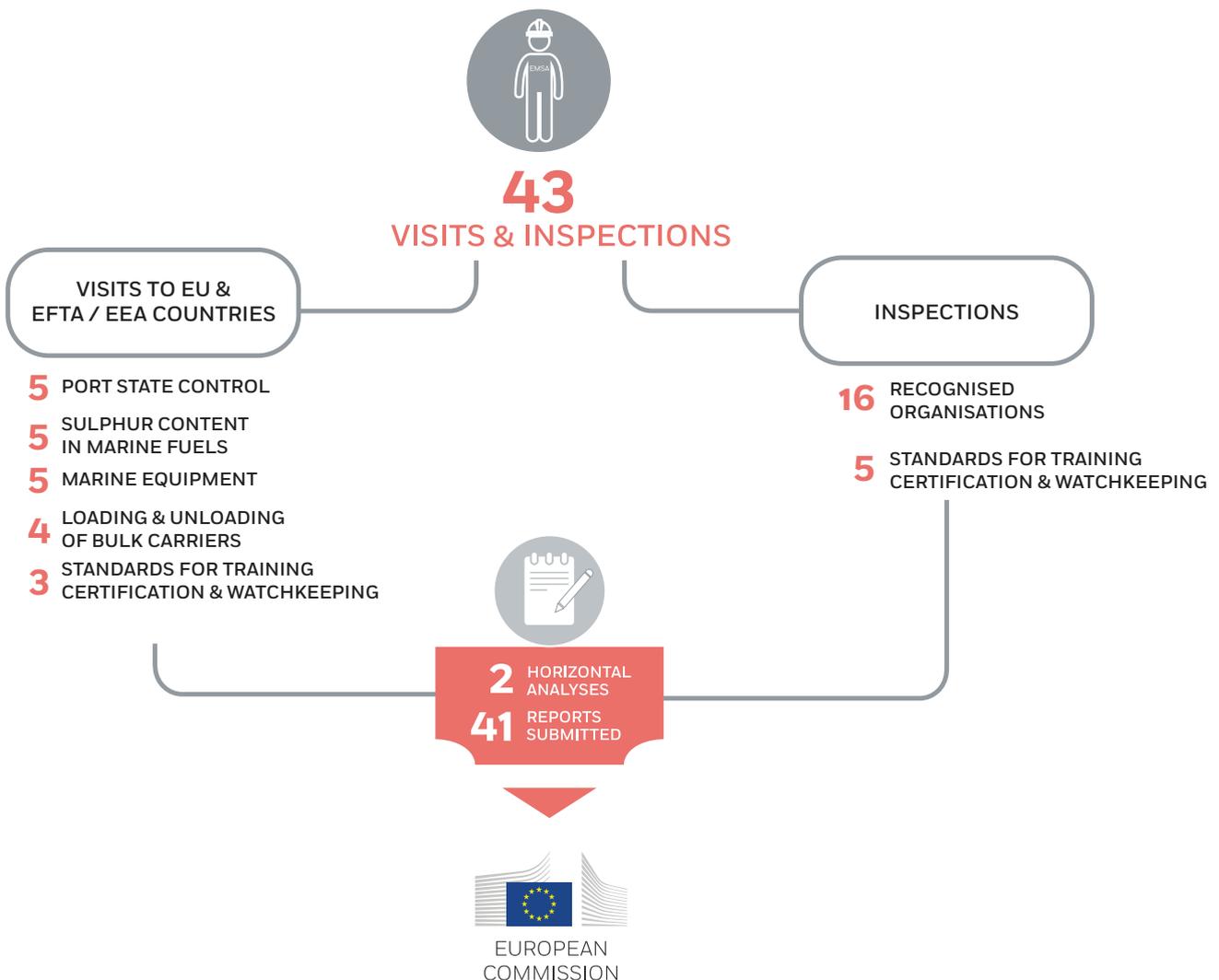
An important development in 2018 was the seafarer statistical review published by EMSA on the European labour market. The data shows that 174 780 masters and officers hold valid certificates of competency (CoC) issued by EU Member States while another 87 802 masters and officers hold original CoCs issued by non-EU countries with endorsements issued by EU Member States. The review is based on data registered by EU Member States and recorded in EMSA's STCW Information System (STCW IS) up until the end of 2016.

EMSA updated two training packages on the STCW Convention and Code which were offered to both EU and non-EU countries. A workshop on the human element was also held in 2018, covering three main topics: the STCW Information System Seafarers' Statistical Review; the digitalisation of STCW certificates; and, the findings of the mid-cycle horizontal analysis on the implementation of the Directive on the minimum level of training of seafarers.

MONITORING THE IMPLEMENTATION OF EU MARITIME LEGISLATION

EMSA assists the European Commission and the EFTA Surveillance Authority in their efforts to achieve a convergent and effective implementation of EU maritime law by conducting visits to Member States, Iceland and Norway. In 2018, visits were carried out to monitor the implementation of four EU directives: on the sulphur content of marine fuels; on port state control; on marine equipment; and on the safe loading and unloading of bulk carriers.

The outcome of each visit forms the basis of a report which is shared with the Member State in question and the European Commission (and, where appropriate, the EFTA Surveillance Authority). The visits give Member States the opportunity to better plan resources, assess training requirements and review any gaps and shortcomings, in order to improve the level of compliance with EU law. This enhances cooperation between the European Commission and Member States and facilitates greater consistency and shared targets.





MARITIME SECURITY

Maritime security refers generally to measures taken for protection against unlawful acts such as piracy, armed robbery, terrorism and maritime violence. EMSA assists the European Commission by monitoring the implementation of Regulation (EC) No 725/2004 on enhancing ship and port facility security. It also provides technical assistance to the EFTA Surveillance Authority on ship security.

EMSA's inspection reports detail the maritime security measures, procedures and structures of the countries visited. The agency also provides technical input on future inspections for the consideration of the European Commission. In 2018, 46 individual inspections took place, reflecting heightened priority of the European Commission in this area.



EMSA continues to participate in the European Commission's maritime security committee (MARSEC) and in the stakeholders' advisory group on maritime security (SAGMAS) chaired by the European Commission.

A new reporting module in THETIS-EU to assist the Member States in the recording and reporting of maritime security inspections was developed and presented to the Member States in 2018, before going live in January 2019.

Also in 2018, EMSA developed three training courses on ship security which were given both in EMSA and externally. The agency also released a distance learning module on cybersecurity awareness geared towards officers working in the maritime authorities but available to the public from EMSA's website.

HORIZONTAL ANALYSIS AND RESEARCH

EMSA drafts reports for each of the visits and inspections it conducts and then analyses these to identify any common findings and draw general conclusions on the effectiveness of the measures put in place by Member States to implement the directives in question. Two analyses were completed in 2018:

- the first covering issues identified following a full cycle of Member State visits related to accident investigation, and presented during a Permanent Cooperation Framework meeting
- the second dealing with mid-cycle findings from Member State visits on the minimum level of training of seafarers, and presented during a workshop at EMSA on Maritime Education, Training and Certification of Seafarers.



CHAPTER 3

PROVIDING TECHNICAL AND

SCIENTIFIC ASSISTANCE AND

FACILITATING TECHNICAL COOPERATION



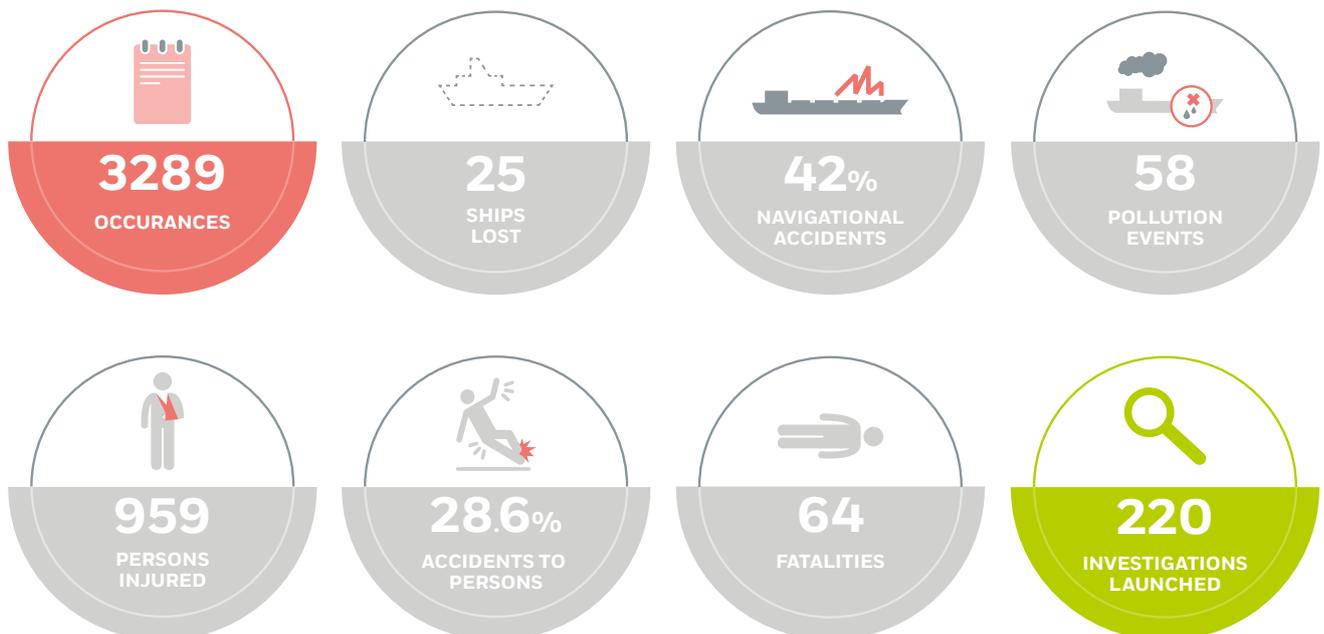
ACCIDENT INVESTIGATION

EMSA helps the European Commission and Member States to improve maritime safety by analysing accident investigation reports and producing marine casualty statistics. The European Marine Casualty Information Platform (EMCIP) run by EMSA is a centralised database where Member States store and analyse information on marine casualties and incidents. Based on the information extracted from EMCIP, EMSA published the fifth edition of the Annual Overview of Marine Casualties and Incidents in 2018.

This data holds valuable potential for maritime safety. To explore this potential, EMSA developed a methodology in 2017 to analyse EMCIP data and detect potential safety issues. This methodology was applied and tested on the data held for fishing vessels in early 2018 and on ro-ro vessels later in the year. At the same time, EMSA released a more user friendly EMCIP database to support accident investigation bodies in their daily tasks.

EMSA also hosts the Permanent Cooperation Framework (PCF) where Member States and the European Commission work together to facilitate cooperation among accident investigation bodies. In 2018, the third inter-sessional seminar was held on evidence collection as part of the human element in accident investigation and EMSA continued to provide training activities for accident investigators from EU Member States and neighbouring countries.

2018 MARITIME CASUALTIES KEY FIGURES



MARINE EQUIPMENT AND SHIP SAFETY STANDARDS

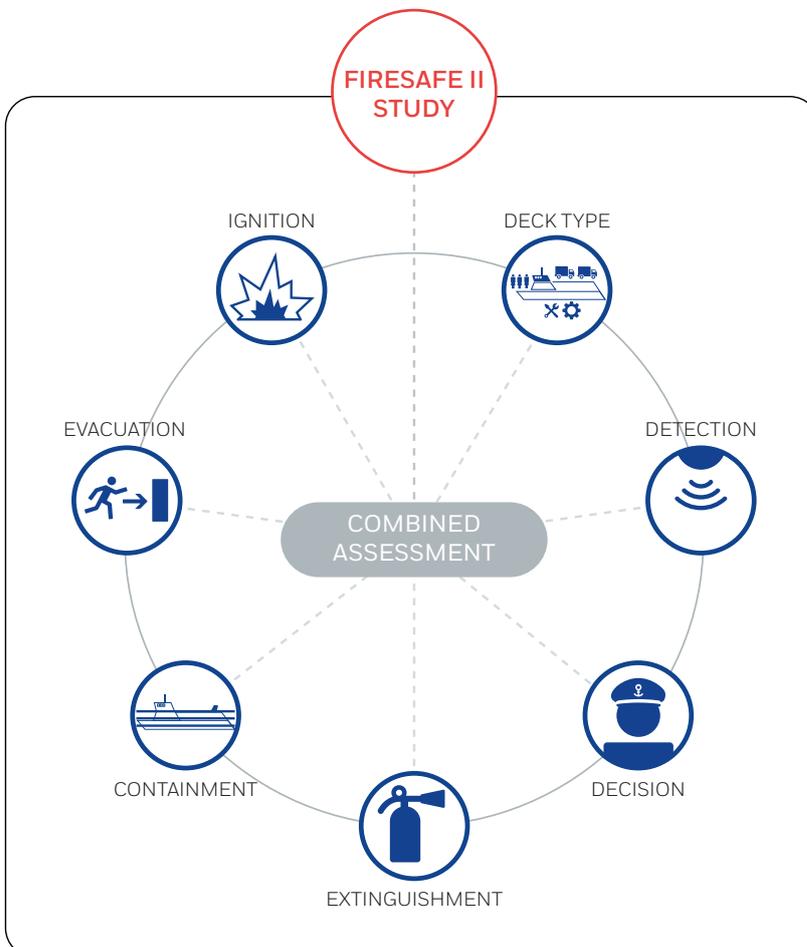
EMSA contributes to the safety of ships and marine equipment by closely monitoring the development of safety standards. In 2018 EMSA contributed to the European Commission's fitness check of passenger ship safety legislation in two key areas. Firstly, EMSA conducted the technical coordination of a new annex for Directive 2009/45/EC which draws input from several consultations. And, secondly, EMSA finalised a safety guide for small passenger ships (below 24m in length) which has been put forward for adoption by Member States as a Council Recommendation.

EMSA continued to build on the work developed in the area of fires on the vehicle decks of ro-ro passenger ships, notably through the Firesafe II study which investigates the risk control options available in the different stages following the outbreak of a fire on board a ro-ro passenger ship – detection, decision, containment and evacuation. EMSA facilitated the related discussions among accident investigation bodies and maritime administrations, and coordinated subsequent EU submissions at IMO.

EMSA continued to support the European Commission on the implementation of the Marine Equipment Directive, particularly as work began on a new MarED database capable of supporting the electronic tagging of marine equipment. This development is expected to substantially improve the monitoring of marine equipment on board EU-flagged vessels.



New electronic tagging standard for better marine equipment safety



The Firesafe II study investigated cost efficient measures for reducing the risk of fires on ro-ro passenger ships



PREVENTION OF POLLUTION BY SHIPS

EMSA provided expertise to the European Commission and Member States throughout 2018 to help them tackle a variety of issues related to the prevention of pollution caused by ships. This assistance covered:



- guidance on LNG bunkering to accommodate for a continued upward trend in LNG fuelled ships operating in Europe. This came together in the form of EMSA's "Guidance on LNG Bunkering to Port Authorities and Administrations" published in 2018 to support ports as they strive to develop adequate control measures for LNG bunkering operations.
- situational awareness data provided to the European Commission's DG Environment on specific ships suspected of breaching the Waste Shipment Regulation (7-day ship track, port of call and departure date, destination and estimated arrival date).
- contributing to the adoption of the revised Port Reception Facilities Directive (including proposals for the enforcement regime and new inspection database).
- holding technical workshops on the implementation of the Sulphur Content of Marine Fuels Directive and organising training courses for sulphur inspectors.
- delivering training to national authorities on the use of the THETIS-MRV system to ensure compliance with the Monitoring, Reporting and Verification of CO₂ Regulation.

On the international front, EMSA continued to actively participate on behalf of the European Commission in the discussions held at the International Maritime Organisation as regards the strategy on the reduction of greenhouse gas emissions from shipping and the development of the Energy Efficiency Design Index (EEDI).



TRAINING AND COOPERATION

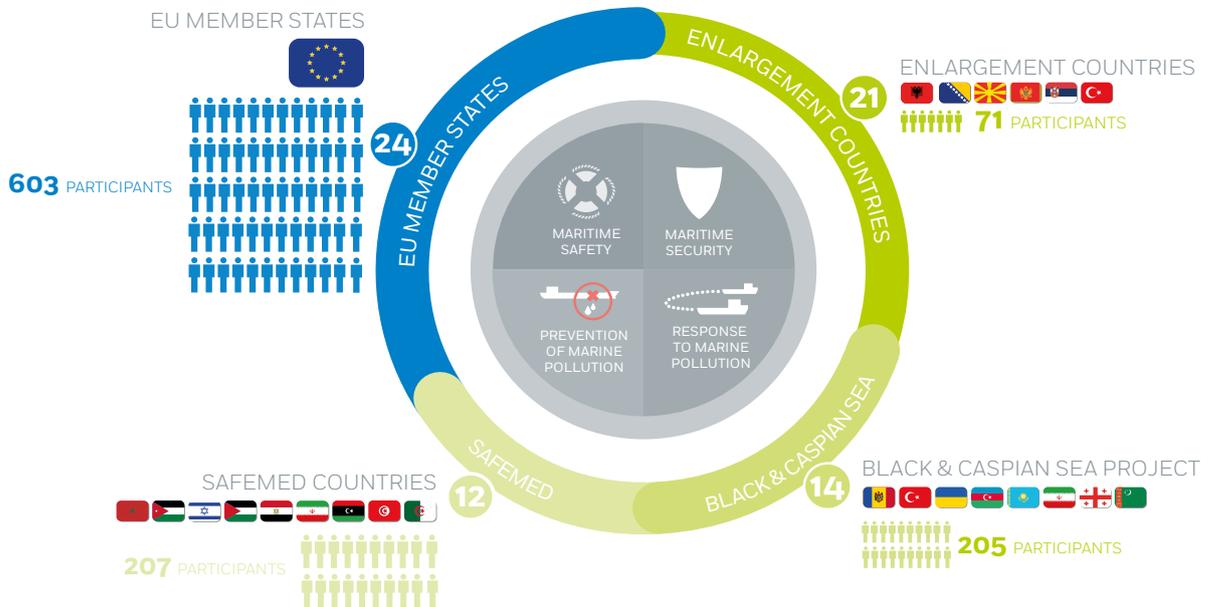
In 2018, EMSA organised 24 training sessions, seminars and best practice exchanges that were attended by 603 participants from the EU Member States, Iceland and Norway. Through this form of technical assistance, the beneficiaries were given updated information on selected technical subjects and benefited from exchanges with both EMSA and other stakeholders on the general effectiveness and harmonisation of standards. In addition, new distance learning modules on EU and international maritime legislation were developed and made available through MaKCs, EMSA's e-learning platform. In addition, 21 training courses were held by EMSA for the enlargement countries (Albania, Bosnia-Herzegovina, FYROM, Montenegro, Serbia, Turkey) included in the grant agreement signed by EMSA and the European Commission's Directorate General for neighbourhood and enlargement negotiations (DG NEAR).

The technical assistance provided to SAFEMED beneficiary countries (Algeria, Egypt, Jordan, Israel, Lebanon, Libya, Morocco, Palestine and Tunisia) resulted in 12 training sessions attended by 207 participants. Following on from the TRACECA project, in 2018 EMSA successfully launched the new project for the Black Sea and Caspian Sea (BCSEA) areas expected to run until January 2021. This offers the beneficiary countries (Azerbaijan, Georgia, Kazakhstan, Moldova, Ukraine, Turkey and Turkmenistan) technical assistance in a number of key areas, including flag state, port state, VTMS, human element, environmental protection and International Ship and Port Facility Security. Both SAFEMED and BCSEA beneficiary countries were given access to some of EMSA's operational tools, including CleanSeaNet.

During 2018 EMSA continued to host and support the information system, RuleCheck, through which port state control officers are given direct access to up-to-date EU legislation, IMO and ILO Conventions and Paris MoU documents. RuleCheck is also now available to flag state personnel in Member States, European bordering (ENP) and pre-accession (IPA) countries as well as to numerous regional port state control regimes such as Mediterranean, Black Sea, Caribbean and Indian Sea MoUs. The e-learning platform, MaKCs, was also maintained, offering dedicated courses to port state control officers on ship inspections. These services were also extended to SAFEMED and BCSEA countries.

2018
TRAINING SESSIONS

71



SHIP INSPECTION SUPPORT

Valuable information on the safety and quality of the world’s merchant fleet can be found online, free of charge through the Equasis information system. By publishing reliable and objective information on the safety of ships and their operation, this system helps to encourage quality shipping and eradicate substandard practices. The data which is supplied by port state control regimes, class societies and other industry-based organisations counts a monthly average of 34360 individual users , viewing the pages in the Equasis database over two billion times a year (based on 2018 figures). EMSA’s role as host of the management unit of Equasis includes: manning a user helpdesk to ensure the system runs smoothly; preparing biannual meetings for the editorial board and supervisory committee; handling the accreditation of data providers; and, publishing the Equasis annual report on the world merchant fleet.

Alongside this is the MARINFO information system which collects data from commercial sources worldwide on ship characteristics, accidents, movements, ownership, and ship history. This system is particularly useful to EMSA staff when preparing their visits and inspections, as well as to the European Commission when making ex-post assessments of legal provisions. In 2018, the use of MARINFO was extended to facilitate the provision of regular statistics to Member States.

CHAPTER 4

POLLUTION PREPAREDNESS

DETECTION AND RESPONSE



NETWORK OF STANDBY OIL SPILL RESPONSE VESSELS

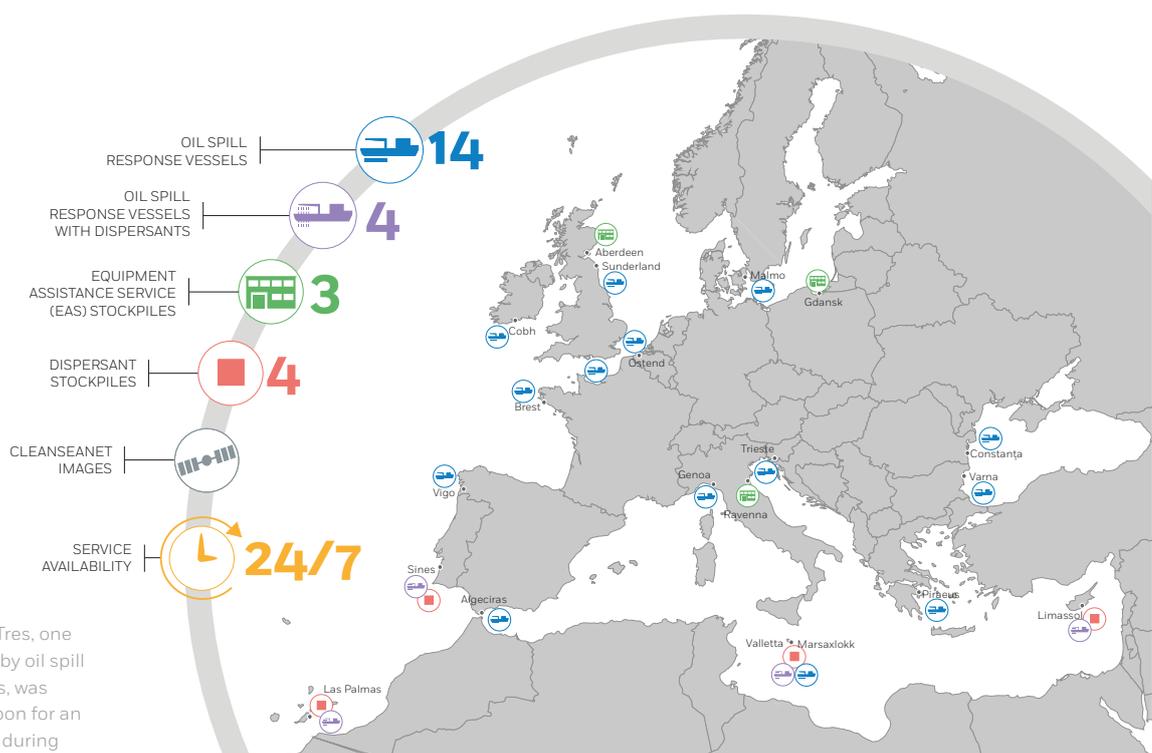
A network of oil spill response vessels is on standby across Europe to reinforce the ability of individual EU Member States to protect their coastlines from marine pollution. EMSA maintains operational contracts for each of the vessels in this network, mainly by monitoring and assessing the performance of the contracted vessels during quarterly drills and international exercises. At the end of 2018, 17 fully equipped oil spill response vessels were available for mobilisation.

EMSA continued to build up its Equipment Assistance Service throughout the year by creating a new depot in the Adriatic Sea area and completing procurement for another depot in the Baltic Sea area. Dispersants and dispersant spraying systems were also added to the service, thereby extending the options available to national authorities when responding to incidents at sea.

While the EU had another year without a major oil pollution disaster, extensive support was provided following the ship collision north of Corsica, for which EMSA's Brezzamare oil recovery vessel was mobilised. Also, at the request of the Bulgarian authorities, a stockpile from Malta was made available for oil recovery operations following a reported leak from the sunken M/V MOPANG cargo ship dating back to 1921.

Developments got underway for the use of RPAS services from two of EMSA's response vessels (Ria de Vigo and VM Partisan), with the aim of improving detection capacity and monitoring equipment use.

NETWORK OF EMSA CONTRACTED VESSELS, DISPERSANTS & EQUIPMENT STOCKPILES IN 2018



Left: The Bahia Tres, one of EMSA's standby oil spill response vessels, was stationed in Lisbon for an open ship event during Portugal Shipping Week in September 2018



An oil spill response vessel was deployed from EMSA's fleet to help in the clean-up operations following a collision between two vessels, north of Corsica on 7 October 2018. CleanSeaNet satellite-based images were also requested and used to help monitor the extent and spread of the oil slick



DETECTING AND DETERRING MARINE POLLUTION

EMSA helps to identify, trace and track the origin of illegal discharges through the satellite image-based service known as CleanSeaNet. The service is available to 28 coastal states (all 23 EU coastal states; two EFTA coastal states, Iceland and Norway; three candidate countries, Albania, Montenegro and Turkey). Through the SAFEMED and BCSEA cooperation projects, the service was also made available across the Mediterranean, Black and Caspian Sea areas.

Overall, 4860 analysed images were delivered: 4645 to coastal state users; and, 215 to SAFEMED and BCSEA beneficiary countries. A total of 6515 potential spills were detected, half of which ranked in the highest probability category regarding the detection of hydrocarbons.

CleanSeaNet provided support to 11 additional emergency requests from Member States and the European Commission. One such request came from France, following the collision between the Tunisian Ulysse ro-ro ship and the Cypriot CSL Virginia general cargo ship off the coast of Corsica on 7 October. For this case, synthetic aperture radar images were used to monitor the extent and spread of the resulting oil slick and optical images from the Copernicus Maritime Surveillance service were used to monitor the coastline affected.



EMSA's contracted standby oil spill response vessel - Galaxy Eco (based in Varna, Bulgaria) - participated in the oil spill response activities held as part of the 'Breeze 2018', an international exercise, organised by the Bulgarian navy and maritime administration in the Black Sea



IMO Secretary General, Kitack Lim, and EMSA's former Executive Director, Markku Mylly at Europe's leading oil spill conference and exhibition - Interspill.

COOPERATION FOR EFFECTIVE POLLUTION PREPAREDNESS AND RESPONSE

EMSA supports the preparedness and response capabilities of Member States for marine pollution incidents. This role involves disseminating best practices and exchanging information between Member States, the Regional Agreements, the International Maritime Organisation and other relevant international bodies.

EMSA shares information with Member States on chemicals and their treatment in the marine environment to assist them in dealing with spills involving hazardous and noxious substances. MAR-ICE is a service offering information from experts in the event of a marine chemical incident. The MAR-ICE network was activated four times for drills and exercises in 2018. Special datasheets are also available for over 200 chemicals through MAR-CIS web portal which is now available through a new application for mobile devices and is available both online and offline. There is also the possibility for EMSA to support Member States in monitoring the evolution of spills through the Dispersant Usage Evaluation Tool (DUET).



Practical exercises and demonstration of oil spill sampling kits

In 2018, EMSA also held its first oil spill sampling course in Spain. The course covered operational, practical and legal elements of oil spill sampling and included a demonstration in the port of Gijon.



COOPERATION





EUROPEAN COOPERATION ON COAST GUARD FUNCTIONS

EFCA, Frontex and EMSA are working together to provide efficient and cost effective support to Member State authorities carrying out coast guard functions. This enhanced cooperation follows the adoption of the European border and coastguard package by the European Parliament and Council in 2016, and the subsequent signature of a tripartite working agreement in 2017. In 2018, the first Annual European Coast Guard event held in Pontevedra (Spain) provided a forum through which national authorities could be consulted on the five key areas of cooperation. Specific developments throughout the year included:

- sharing information – EMSA shared integrated maritime data with EFCA to help them in the detection of illegal, unreported and unregulated fishing. Similarly, EMSA offered tailored information to Frontex to support the detection, identification and tracking of vessels for enhanced border control surveillance
- joint maritime surveillance services – the available range of remotely piloted aircraft systems (RPAS) expanded in 2018 to include new long endurance models (MALE), vertical take-off and landing models, and quadcopters for operation from vessels. As for specific operations, EMSA provided Frontex with RPAS services for surveillance activities over Portuguese waters. For this purpose the aircraft was equipped with satellite communications allowing it to fly beyond radio line of sight.
- identifying national training needs – the three agencies consulted their specific user communities and created cross-sector training modules on certain areas of need, including maritime safety, fisheries control and air crew preparation for joint operations.

The three agencies worked together throughout the year on the activities set out in their common annual strategic plan for 2018.

CHAPTER 5

EMSA MANAGEMENT





Administrative Board

EMSA's Executive Director reports to an Administrative Board whose job it is to steer the work of the Agency through the review and adoption of its work programme, associated budget and establishment plan, staff policy plan, and finally the assessment and adoption of the consolidated annual activity report detailing the Agency's performance output.

The Administrative Board met four times in 2018 gathering 28 government representatives from each EU country, two non-voting government representatives from Iceland and Norway, four representatives from the European Commission, and four non-voting representatives from the maritime cluster. One of these meetings was fully dedicated to the appointment of EMSA's new Executive Director and led to the nomination of Ms Maja Markovčić Kostelac who subsequently took up duties in January 2019.

In the context of a change in leadership, it was considered appropriate to extend the validity of the existing 5-year strategy until the end of 2019. This will give the new Executive Director time to prepare a multi-annual strategy for 2020-2024.

Administrative agreements

Cooperation was extended in 2018, covering:

- access to EMSA's RuleCheck through a Memorandum of Understanding signed with the Indian Ocean MoU on 8 August and with the Caribbean MoU on 24 July
- the promotion of interoperability between industry and competent authorities in the European Maritime Single Window environment under the CISE process (European Commission's Directorate General for Maritime Affairs and Fisheries)
- the European Union Agency for Law Enforcement Cooperation (EUROPOL).

External evaluation

The Administrative Board issued a number of recommendations following the external evaluation report adopted in June 2017. These covered a broad swathe of EMSA activities and were reflected in an action plan drawn up by the Agency and approved by the Board in March 2018. Throughout the year, EMSA continued to provide regular updates on the implementation of these recommendations.

2018

Visitor timeline



9 April
Cape Verde Ambassador
Eurico Monteiro



13 April
Austria Ambassador
Robert Zischg



16 May
President of Malta
Marie Louise Coleiro Preca

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
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6 February
French and Portuguese
Ministers of European Affairs,
Nathalie Loiseau and
Ana Paula Zacarias with French
Ambassador, Jean Michel Casa



16 February
Delegation of ten French MEPs



1 March
BIMCO Secretary General
Angus Frew, together with
Lars Robert Pedersen



6 March
EU Transport Commissioner
Violeta Bulc speaking to all EMSA staff



14 March
Director General for DG Environment
Daniel Calleja



20 September
European Parliament Transport
Committee Members



21 September
Vincent Bouvier
Secretary General of the Sea



14 December
EMSA Executive Director
Markku Mylly's farewell party

JULY

AUGUST

SEPTEMBER

OCTOBER

NOVEMBER

DECEMBER



27 July
Energy Interconnection Summit sees high level
group visit EMSA, including Prime Minister
of Portugal, President of France, President
of the Government of Spain in the presence
of Commissioner for Climate Action and
European Investment Bank Vice President



24 October
Portuguese Parliamentary Committee of
Agriculture and the Sea

THIRD PARTY	SUBJECT	START	END
CEDRE - CEFIC	MAR-ICE Network	17/10/2014	16/10/2022
DG CLIMA	Support for the implementation of the 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
	Cooperation Agreement for support in the implementation of Directive (EU) 2016/802 of the European Parliament and the Council of 11 May 2016 relating to a reduction in the sulphur content of certain liquid fuels, and technical assistance actions relevant to the Energy Community	08/03/2018	07/09/2020
	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	02/02/2018
DG GROW	Implementation of the maritime surveillance component of the Copernicus security service	03/12/2015	31/12/2026
DG MARE	Interoperability between industry and competent authorities in the EMSW environment under the CISE Process	19/09/2018	18/09/2021
DG MOVE	Provision by EMSA of technical assistance for maritime security	29/10/2013	No end date
DG NEAR	Preparatory measures for the participation of enlargement countries in EMSA's work	23/10/2015	22/04/2018
	Maritime Safety, Security and Environmental Protection in the Black and Caspian Sea Regions	01/11/2016	28/03/2021
	SAFEMED IV, EuroMed Maritime Safety Project	01/01/2017	21/03/2021
	Grant Contract – Preparatory measures for the participation of IPA II beneficiaries in EU Agencies	01/05/2018	30/04/2020
EFCA - European Fisheries Control Agency	EFCA MARSURV	26/06/2015	25/06/2018
	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
	SAT-AIS Data Processing Centre (DPC) Block 2 software	18/02/2015	No end date
EUROCONTROL	Navigation safety for RPAS	13/12/2016	No end date
EUROPOL	Cooperation between EMSA and the European Union Agency for Law Enforcement Cooperation	18/12/2018	No end date

THIRD PARTY	SUBJECT	START	END
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
	Provision by EMSA of technical assistance for maritime security 2	01/05/2016	30/04/2019
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
Frontex and EFCA	Interagency cooperation between Frontex, EFCA and EMSA on coast guard functions	17/03/2017	16/03/2021
International Mobile Satellite Organisation	IMSO AUDIT – LRIT-DC	27/05/2009	No end date
	IMSO AUDIT – LRIT-IDE	17/07/2018	30/06/2019
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	28/02/2018
	Mediterranean Regional SSN Server	22/10/2015	28/02/2019
JRC - Joint Research Centre	Hosting and operation of EMCIP platform and support for the transfer of ECCAIRS/EMCIP relevant data from the JRC to EMSA	14/12/2017	13/12/2018
MAOC	Operational assistance and training	12/08/2014	11/08/2019
Marine Environmental and Technology Centre - Instituto Superior Tecnico	Cooperation agreement MARETEC-IST - EMSA Oil Spill 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
	SLA EMSA NCA Regional SSN Server	20/12/2016	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

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ABOUT THE EUROPEAN MARITIME SAFETY AGENCY

The European Maritime Safety Agency is one of the European Union's decentralised agencies. Based in Lisbon, the Agency's mission is to ensure a high level of maritime safety, maritime security, prevention of and response to pollution from ships, as well as response to marine pollution from oil and gas installations. The overall purpose is to promote a safe, clean and economically viable maritime sector in the EU.



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