#### European Maritime Safety Agency





EMSA





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#### FOREWORD

2018 will be a pivotal year for EMSA on many levels, not least as plans get underway for a new Executive Director to take up duty in January 2019. It has been my great pleasure to lead the Agency through its many developments since my arrival in 2012 and I will continue to do so with great enthusiasm and dedication throughout the year ahead. This publication shows us that we have our work cut out for us and that we must be forward thinking in our support for the EU's maritime transport policy.

We are grateful to our many partners without whom it would not be possible to undertake the full array of tasks entrusted to us: the European Commission; each EU member country and their maritime administrations in particular, Iceland and Norway; the European Fisheries Control Agency, the European Space Agency, Frontex, the Maritime Analysis and Operations Centre for Narcotics, and EU Navfor. These tasks are not limited to the geographical confines of the European Union, EMSA also works closely with countries bordering the Mediterranean, Black and Caspian Seas.

We see the value of this collaboration on a day-to-day basis, as information streams converge to form a maritime picture that serves the specific needs of our user communities. One recent poignant example of this is the case of our Remotely Piloted Aircraft Systems. Deployed on multipurpose missions, the RPAS are relaying footage to a data centre used by several local authorities, whether to detect illegal activities and marine pollution, or to monitor fishing activities and vessel traffic separation.

The strength of collaboration will also further efforts to bring about cleaner shipping. Through the latest advances to the THETIS system, inspections to ensure a ship's fuel respects a lower sulphur limit are supported via THETIS-EU, and the monitoring and reporting of  $CO_2$  emissions by large ships calling at European ports is catered for through THETIS-MRV. EMSA's role of bringing together key stakeholders, identifying needs and facilitating progress should not be overlooked as these are the building blocks of a solid, sustainable and competitive maritime sector.

While my departure from EMSA still lies ahead, I would like to pay my deep respects to EMSA's former chairperson, Frans van Rompuy, as well as to his deputy, Achim Wehrmann, who stood down in December 2017. In their place, we warmly welcome Andreas Nordseth and Nicola Carlone who will head up the Administrative Board for the next three years. They enter at an exciting time.

Markku Mylly

Executive Director

#### **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



Nicola Carlone and Andreas Nordseth take up helm EMSA's Administrative Board

#### VALUES

Efficiency, effectiveness, transparency, flexibility, creating added value

#### European Maritime Safety Agency



#### VISION

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



Andreas Nordseth, Markku Mylly and Frans van Rompuy

#### EMSA Outlook 2018



#### **EXECUTIVE SUMMARY**

EMSA's Outlook 2018 contains the concrete action and steps the Agency plans to take in 2018 to deliver on its multi-annual strategic objectives. It represents a condensed version of the Single Programming Document (2018-2020) adopted by EMSA's Administrative Board in November 2017.

The publication is organised by activity with planned developments outlined in a short narrative. The outcome is reported in the corresponding Consolidated Annual Activity Report which shows the results achieved against the objectives set. The Agency's activities can be broadly divided into five thematic areas which are also reflected in the organisation of the Agency structure. Here below we highlight some of the new developments for 2018 per thematic area:

#### Maritime transport and surveillance

The SafeSeaNet ecosystem graphical user interface, which combines and integrates several operational systems hosted by EMSA, will continue to be rolled out in 2018 as the new interface and mobile app are made available to users. Data will grow as Remotely Piloted Aircraft Systems gain headway, improving pollution detection for example, and also as extended satellite data is more readily available under the

#### EMSA'S COAST GUARD FUNCTIONS



Copernicus maritime surveillance services. The THETIS modular information system will expand continuing in its drive to target potentially harmful substandard shipping and support enforcement of EU legislation. Efficiency will also be on the agenda, particularly as regards reporting formalities.

- and alternative fuels.
- Pollution preparedness, detection and response
- be issued by the Board in early 2018.

EMSA will further support authorities carrying out coast guard functions by continuing to perform its core activities as well as by setting up new and enhanced services for maritime surveillance and capacity building. International multipartner, multipurpose exercises at sea will also be held, for example.























## European Maritime Safety Agency

#### Visits and inspections to monitor legal and regulatory compliance

Visits and inspections in 2018 will cover recognised organisations; STCW; PSC and other EU maritime safety legislation; and, maritime security. Based on the information gathered, horizontal analyses will be made to identify any gaps or lessons learned in the implementation of EU maritime legislation.

#### Providing technical and scientific assistance and facilitating cooperation

EMSA will assist the European Commission and Member States in capacity building by providing the training and tools needed by the competent authorities of the Member States. The e-learning portfolio will be expanded and support given to neighbouring partner countries. Environmental protection will also be at the fore as assistance is directed towards the implementation of legislation relating to CO<sub>2</sub> emissions, sulphur content of marine fuel, port reception facilities, ship recycling

In 2018 the options available to coastal states to respond quickly to marine pollution from ships and oil and gas installations also includes a sea-borne dispersant spraying service for the Atlantic Coast and Mediterranean, as well as an equipment assistance service in the Baltic and North Seas. RPAS monitoring services will also be used to complement the satellite imagery available under CleanSeaNet.

#### Management, quality control, resources and communication

The Administrative Board will meet three times in 2018 – adopting the work programme, budget, establishment plan and annual report. In line with the founding regulation, a second evaluation of the Agency was held in 2017 and carried a set of recommendations. These recommendations will be translated into an action plan to

**BORDER CONTROL** 

**FISHERIES INSPECTION** 

**CUSTOMS ACTIVITIES** 



MARITIME **SEARCH & RESCUE** 



**PREVENTION &** SUPPRESSION OF **TRAFFICKING &** SMUGGLING & MARITIME LAW ENFORCEMENT





### HOW EMSA ACTIVITIES FIT INTO THE EU'S **OVERALL TRANSPORT POLICY**

The EU's transport policy portfolio is designed to make transport safer, more efficient and more environmentally friendly. Its action is articulated around four priority areas: digitalisation, decarbonisation, humanisation and internationalisation. Here we map out how EMSA fits into this landscape, and importantly how its activities relate directly to the achievement of these priorities in the maritime domain.

# INTERNATIONALISATION

# DIGITALISATION

resilience and competitiveness of the European

## DECARBONISATION

# HUMANISATION

Upholding the highest standards for maritime safety

S		Greater securit
		Support to EU
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pe, these		Increased use o
		Developing tec through the Ma
		Various data st
		Maritime Servi
		Using Remotely notably pollution
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•		craft passenge
• •		Supporting joir
	•••••••••••••••••••••••••••••••••••••••	Offering a wide neighbourhood

ritime Single Window r shipping

ies efficiently

uld-be polluters

equipment, the sulphur directive, and port state control

are appropriately educated and trained

services

#### European Maritime Safety Agency

r for EU shipping in overseas markets through Long Range Identification and Tracking

- Navfor in its anti-piracy operations through EMSA's Integrated Maritime Services
- asis, the global online database for high quality information on the world shipping fleet, overall aim of reducing substandard shipping
- f the SafeSeaNet maritime information and exchange system hosted in EMSA
- nnical solutions for simplified reporting formalities and interoperable IT solutions
- reams are available to a wide range of national authorities through EMSA's Integrated
- Piloted Aircraft Systems for multiple maritime monitoring and surveillance purposes, n and polluter detection, ship emissions monitoring and search and rescue operations
- rce stricter limits on the sulphur content of marine fuel for those ships calling at EU tifying CO<sub>2</sub> emissions from shipping through the EU MRV regulation
- an and sustainable shipping by exploring alternative and cost-effective fuel
- al developments to ensure ship-generated waste can be delivered to port waste
- ct possible oil spills on the sea surface through the CleanSeaNet service and a with vessel traffic reports to identify the probable source and thereby act as a powerful
- on response services to protect the areas in and around the European coastline, tion response vessels, specialist response equipment and dispersant spraying
- its in Member States to link legal objectives with their operational application in areas
- pections in non-EU seafarer supply countries to ensure seafarers working on board EU
- l advice on passenger ship safety legislation, simplifying rules governing safety and egistration of people on board, and mandatory surveys of ro-ro ferry and high speed
- t multipurpose operations and information exchange for coast guard related functions
- range of training courses to maritime authorities, including the authorities of European countries, to build up national capacity and thereby enhance overall maritime safety



#### 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 have access to key maritime applications and their data sets whether from mobile and tablet devices or desktop and laptop computers. This interface groups together the information services of SafeSeaNet (SSN), Long Range Identification and Tracking (LRIT), Integrated Maritime Services (IMS) and CleanSeaNet (CSN). In doing so, the interface offers a valuable tailored picture of maritime traffic.

#### MONITORING VESSEL TRAFFIC IN EUROPEAN WATERS

Vessel and voyage related information across the EU is shared among targeted users through the SafeSeaNet system. The information flows and system functionalities are designed to enhance maritime safety and security, as well as to boost the efficiency of maritime traffic and transport. EMSA works to provide the national administrations (port authorities, coastal stations, search and rescue, vessel traffic services, pollution response bodies, etc.) with 24/7 access to the system.

Importantly, EMSA works alongside the national authorities to ensure the interaction of their systems with SafeSeaNet. This allows SafeSeaNet to serve as a European platform for maritime data exchange. Mandatory functions cover the collection and distribution of data on vessel traffic monitoring, port call information, dangerous and polluting cargo, security, waste and cargo residues, and incident and accident reports. The various central databases that form part of the SafeSeaNet ecosystem help to improve data quality on the individual national databases.

In 2018, efforts will be made to further improve the common graphical user interface for all the applications available in the SafeSeaNet ecosystem. Access is determined through the common management console set up in 2017. The new developments offer users a range of features including access to integrated data flows, increased data visualisation options and new machine-to-machine interfaces. Two recently created databases will be further developed in 2018: the Central Ship Database which receives and stores up-to-date information on ship identifiers; and, the Central Hazmat Database for information on dangerous and polluting goods which is to serve as a reference tool for national authorities.



# MONITORING EUROPEAN VESSEL TRAFFIC AROUND THE WORLD

The EU LRIT Cooperative Data Centre (EU LRIT CDC) hosted by EMSA disseminates long range identification and tracking information on EU-flagged ships around the world on behalf of all European flag states, and enables the exchange of information with other data centres around the world. This centre can provide Member State users with LRIT information on any third country vessel bound to or sailing within 1000 nm of EU waters. Associated to this is the global LRIT International Data Exchange which serves 57 LRIT data centres worldwide covering 122 contracting governments and is hosted and operated by EMSA.

In 2018 EMSA will continue to operate and monitor the EU LRIT CDC, enabling participating countries to comply with vessel tracking obligations under the SOLAS 74 International Convention for the Safety of Life at Sea. Activities will focus on replacing the old user interface with the new SafeSeaNet Ecosystem Graphical User Interface (SEG).

Global satellite AIS (Automatic Identification System) data will also continue to be processed, stored and distributed to users, based on data provided to and procured by EMSA as well as on data received from Member States with existing national satellite AIS programmes. This helps extend the geographical range over which ships can be tracked using the AIS system.

#### AUTOMATIC DETECTION AND ALERT TRIGGERING OF SHIP BEHAVIOUR



EMSA provides integrated maritime services to a wide range of national authorities across the EU whose duties include maritime-related tasks, as well as to a number of European bodies such as Frontex (border control), EFCA (fisheries monitoring), EU Navfor (antipiracy) and MAOC-N (law enforcement – narcotics).

By integrating and correlating data from EMSA applications and external sources, services are delivered responding directly to a user's specific needs. Users benefit regardless of whether their needs lie in search and rescue, law enforcement or border control operations. And, as operational needs evolve, the services can be refined and developed.

In 2018 EMSA will continue to provide Automated Behaviour Monitoring tools to support maritime surveillance users in the detection of anomalous and specific behaviour for use in various domains, including safety, security, traffic monitoring, fisheries, border control, and accident/incident prevention.

Data will be extracted from Remotely Piloted Aircraft Systems for multiple maritime monitoring and surveillance purposes, such as pollution and polluter detection, ship emissions monitoring, search and rescue operations, and various other coast guard related functions. The data is currently being fed into a data centre with partial access to other EMSA data sources. The centre is to be further developed and finalised in 2018-2019 to allow for the full integration of data.

With respect to new technological advancements, EMSA will continue to monitor developments concerning the VHF Data Exchange System (VDES). The VDES, which builds on satellite AlS data, is set to provide higher rates for digital data exchange. Potentially, it could allow for a more effective and efficient transfer of information from ships to shore-based systems, on a worldwide basis. EMSA will continue to work closely with the European Space Agency as well as with national administrations on VDES through the EU Satellite-AlS Collaborative Forum.

EMSA will also be exploring the potential of High Altitude Pseudo Satellites (HAPS) as an additional surveillance tool as well as the possibility of developing a hybrid vessel traffic management system to incorporate autonomous vessels and manned vessel traffic which would maintain navigational safety.





#### Traffic monitoring

#### INTEGRATED MARITIME SERVICES





#### SIMPLIFYING REPORTING FORMALITIES

In 2018, EMSA will support the European Commission in the revision of the Reporting Formalities Directive, working on measures to facilitate the overall efficiency of ships in relation to reporting formalities. The Maritime Single Window (MSW) prototype, which includes cargo data, will be made available and tested by the eManifest pilot participants within Member States and the shipping industry.

The MSW prototype is where all the data - including the eManifest - is reported and then made available to the various competent authorities in the Member States. It covers information flows between the ship data providers, the relevant public authorities and other Member States via the SafeSeaNet system.

#### **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 continual monitoring of these systems, facilitating early incident management and high availability and performance standards. Average feedback times stand at approx. 20 minutes for urgent requests and 30 minutes for non-urgent requests. The MSS centre is the first point of contact for Member States whenever assistance is required in case of pollution accidents. In 2018 the centre will continue to provide users with timely helpdesk and monitoring services.

#### FRONTEX

EMSA supports Frontex in conducting operations to address irregular migration and cross-border crime along European maritime borders. The existing service level agreement between Frontex and EMSA was renewed in 2016 for an additional three years. This agreement defines the conditions of the services provided to Frontex, including support for the implementation of the European Border Surveillance System (EUROSUR). Activities in 2018 are decided on the basis of an annual programme and service description agreed between the agencies.

#### **EFCA**

EMSA supports the European Fisheries Control Agency (EFCA) in conducting Joint Deployment Plans to monitor fisheries campaigns through the Agency's Integrated Maritime Services platform. Surveillance tools and services (such as Remotely Piloted Aircraft Systems and vessel chartering) are provided according to a Service Level Agreement renewed yearly. This agreement sets out the conditions in which the two agencies cooperate to support national authorities carrying out coast guard functions as well as to facilitate the implementation of legislation on irregular, unreported and unregulated catches.







#### **THETIS INFORMATION SYSTEM & RELATED MODULES**

The THETIS information system was set up to allow port state authorities in the EU and 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, assists the European Commission by providing statistics on inspection results, and helps monitor the performance of Member States in relation to their international and European legal obligations.

New functionalities have been 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 and the  $CO_2$  Monitoring, Reporting and Verification Regulation are all being, or in the process of being, catered for in the new modules of this flexible system (THETIS-EU and THETIS-MRV).

In 2018, functionalities will be added to the THETIS-EU sulphur module (including a fuel calculator and bunker supplier monitoring component) and enhanced to cater for the new directive on inspections for the safe operation of ro-ro ferry and high speed passenger craft. In mid-2017, the THETIS-MRV  $CO_2$  monitoring, reporting and verification system became operational. And, as of 1 January 2018, companies will be using the system to monitor and report on ship data covering  $CO_2$  emissions and fuel consumption, among others.

#### **REDUCING EMISSIONS** FROM SHIPPING SECTOR EU STRATEGY THETIS MRV REPORTING SHIP VERIFIER OWNER 3 MONITORING GREENHOUSE FURTHER REPORTING AND EUROPEAN VERIFICATION COMMISSION PUBLIC COPERNICUS

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. For the duration of the delegation agreement (2015-2020), EMSA is responsible on behalf of the European Commission for implementing all related technical and operational activities. While activities in 2018 will be directed by the Copernicus Maritime Surveillance annual implementation plan, services are expected to cover the fields of fisheries control (for EFCA), law enforcement (for MAOC-N), maritime safety and security, law enforcement, customs; and, marine environment, including pollution monitoring.

#### EMSA Outlook 2018



#### MONITORING THE IMPLEMENTATION OF EU MARITIME LEGISLATION

EMSA has been monitoring the implementation of EU law in the Member States since its very beginning. The visits to Member States conducted offer a valuable link between the legal objectives and the operational application. In this way the European Commission is able to assess the extent to which EU law is being implemented in this field. They provide a feedback chain on the effectiveness of the legislation and identify gaps where the legal objectives are not being met.

Visits in 2018 will cover a broad range of implementation areas:

- the third cycle of port state control visits will continue (5-6 visits)
- compliance with the sulphur content of marine fuels requirement will be monitored (4-5 visits)
- the second cycle of visits related to the marine equipment directive will take place (3-4 visits)
- a new cycle of visits related to the safe loading and unloading of bulk carriers will be launched in 2018, following on from the pre-cycle workshop held in December 2017.

These visits will follow the new methodology for visits adopted by EMSA Administrative Board in November 2015.



Mock inspection of vessel compliance with the Sulphur Directive

#### **CLASSIFICATION SOCIETIES**

Classification societies develop and apply technical standards to the design, construction and assessment of ships. Of the 50-odd classifications societies worldwide, 12 are recognised at EU level and inspected regularly by EMSA. Based on the reports submitted, the European Commission makes two yearly assessments and takes policy decisions and/or requests corrective measures. The overall aim is to improve the quality of the certification work undertaken by these recognised organisations.

In 2018 EMSA will conduct anywhere up to 20 inspections based on a programme decided jointly with the European Commission and focussing on certain factors such as increased risk as indicated by previous findings and non-conformities, or size and geographical spread of a particular recognised organisation's activities.



#### **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 and the EFTA Surveillance Authority in the performance of their inspections on enhancing ship and port facility security.

In 2018, approximately 12-15 missions are expected based on requests from the European Commission and determined through the information gathered from a range of sources including previous inspections, and approximately 2-3 to Norway and Iceland at the request of EFTA Surveillance Authority. EMSA will also follow up on issues emerging from the cyber security workshop held in December 2017 under the framework of the European Coast Guard Functions Forum.

#### **PORT STATE CONTROL**

In 2018 EMSA will continue to support the European Commission as it participates in the bodies of the Paris Memorandum of Understanding (MoU) on port state control. Support will also be given to ensure the proper implementation of a system of inspections for the safe operation of ro-ro ferry and high speed passenger craft. For port state control officers in the Paris MoU area, EMSA will provide ongoing access to the ship inspection database (through THETIS), as well as to up-to-date rules and regulations (through RuleCheck), and flexible e-learning courses (through MaKCs).

#### HORIZONTAL ANALYSIS AND RESEARCH

EMSA drafts reports for each of the visits and inspections it conducts and then analyses these to identify common findings and draw general conclusions on the effectiveness of the measures in place. This support is vital to the European Commission to identify good practices, draw lessons and make improvements to current legislation. The focus in this area in 2018 is expected to be on the minimum level of training for seafarers.

#### STANDARDS OF TRAINING CERTIFICATION AND WATCHKEEPING

Many EU registered ships are manned by seafarers who are not nationals of EU Member States. To ensure that these crew members are adequately educated and trained, EMSA carries out inspections in the supplying countries. EMSA staff have been conducting such inspections for over ten years, assessing their level of compliance with the requirements of the IMO's Convention on Standards of Training, Certification and Watchkeeping. EMSA also runs the STCW information system. This system contains objective and comparable information on seafarers holding EU certificates/ endorsements and therefore able to work on board EU registered ships. In 2018 EMSA will conduct up to five inspections to non-EU countries and up to four visits to EU countries.

#### A SNAPSHOT OF SEAFARERS HOLDING CERTIFICATES OF COMPETENCY & ENDORSEMENTS ATTESTING RECOGNITION BY EU COUNTRIES VALID IN 2015, AS REPORTED IN EMSA'S STCW INFORMATION SYSTEM





#### ACCIDENT INVESTIGATION

Technical investigations into marine casualties contribute to raising the overall level of maritime safety in Europe by helping to prevent such casualties resulting in loss of life, loss of ships and pollution from happening again. EMSA's role in this process involves gathering together the Member States' accident investigation bodies to encourage a more uniform approach as well as to provide technical support and training.

EMSA runs the EMCIP database of accidents populated by the accident investigation bodies. The information contained in this database is a valuable basis for sound decision-making in areas such as passenger ship damage stability and ro-ro vehicle deck fires. Some 4 000 casualties and incidents are recorded on average each year in the database.

By mid-2018 accident investigation bodies can expect to see a more efficient and userfriendly platform in place, whose improvements include direct assistance to investigators and simplified data analysis. EMSA will also be actively involved in analysing EMCIP data to identify the lessons to be learned at EU level.

The overview of marine casualties and incidents publication will be published on the EMSA website towards the end of 2018, covering data extracted from EMCIP since its creation in 2011.

#### OVERVIEW OF KEY FIGURES OF MARINE CASUALTIES AND INCIDENTS RECORDED FOR THE PERIOD 2011 - 2016



#### MARINE EQUIPMENT AND SHIP SAFETY STANDARDS

EMSA contributes to the safety of ships and marine equipment at European level by closely monitoring the development and implementation of harmonised safety standards. It also provides technical support to Member States and the European Commission at international level through the work of the International Maritime Organisation (IMO).

EMSA maintains the list of flag state-approved safety standards for marine equipment, as well as the MarED database containing details on the equipment authorised for use in EU flagged merchant vessels. All this is governed by the European Marine Equipment Directive.

The potential safety gap identified between the amended SOLAS 2009 and the Stockholm Agreement (Directive 2003/25/EC) will also be targeted as EMSA offers technical advice to the European Commission on its study on the safety level of stability requirements for ro-ro passenger ships.

Ro-ro vehicle deck fire safety will remain on the agenda as EMSA coordinates technical discussions between Member State administrations and accident investigation bodies. EMSA will follow up on any issues arising from the Firesafe studies conducted in 2016 and 2017.

Follow-up actions will continue on the so-called REFIT or regulatory fitness of passenger ship safety legislation that began in 2014, simplifying the relevant legislation governing safety rules and standards, registration of people on board, and mandatory surveys of ro-ro ferry and high speed craft passenger services, among others.









Ship inspections are used to verify that the condition of a ship and its equipment fulfil the necessary legal requirements and that the ship is manned and operated according to these rules. Increasing transparency in this area, by publishing reliable and objective information on the safety of ships and their operation, helps to encourage quality shipping and eradicate substandard practices.

EMSA hosts the management unit of Equasis, an online database providing details on port state control inspections, ship-related information from classification societies and P&I ship specific data. The information is supplied by port state control regions (Paris MoU, Caribbean MoU, Indian Ocean MoU, US coast guard, etc.) as well as industry based organisations. In 2018 Equasis will continue to work on the priorities identified in its five-year strategy, bringing in more data providers and attracting new members. A statistical report on the world shipping fleet is published each year based on data extracted from the Equasis database.

EMSA also runs the MARINFO information system which collects data from commercial sources worldwide on ship characteristics, accidents, movements, ownership, and ship history. This internal system offers valuable information to EMSA staff when preparing their visits and inspections, as well as to the European Commission when making assessments of legal provisions.

#### PREVENTION OF POLLUTION BY SHIPS

EMSA offers expertise in the field of environmental protection helping the European Commission and Member States to address a wide variety of ship-sourced pollution and emission-related issues. Assistance in 2018 will be directed towards the implementation of legislation relating to  $CO_2$  emissions, sulphur content of marine fuel, port reception facilities, ship recycling and alternative fuels.



The European Sustainable Shipping Forum provides a platform for structured dialogue among maritime industry stakeholders and the European Commission with a view to address the environmental sustainability challenges confronting the EU maritime transport sector. EMSA has been highly active in this arena as the forum's technical secretariat.

On the international front, EMSA will continue to contribute to the wide-ranging developments at the IMO including among others enhancing the energy efficiency of international shipping, a global data collection system, greenhouse gas emissions, ballast water management, and the safe recycling of ships.





#### TRAINING, COOPERATION AND CAPACITY BUILDING

EMSA's wide portfolio of training courses offer support to national maritime authorities in their day-to-day duties as flag, port or coastal state authorities. It includes e-learning courses which are available to Member States, EFTA, and enlargement and European Neighbourhood Policy countries. The courses are devised to address the needs of the maritime administrations which meet together under the framework of the Consultative Network for Technical Assistance (CNTA). In 2018, EMSA plans to hold up to 18 training sessions for Member States and six for enlargement countries.

EMSA will continue to maintain the RuleCheck information system which was set up to inform inspectors on the complex international rules governing port state control related ship inspections by clearly showing the rules that apply to a selected ship at the time of inspection. The system will be further expanded to cater also to authorities carrying out coast guard functions, as well as to an increasing number of user groups.

MaKCs, the e-learning platform primarily for port state control officers, will be further populated in 2018 with additional modules on EU law, to take MaKCs beyond port state control and enable a broader audience to benefit from this highly flexible learning environment. In particular, support will be given in 2018 to Flag State authorities.

EMSA will also be looking to extend its training capabilities through new technologies – virtual reality and 3D simulations could be used to make the learning experience even more engaging and immersive.

## EUROPEAN NEIGHBOURHOOD COUNTRIES

Through the SAFEMED project, EMSA works with southern Mediterranean partner countries to help enhance their technical capacity in the fields of maritime safety, security and marine pollution. Beneficiaries include Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine and Tunisia. The current phase of the project is expected to run until 2021.

Seminars, workshops and training sessions will be held in 2018 and access to both RuleCheck and MaKCs will be provided to the relevant authorities of the beneficiary countries. An oil pollution response simulation exercise is expected to be held gathering experts from the Member States and their counterparts in the beneficiary countries. The exercise will entail the deployment of EMSA standby oil spill response vessels as well as involvement from the European Commission's Emergency Response Coordination Centre.

Similarly, EMSA works with eastern European neighbourhood countries around the Black and Caspian seas. This current phase of the project is also expected to run until 2021 and aims to promote a harmonised approach to maritime safety, security and marine pollution.

# 

#### Mediterranean Sea Project



#### Technical assistance





## OPERATIONAL POLLUTION RESPONSE SERVICES

EMSA offers a range of pollution response services to protect the areas in and around the European coastline. Various options are available to Member States on request via the European Commission's Emergency Response Coordination Centre. These can be selected based on the particular circumstances of the spill and the type of pollutant involved.

EMSA's services target marine pollution from both ships and oil and gas installations, and are intended to top up the capacity of coastal states in the event of a major spill at sea. The services are also in the process of being made available to countries sharing a regional sea basin through the eastern and southern European neighbourhood projects.

At the heart of these services is a network of oil spill response vessels which remains on standby at all times. Related equipment and land-based stockpiles can be used, taking into consideration various specificities, such as the amount of dangerous cargo being transported, ship traffic density, as well as the coastal state's existing pollution response capacity. In recent years, dispersants have also been made available in selected places as a response option. In addition, an equipment assistance service now exists in the Baltic Sea, North Sea and Adriatic Sea offering specialised equipment for use by vessels of opportunity.

In 2018, EMSA will be involved in organising international multi-partner, multi-purpose exercises at sea with Member States as well as with EFCA and Frontex as part of ongoing cooperation on coast guard functions.



#### EMSA NETWORK OF STANDBY OIL SPILL RESPONSE VESSELS, EAS & DISPERSANT STOCKPILES





#### DETECTING AND DETERRING MARINE POLLUTION

EMSA's satellite-based oil spill surveillance and vessel detection service, CleanSeaNet, analyses images from earth observation satellites to detect possible oil spills on the sea surface. The Sentinel-1 satellite mission, followed by Radarsat-2 and TerraSar-X, is the main supplier of images from Synthetic Aperture Radar and optical satellites. This data can be correlated with vessel traffic reports to identify likely spill sources, making the system a powerful deterrent to would-be polluters.

Through EMSA's Earth Observation Data Centre (EODC) which manages and distributes the EO information (oil spill detection, vessel detection, activity detection), the CleanSeaNet service is also accessible from the SafeSeaNet ecosystem (SEG).

Having set up a service for Remotely Piloted Aircraft Systems in 2017, EMSA will be making this service available to interested Member States and thereby giving them the operational capability for the purpose of pollution detection, monitoring and response. The Agency will be looking to enhance access to satellites on the one hand and, on the other, to complement satellite imagery with RPAS monitoring services to allow for more flexible and intensive detection and monitoring of illegal discharges.

## COOPERATION FOR EFFECTIVE POLLUTION PREPAREDNESS AND RESPONSE

Careful planning is essential to effectively deal with marine pollution incidents. EMSA's role involves disseminating best practices and exchanging information between Member States, the Regional Agreements, the International Maritime Organisation and other relevant international bodies.

Special care is required for chemical spills of hazardous and noxious substances given their wide array of properties and how these can affect the environment. EMSA offers specialist information and expertise to Member States through the MAR-ICE chemical experts network, the MAR-CIS database of information on chemical substances, as well as through the DUET dispersant usage evaluation tool. All this is provided as part of the Hazardous and Noxious Substances Action Plan.

# **CHAPTER 5**

MANAGEMENT, QUALITY CONTROL RESOURCES AND COMMUNICATION

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#### MANAGEMENT, QUALITY CONTROL RESOURCES AND COMMUNICATION

Efficient and effective administration is essential not only for the smooth running of the Agency but also, even more importantly, for the fulfilment of its objectives. In 2018, EMSA will continue to monitor its performance and make efficiency gains where possible.

In December 2016, EMSA's visits and inspections activities received ISO9001:2015 certification from TÜV Rheinland Portugal. These activities have now entered into a three-year cycle of annual verification and re-certification.

The Administrative Board whose main task it is to supervise the work undertaken by the Agency – adopting the work programme, budget and establishment plan, for example – will meet three times in 2018. In line with the founding regulation, a second evaluation of the Agency was held in 2017 and carried a set of recommendations. These recommendations will be translated into an action plan to be issued by the Board in early 2018.

EMSA will foster staff development and redeployment to enhance overall efficiency and increase mobility in response to the new priorities. Efforts will also continue to ensure an efficient document, record management and archiving policy within the Agency.

In the field of ICT, EMSA will prioritise service delivery and business continuity, striving for improvements in performance. The overall task in 2018 will be to support efficient, reliable, stable and secure operations with smooth releases of application/infrastructure enhancements, new applications and pilots, all in line with EMSA's evolving ICT landscape.

Communication remains a crucial aspect of EMSA's activities and efforts throughout 2018 will be directed towards four focus areas as per the 2014-2020 communication strategy: providing general communication support to ensure up-to-date information; increasing user friendliness; rationalising the use of resources; and, tailoring information to the Agency's target audiences.



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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.



#### Get in touch for more information

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