

Lisbon, 8 November 2019

DECISION OF THE ADMINISTRATIVE BOARD ADOPTING THE EMSA 5-YEAR STRATEGY 2020 – 2024

THE ADMINISTRATIVE BOARD OF THE EUROPEAN MARITIME SAFETY AGENCY,

Having regard to the European Parliament and Council Regulation 1406/2002, of 27 June 2002, as amended, establishing a European Maritime Safety Agency (hereafter EMSA or the Agency) and in particular Articles 10.2 (ca) and 15.2(a) thereof;

Having regard to Regulation (EU) No 911/2014 of the European Parliament and of the Council of 23 July 2014 on multiannual funding for the action of the European Maritime Safety Agency in the field of response to marine pollution caused by ships and oil and gas installations;

HAS DECIDED AS FOLLOWS:

Article 1

The Administrative Board hereby adopts the EMSA 5-year Strategy 2020-2024.

Done at Lisbon on 8 November 2019,

A handwritten signature in black ink, appearing to read 'A. Nordseth', is written over a light blue horizontal line.

Andreas Nordseth

Chairman of the Administrative Board

Annex : EMSA 5-YEAR STRATEGY 2020-2024



EMSA

5-YEAR STRATEGY

2020-2024

Foreword from the Executive Director	3
Statement by the Chairman of the Administrative Board	4
Executive Summary.....	5
1. Setting the scene.....	6
1.1 EMSA’s mandate	6
1.2 Institutional context and policy framework.....	6
1.3 Methodology for developing the EMSA 5-year Strategy	9
1.4 Implementation and indicators	11
1.5 The EU maritime cluster	12
2. Vision, mission and values	17
3. EMSA’s strategic priorities	18
3.1 Sustainability (environment and climate change)	18
3.2 Safety	20
3.3 Security	23
3.4 Simplification (SMART shipping/maritime transport)	24
3.5 Surveillance	25
4. EMSA’s approach and identity	27
4.1 Roles and relationships in the sector.....	27
4.2 Organisational identity.....	31

Foreword from the Executive Director

This EMSA 5-year Strategy comes at just the right time: on the crest of a new wave that will have a big impact on the course of maritime transport and all the actors and lives that are linked to it.

The environment has made its way right to the top of the agenda everywhere – in all corners of the globe and in every sector. This implies multiplying, diversifying and integrating our efforts in the maritime field, to not only prevent and respond to pollution, but to help build a genuinely sustainable maritime sector that can contribute its fair share to the circular economy and to EU's climate neutral ambition.

Technology is the other big issue that is profoundly redefining our sector. Digitalisation is one aspect, with far reaching consequences. If properly harnessed, there are opportunities to make our shipping industry cleaner, safer, simpler and more secure, for instance using the potential of automation or of Artificial Intelligence. But these opportunities come with safety and security challenges that need to be carefully managed, cybersecurity being the keyword here.

Knowledge is the strongest currency as we move forward. It is not enough to collect data it must be transformed into intelligent tools and services. Information sharing must be a priority in order to support effective and inclusive cooperation. Capacity building will continue to be an essential component of a positive cycle in relation to practices, guidance and standards, in the EU and further afield.

I am delighted to present this vision that builds on 15 solid years of maritime safety experience and expertise and acknowledges the rapidly changing world we live in. I believe it sets the right course for the Agency for the next five years – so that EMSA can help the maritime sector ride the new wave with confidence.

Maja Markovčić Kostelac

Executive Director

Statement by the Chairman of the Administrative Board

It is a pleasure to present the European Maritime Safety Agency's new 5-year Strategy developed under the leadership of the Executive Director, Ms Maja Markovčić Kostelac. The preparation of the strategy reflects quite an inclusive process where everyone on the Administrative Board has been actively involved as well as the competent staff of EMSA.

The new strategy comes at a time where the maritime sector – both in the EU and globally – is facing historical challenges and opportunities. Zero pollution, decarbonization, sustainability, digitalization, data exchange, safety and security, compliance and effective enforcement are all topics that the sector will be tested by and will need to address in the coming years. In times like this, a strong facilitator of knowledge and collaboration is a key to cope effectively with the challenges and move ahead and beyond, and with the strategy EMSA takes on itself the task as such a facilitator for the benefit of the European Commission and the Member States.

With the new strategy's five priorities – Sustainability, Safety, Security, Simplification and Surveillance – EMSA has set the course as a centre of excellence in the European maritime domain that will bring EMSA to fulfil the purpose of the agency in ensuring 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.

With the highly committed and competent staff and management of EMSA, the strategy will be in the best hands, and together with the entire Administrative Board, I look forward to following the successful implementation.

Andreas Nordseth

Chairman of the EMSA Administrative Board

Executive Summary

EMSA's strategic framework:



Modern organisational management
efficient, stakeholder oriented, smart, transparent
and gender balanced

EMSA's strategic priorities:



Sustainability

Contribute to the European green agenda for maritime transport by strengthening the EU capacity to protect the marine environment, manage climate change and respond to new environmental challenges.



Safety

Contribute to higher maritime safety standards, anticipate new maritime safety challenges and expectations and provide knowledge-based solutions with the aim of contributing to the reduction of marine casualties and human loss.



Security

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



Simplification

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



Surveillance

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

1. SETTING THE SCENE

1.1 EMSA's mandate

Regulation (EC) No 1406/2002, establishing EMSA, is the legal basis that defines the objectives and the tasks of EMSA and is the framework for developing the new EMSA 5-year Strategy.

This Founding Regulation has been amended several times. The principle impact of the 2013 revision was the geographical extension of assistance, cooperation, response and monitoring tasks to different sets of third countries; the extension of response tasks to marine pollution from oil and gas installations; and the possibility of using the Agency's recognised expertise and tools for ancillary tasks including the support to the establishment of a European maritime transport space without barriers, thus extending benefits to related policy areas.

The most recent amendment of this Regulation (Regulation (EU) No 2016/1625 of 14 September 2016), which entered into force in October 2016, aims at developing European cooperation on coast guard functions by further developing forms of cooperation between EMSA, Frontex (European Border and Coast Guard Agency) and the European Fisheries Control Agency (EFCA) to improve synergies between those agencies, in order to provide more efficient and cost-effective multipurpose services to national authorities carrying out coast guard functions.

The Agency's ongoing activities under the current mandate can be broadly described as:

- *providing technical and scientific assistance to the Member States and the Commission in the proper development and implementation of EU legislation on maritime safety, security, prevention of pollution by ships and maritime transport administrative simplification;*
- *monitoring the implementation of EU legislation through visits and inspections;*
- *addressing the human element in maritime safety;*
- *promoting cooperation with, and between, Member States;*
- *building capacity of national competent authorities;*
- *providing operational support, including developing, managing and maintaining integrated 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;*
- *supporting national authorities responsible for coast guard functions for safety, security, environmental protection, law enforcement and maritime border and fisheries control.*

1.2 Institutional context and policy framework

EMSA has an important role to play in the implementation of the Commission priorities. The Agency's working environment reflects the initiatives launched by the EU in all policy areas related to the seas in order to strengthen Europe's competitiveness, sustainable growth and Blue economy, as well as contribute to the EU's security agenda and international profile.

EMSA's work contributes to the headline ambitions of the new Commission as presented by the President elect of the European Commission, Ursula von der Leyen.

A European Green Deal: being the first climate-neutral continent with an ambition towards zero-pollution

The Agency's extensive portfolio of actions to prevent pollution by ships and respond to pollution by ships and marine pollution from oil and gas installations supports the maritime "volet" of the decarbonisation of transport and contributes to preventing and mitigating marine and air pollution and climate change from the maritime angle. This work represents the maritime perspective of the Commission's first headline ambition to promote a **circular, clean, resilient and future-ready economy**, adopt more ambitious emissions reduction targets for 2030 whilst aiming at zero emissions and **preserve Europe's natural environment**.

An economy that works for people: building social fairness and prosperity

The Agency's contribution to competitiveness and growth is of particular relevance. With almost 90% of seaborne EU external freight trade and short sea shipping representing 40% of intra-EU exchanges, maritime industries are an important source of employment and income for the European economy. By supporting the implementation of an attractive and competitive framework for quality shipping, quality operators and quality jobs, the Agency contributes to the Commission's second headline ambition of building a **prosperous and fair economy**.

A Europe fit for the digital age: grasping the opportunities from the digital age within safe and ethical boundaries

EMSA's efforts to support the simplification of EU shipping by reducing the burden and increasing efficiency in relation to the range of reporting and administrative requirements contributes to the establishment of a European Maritime Transport Space without Barriers. In this way EMSA contributes to the implementation of the **single market** in the maritime sector based on digital solutions.

Moreover, EMSA provides an extensive portfolio of digital tools to support Member States' flag, port and coastal state responsibilities

The Agency's ongoing work towards further data integration and intelligent processing of information are in step with the close attention given to a new generation of technologies including **artificial intelligence** and their potential for helping find solutions to a range of challenges. Similarly, the Agency has been stepping up its digital capacity and security to prepare for when stakeholders are ready and standards in place (the future "Digital Services Act") to shift **from "need to know" to "need to share"**.

Promoting our European way of life: protecting our citizens and our values

Under the European cooperation on coastguard functions, EMSA was explicitly tasked to enhance inter-agency cooperation and support multi-purpose operations in the context of the response to the migration and security crisis. In fact EMSA's surveillance capabilities support a range of functions in the maritime sector and already contributed to protecting the EU fleet against illegal acts such as piracy and armed robbery. Along with growing support to the Commission in relation to verifying compliance with ship and port facility security, the Agency is increasingly contributing to efforts to **step up cooperation on security in the EU** under the Commission's fourth headline ambition.

A stronger Europe in the world: strengthening our unique brand of responsible global leadership

The technical assistance provided to accession and neighbouring countries under the Instrument for Pre-accession Assistance (IPA) and European Neighbourhood Policy (ENP) mechanisms support the approximation of EU standards and cover all areas of the Agency's work. Together with the assistance to third countries within the context of Port State Control and to the Commission to

support regional cooperation at sea basin level, ratification of IMO conventions, and interaction with relevant international organisations including the Regional Seas Conventions, entrusted with the protection of marine and coastal environment, this work contributes to raising the international profile of the EU in the worldwide maritime sector and to the accomplishment of the Commission's fifth headline ambition of a [stronger Europe in the world](#).

EMSA continues to be firmly rooted in the Commission's transport portfolio. The Agency is well positioned to support the maritime "volet" of the new [Transport mission](#), which highlights on the one hand the role of transport for the [free movement of people, services and goods](#), and on the other the transport sector's responsibility to [harness the potential of the twin climate and digital transitions](#) and work towards [sustainable and smart mobility](#). The Agency's activities under the headings of **sustainability** and **simplification** contribute directly to these drivers.

At the same time, the [highest safety standards](#) remain a top priority for the [Transport mission](#) in the face of [increasing traffic](#) and [more complex security threats](#). The Agency's long-standing work under the heading of **safety** to help develop and implement maritime safety legislation and standards, address the human element in shipping and build capacity; under **security** to support better port and ship security but also contribute to preventing unlawful or illegal acts; and under the heading of **surveillance**, to provide operational maritime traffic monitoring and surveillance services to support implementation and enforcement, contributes directly to this priority.

EMSA's work also contributes to a number of other portfolios. The blue economy is very much in the spotlight under the [European Green Deal](#) for its potential contribution to decarbonisation and ultimately the [climate-neutral ambition](#). Specifically in the context of the [Environment, Oceans and Fisheries mission](#), efforts to promote a sustainable blue economy are central. EMSA is positioned to contribute on various fronts, looking to curb pollutants – [emissions, microplastics, hazardous substances](#) – and polluters – with integrated surveillance services and a range of monitoring, reporting and enforcement tools, and to support [energy efficiency](#) and the role of [liquefied natural gas](#) and other [alternative sources of energy](#), part of the [Energy](#) portfolio's mission in the transition towards a carbon neutral economy.

The [Internal Market mission](#) highlights the [digital transition](#) affecting all sectors of the economy and as a key factor for strengthening the internal market. EMSA supports the digitalisation and simplification of EU shipping to make maritime transport more efficient. [Artificial Intelligence](#) is one of the major opportunities linked to this portfolio and which the Agency will be using to enhance maritime safety, surveillance and security. [Cybersecurity](#), on the other hand, is one of the major challenges. The Agency is addressing this on two levels, to maintain the integrity of the EU maritime information systems operated by EMSA and counter the threat to maritime safety in general.

The Agency's activities beyond EU borders to support approximation to EU standards are important in the context of the [Neighbourhood and Enlargement mission](#), in relation to future accession for some countries but also more broadly to extend and enhance maritime safety, security and environmental standards in neighbouring regions.

Finally, the Agency continues to support the EU's migration and security response, through its ongoing work under the European cooperation on coastguard functions and by providing the EU integrated maritime picture. There may be a role for the Agency in the future in relation to strengthening support to [search and rescue](#). EMSA contributes significantly in the maritime domain to ensuring the [interoperability of EU information systems](#), which is an important component of the Security Union under the [Home Affairs mission](#).

1.3 Methodology for developing the EMSA 5-year Strategy

This is the third 5-year strategy document for EMSA and it is meant to cover the period 2020-2024. It builds on the well-established structure and activities that have positioned overtime EMSA as the main EU technical maritime partner for both the Member States and the European Commission. The 5-year strategy also takes into account the outcome of the last EMSA external evaluation and subsequent EMSA Administrative Board Recommendations (2017) and action plan put in place by EMSA in response.

After 15 years of operation, the experience and information built up by the Agency constitutes a considerable and unique resource. EMSA has made a point, in the process of developing this strategy, to explore with its primary stakeholders – represented by the Administrative Board – what new challenges and opportunities lie ahead for them in the EU maritime sector and how EMSA can capitalize on its unique resource to help them meet those challenges and harness those opportunities.

This 5-year Strategy is forward-thinking and intentionally ambitious. The Agency strives to add maximum value for its key stakeholders, the Member States and the Commission, now and in the years to come. But there are some constraints and uncertainties that will have an impact on how the more novel elements of the strategy will in fact unfold, in particular the question of resources.

The Agency's sphere of action is regulated chiefly by its [Founding Regulation](#) (section 1.1) but also affected by the [evolving institutional and policy context](#) (section 1.2), which currently includes the prospect of Brexit. The outcome of the on-going negotiations on the future EU [Multi-annual Financial Framework](#) will determine the evolution of the Agency's resources.

This 5-year Strategy is therefore considered a living document that will be implemented through the Agency's annual work programmes taking into account possible regulatory, policy and resource developments.

The EMSA Executive Director, as the responsible party for drafting this five-year strategy, expressed from the very beginning of the process her wish to have an inclusive approach where the views of the main EMSA stakeholders, the Agency's Administrative Board, and those of the main EMSA asset, its staff, would be the ingredients for this multiannual strategy.

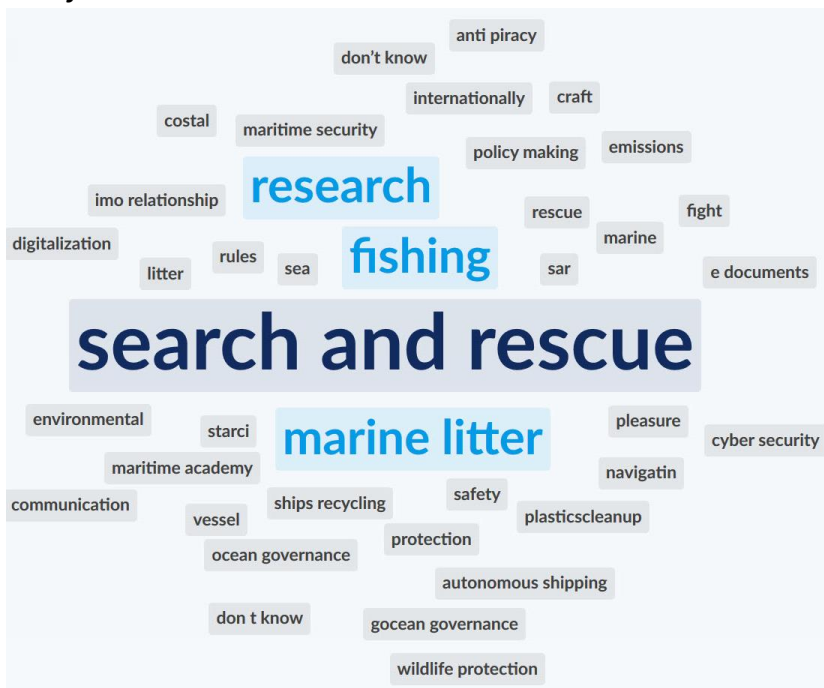
The consultation process with its main stakeholders took the form of a workshop with the Board Members facilitated by EMSA staff. The material generated from the workshop was processed through various exercises within the Agency. A first draft of the 5-year Strategy was submitted for debate at the June 2019 Administrative Board meeting. Members were invited to also provide written comments after the debate. The Agency examined all the views expressed and developed a new draft which was submitted by the Executive Director to the Commission for formal consultation in early September 2019, as required by the Agency's Founding Regulation. As a final step, the document was submitted to the November 2019 Administrative Board meeting for adoption.

Board Members respond to the online poll at the 5-year Strategy workshop in March 2019:

What word do you associate with EMSA?

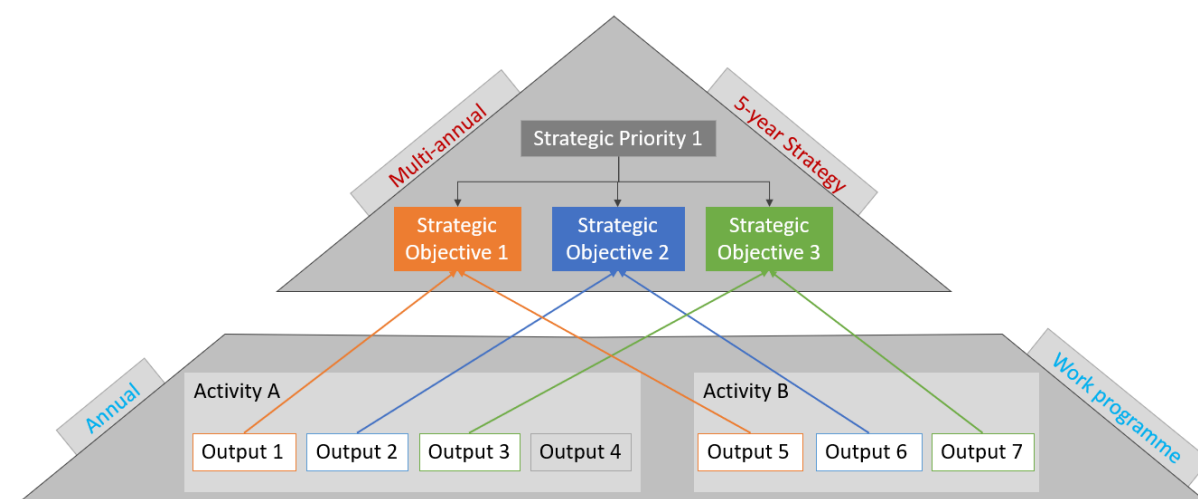


Indicate one field where EMSA is not active but should be:



1.4 Implementation and indicators

Follow up on the implementation of this strategy will be done through the Agency's existing programming and reporting processes. These processes are driven by the single programming document which, in line with the EMSA Financial Regulation, contains a multi-annual work programme and an annual work programme. The single programming document establishes the link between the **multi-annual strategic priorities** defined in this strategy, and the concrete **annual activities and outputs**. In particular, the single programming document establishes the **set of annual activities and outputs** that contribute to each **multi-annual strategic objective**.



Measuring the success of the 5-year Strategy:

1. Annually, the Agency will assess **the contribution of the annual activities and outputs to the multi-annual strategic objectives**. This will be a qualitative assessment, based on the data reported in the Consolidated Annual Activity Report (CAAR) combined with other potentially relevant indicators. Where available, case stories can also be used to illustrate the Agency's relevance and added value. Other indicators such as requests to use EMSA tools or requests for EMSA engagement as technical partner, the evolution of project financed activities etc. may also contribute to assessing the achievement of certain objectives.

2. Towards the end of the period covered by the 5-year Strategy, the Agency will assess **the achievement of the multi-annual strategic priorities**. This exercise will be twofold, taking into account the achievement of the multi-annual strategic objectives over successive years on the one hand, and the views of EMSA stakeholders on the other. The satisfaction and perception of stakeholders in relation to the strategic priorities will be measured through a **survey** in order to assess the quality of the Agency's interactions and its profile in relevant sectors.

1.5 The EU maritime cluster

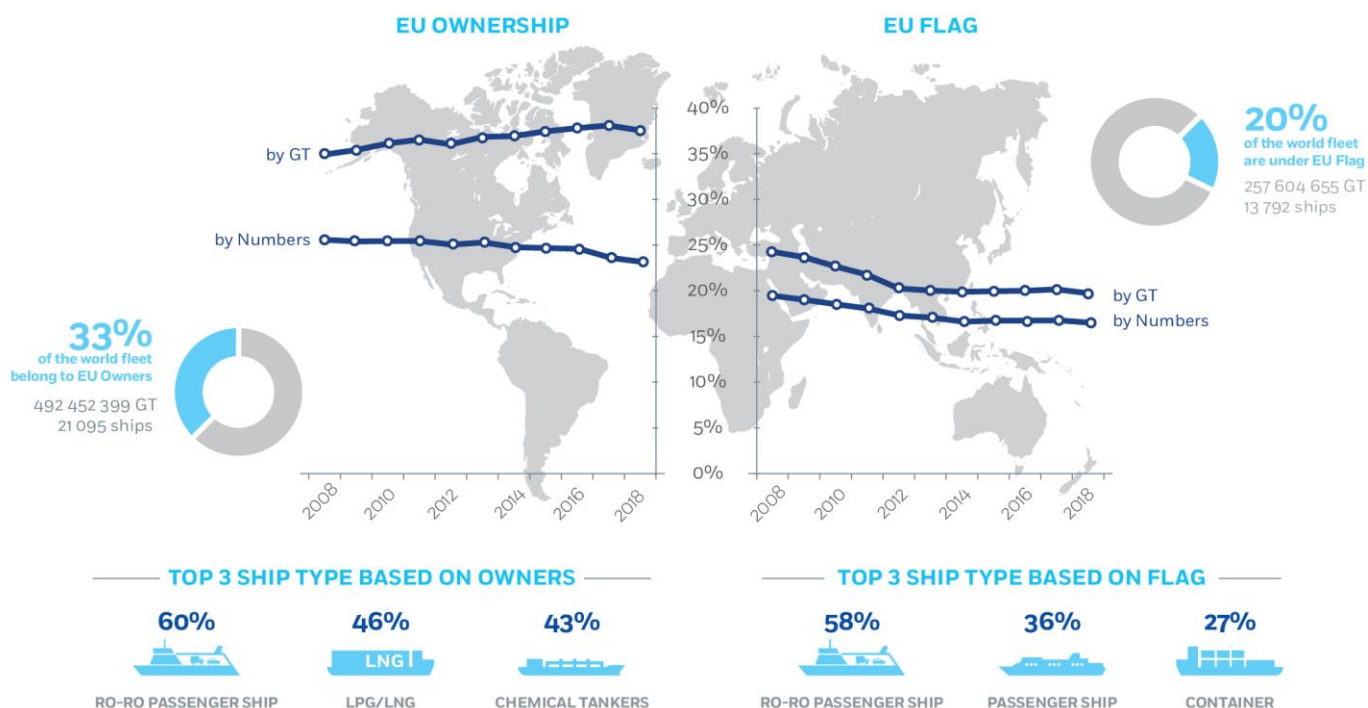
The European continent is essentially a maritime continent. The EU coastline is 68 000 km long. The EU is home to 23 coastal states and 27 flag states. While the economic climate has been challenging, the EU's blue economy is strong with a turnover of some € 658 billion and a workforce of more than four million people¹. The maritime sector's importance spans several key EU policy areas including transport, environment and oceans, energy, internal market, and neighbourhood and enlargement. To illustrate some of the trends in the sector, here below you will find a series of infographics which give figures for each theme covered. What's certain is that Europe will continue to assert itself as a leading player in the maritime world for the years to come.

WHERE WE STAND

The EU fleet

Unit= Gross Tonnage (GT)

Data source: Marinfo, EMSA's internal maritime database



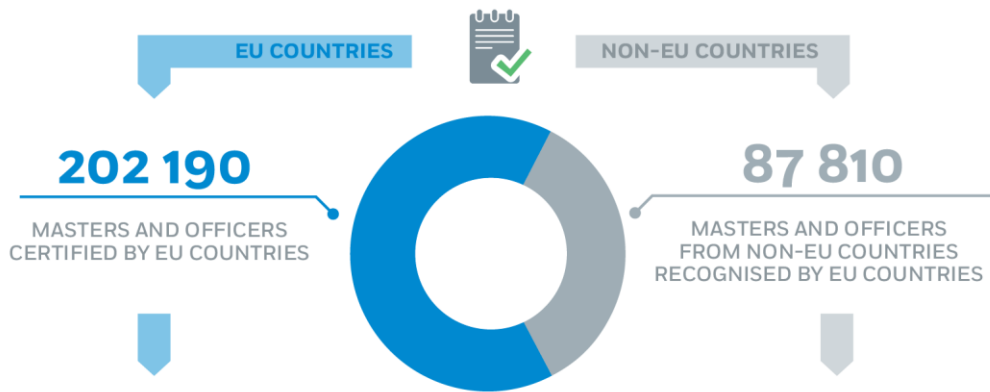
¹ The EU Blue Economy Report 2019, European Commission, DG for Maritime Affairs and Fisheries, page 8

SEAFARER STATISTICS IN THE EU

Insightful view on countries of origin and recognising countries

Data source: EMSA STCW-IS 2017 Report

A snapshot of seafarers holding certificates of competency & endorsements attesting recognition by EU countries valid in 2017, as reported in EMSA's STCW Information System



TOP 5 EU COUNTRIES WITH THE HIGHEST NUMBER OF CERTIFIED OFFICERS

- United Kingdom (30 833)
- Poland (20 138)
- Greece (18 935)
- Italy (15 154)
- Norway (14 696)

TOP 5 EU COUNTRIES WITH MOST OFFICERS RECOGNISED BY EU COUNTRIES

- Poland (9 260)
- Romania (5 227)
- Greece (3 893)
- United Kingdom (3 689)
- Croatia (3 463)

TOP 5 NON-EU COUNTRIES WITH MOST OFFICERS RECOGNISED BY EU COUNTRIES

- Philippines (30 615)
- Ukraine (19 304)
- Russian Federation (15 631)
- India (6 357)
- Turkey (4 100)

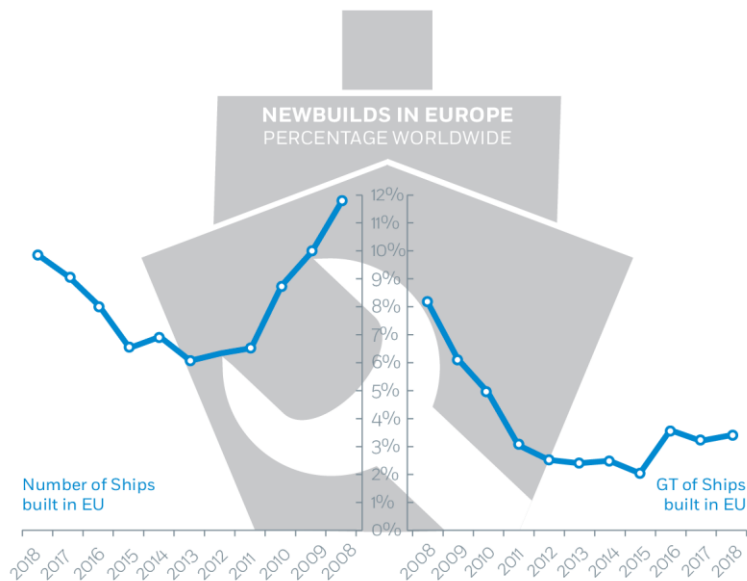
TOP 5 EU COUNTRIES RECOGNISING THE HIGHEST NUMBER OF NON-EU OFFICERS

- Malta (37 151)
- Cyprus (16 442)
- Norway (7 983)
- Netherlands (7 109)
- United Kingdom (6 345)

SHIPBUILDING

More ships, but smaller sizes

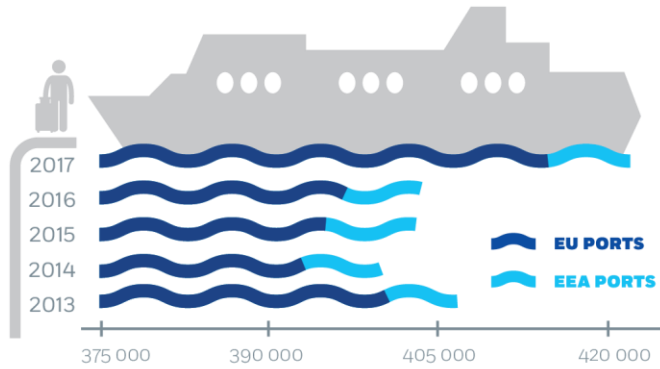
Data source: Marinfo, EMSA's internal maritime database



PORT ACTIVITY FOR TRADE AND TRAVEL

Passengers embarking and disembarking in EU ports

Data source: Eurostat
Unit: Thousand passengers



Top 5 countries

-  Italy (73 876)
-  Denmark (42 886)
-  Greece (70 023)
-  Croatia (31 327)
-  Germany (30 774)

Gross weight of goods handled in ports

Data source: Eurostat
Unit: Thousand tonnes



Top 5 countries

-  Netherlands (595 810)
-  Spain (485 805)
-  United Kingdom (481 815)
-  Italy (475 164)
-  Germany (299 189)

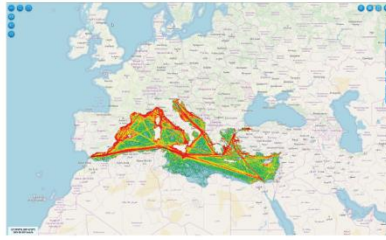
SURVEILLANCE

Data source: EMSA, SEG

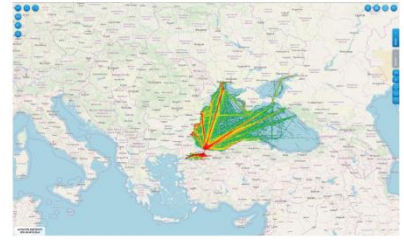
TRAFFIC DENSITY MAPS SUCH AS THE EXAMPLES SHOWN BELOW



Baltic Sea area - August 2019



Mediterranean Sea area - August 2019



Black Sea area - August 2019

16 million

Total messages received by EMSA in one day

T - AIS	8 713 927
S - AIS	7 325 601
VMS	78 973
LRIT	38 286



ACTIVITIES COVERING:



96 265

Distinct vessels detected in one day from different sources

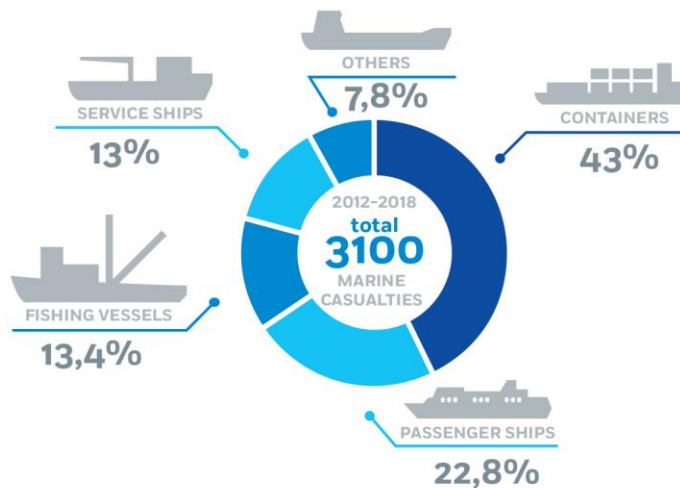
61 803	S - AIS
39 907	T - AIS
6 685	VMS
4 717	LRIT



ACCIDENTS

Breakdown of figures

Data Source: EMSA, European Marine Casualty Information Platform (EMCIP)



Distribution of fatalities by categories of person



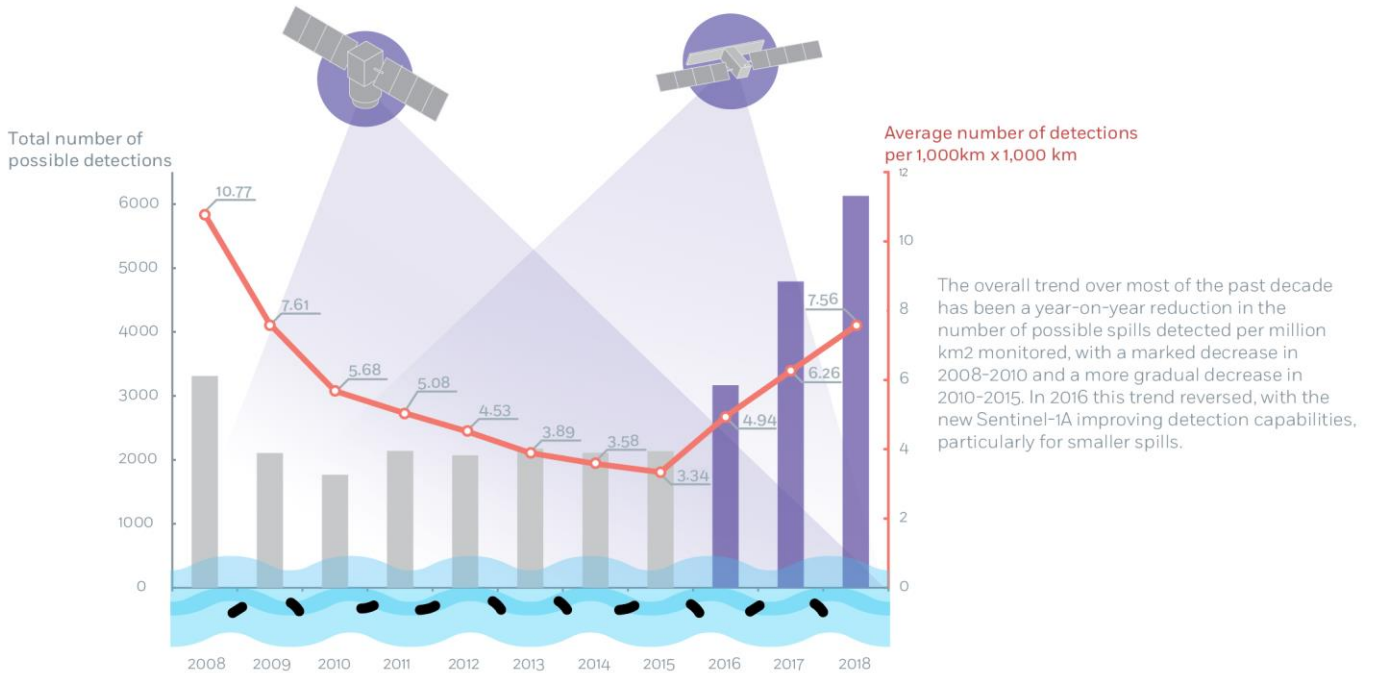
Number of marine casualties and incidents per severity



DETECTION OF POSSIBLE SPILLS

Trends over a decade

Data source: EMSA, CleanSeaNet



PORT STATE CONTROL

Data source: Paris MoU, Annual report "Consistent Compliance" 2018

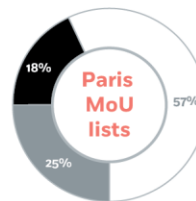
CONSISTENT COMPLIANCE



17 952
INSPECTIONS
9 368
WITH DEFICIENCIES
566 **24**
DETENTIONS BANS

A look at the three-year trend reveals a significant drop in detentions from 3.87% in 2017 to 3.15% in 2018.

WHITE, GREY AND BLACK FLAGS



73 listed countries
13 in the black list
18 in the grey list
41 in the white list
100% of EU countries are in the White List

TOP 5 CATEGORY OF DEFICIENCIES



13%

Fire safety



12,07%

Safety of navigation



8,17%

Life saving appliances



7,96%

Labour conditions



7,14%

Certificates & documentation

2. VISION, MISSION AND VALUES

LEGAL BASIS

*Article 1 of the EMSA Founding Regulation states that the purpose of the Agency is 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 and, where appropriate, to contribute to the overall efficiency of maritime traffic and maritime transport so as to facilitate the establishment of a **European Maritime Transport Space without Barriers**.*

VISION

EMSA's vision is to be the centre of excellence for a safe and sustainable EU maritime sector

MISSION

EMSA's mission is to serve EU maritime interests for a safe, secure, green and competitive maritime sector and act as a reliable and respected point of reference in the maritime sector in Europe and worldwide.

EMSA capitalizes on its unique know-how to position itself as an essential player in the maritime cluster in Europe and beyond.

EMSA works on maritime safety, security, climate, environment and single market issues and tasks, first as a service provider to Member States and the Commission, but also as an innovative and reliable partner and knowledge hub for the European maritime cluster and potentially beyond as a reference internationally.

VALUES

Quality, credibility, efficiency, effectiveness, transparency, flexibility, and being smart and gender balanced.

3. EMSA'S STRATEGIC PRIORITIES

Strengthening the 5 "S": sustainability, safety, security, simplification and surveillance.

*For each of the 5 "S" the Agency has identified **one strategic priority** and a number of → **strategic objectives**.*

3.1 Sustainability (environment and climate change)



Strategic priority: *Contribute to the European green agenda for maritime transport by strengthening the EU capacity to protect the marine environment, manage climate change and respond to new environmental challenges*

EMSA was created in the wake of two major maritime accidents in EU waters that led to massive pollution affecting vast tracts of ocean and thousands of kilometres of coastline. The environmental and economic cost of these accidents was huge. EMSA works on two fronts to protect the environment in and around the sea – pollution prevention and pollution response – thus supporting, where possible, the EU policies on marine and coastal environment and health protection, including regional cooperation, the circular economy in the maritime domain, the UN's sustainable development goals for climate change 2030 and the perspective of Europe as a climate-neutral continent.

The implementation of international and European legislation in the area of **prevention** of pollution by ships is the first pillar of environmental protection. EMSA will continue to provide technical assistance to the Commission and the Member States in this area, which in the EU domain covers port reception facilities, the sulphur content of fuels (including alternative fuels and technologies), GHG emissions, ship-source pollution and the introduction of penalties for infringements, ship recycling, anti-fouling substances and the insurance of shipowners for maritime claims.

In the years to come the Agency will need to engage even more on greenhouse gas emissions and decarbonisation, which has become the highest item on the global agenda, in order to help the EU move the agenda forward and meet its obligations.

More support from the Agency will also be needed in relation to the implementation of the revised Port Reception Facilities legislation and the review of the Ship-source Pollution Directive. Further technical assistance could be envisioned in the area of ship recycling where EMSA has the know-how in support of the Commission.

Moreover the Agency will explore possible involvement in emerging issues such as underwater noise, marine litter, NOX and particles.

→ **Support the development and implementation of relevant EU and international climate and environmental legislation**

EMSA has built up expertise, experience and tools that could be extended to other areas. For example the Agency could adapt the "capacity building" approach developed for LNG to other alternative fuels and thereby provide more support in relation to alternative fuels and energy efficiency and design, notably within the context of the European Sustainable Shipping Forum (ESSF).

EMSA will continue assisting Member States in addressing the issue of transfer of harmful aquatic organisms and pathogens and in the implementation of the relevant international convention (ballast water management, anti-fouling systems).

EMSA shall work along with the national authorities and the shipping industry to develop a commonly accepted Standard Code of Practice for Bunkering by bunker barges/tankers, within the context of European Sustainable Shipping Forum (ESSF).

In relation to pollution from plastics, EMSA will contribute to developing guidance on minimizing the impact of shipping, for instance reducing the use of plastics on board vessels and to the implementation of the IMO Action Plan against marine litter.

In terms of tools, the Agency will use its experience with the Air Emissions Calculator developed within the context of the Emission Inventories project to explore its potential role in relation to emissions modelling per se to support policy options, but also modelling of other pollutants such as underwater noise or (micro) plastics and other chemical contaminants.

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

At the international level, EMSA supports the Commission's work at IMO and is increasingly active in relation to climate change mitigation issues. The critical role of EMSA in designing and managing THETIS–MRV, the data collection system in support of the MRV Regulation, has raised the Agency's profile as a potential technical partner to support the development and implementation of EU and global initiatives, both in relation to the substance of climate change mitigation but also in relation to enforcement methods.

- **Promote and support the development and implementation of innovative EU and global solutions to mitigate climate change**

The other pillar of environmental protection is **response**. Designed to top-up Member State capacity to respond to pollution, EMSA has built up a toolbox that is available for deployment upon request, consisting of a network of oil spill response vessels, an Equipment Assistance Service, dispersant stockpiles and a support service in case of pollution by other Hazardous substances. Satellite surveillance, and more recently RPAS services, are available to spot or monitor potential or actual spills and identify polluters. Maintaining the EU SafeSeaNet and Clean Sea Net information and communication systems and network of Member States authorities is essential to be able to support relevant authorities, share and retrieve relevant information about the incident, the vessel and its cargo in real time.

The toolbox is increasingly sophisticated in terms of response technologies and methods, and increasingly agile in terms of responsiveness and adaptability to regional conditions and capabilities, thanks to continuous improvements and enhancements. This dynamic of continuously upgrading the response toolbox must continue, in order to maintain the EU response capacity at a high level in the event of accidents and incidents. In parallel EMSA will look for ways to enhance the use of the toolbox, taking into consideration a regional needs-based approach.

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

Furthermore, the pollution response angle needs to widen in step with the strong green agenda, looking well beyond the usual suspects and individual culprits i.e. oil, chemicals, ships and oil and gas installations, to what is actually at stake – the oceans and the climate. From this wide angle, a whole

range of additional threats can be identified and EMSA should explore where and how it could help Member States address them, for example:

- fresh approaches to oil response may be needed in view of new, relatively cleaner fuels. EMSA would need to assess the suitability of the existing response mechanisms to these new fuels.
- explore areas that it has not touched before, for instance how its response mechanisms could be adapted to the removal of plastics from the marine environment, including mitigation of impacts from accidents, such as loss of containers. The agency will explore the possibility of working with Regional Agreements including regional seas Conventions addressing the issue of plastics and micro-plastics in the marine environment.

→ Prepare for response to new, evolving and diversified environmental challenges

3.2 Safety



Strategic priority: *Contribute to higher maritime safety standards, anticipate new maritime safety challenges and expectations and provide knowledge-based solutions with the aim of contributing to the reduction of marine casualties and human loss.*

Maritime safety is the *raison d'être* of EMSA from its inception and maritime **safety** will remain at the core of the Agency's activities. The vast array of EU legislative initiatives that govern maritime transport in the EU requires the tangible presence of a technical body available for independently auditing the level of **implementation** and **enforcement** of legislation. This is where EMSA stands today and this is what it will continue to provide in terms of support to the Commission in its role as "guardian of the Treaties" and to EU Member States for implementing their obligations. The Agency will continue its programme of visits to Member States and inspections to third countries and Recognised Organisations, factoring in new legislative requirements and adapting its cycles and overall approach to optimise EMSA's resources and the visits' process, enhance the impact and minimise the burden on the visited/inspected entities.

EMSA will promote a strong safety culture in EU maritime transport by supporting commitment and continuous improvement through an enhanced portfolio of learning and enforcement tools and services. This portfolio will build on the experience and expertise of the Agency: capacity building, training, horizontal analysis, cost-effectiveness analysis, guidance; turning the information gathered through visits and inspections into lessons learned, best and good practices, knowledge, and supporting the sharing of this information.

Today EMSA is a recognised technical hub for discussions involving safety and sustainability of shipping. Its technical proposals and contributions in the appropriate fora stimulate discussion and progress towards safer and greener shipping. Its studies, as happened in the past, provide the critical mass for improvement of standards and identification of sustainable solutions. The Agency will enhance this function and its workshops should be the fora for discussing technical options and putting forward knowledge-based solutions.

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

EMSA will continue to support the competent authorities of the EU Member States in relation to their Flag States responsibilities. The Agency will further develop its capacity building capabilities to

provide systematic, coherent and needs-based training schemes to support their daily work in relation to Flag State Implementation, Accident Investigation, Marine Equipment, STCW, etc.

Technical discussions within the context of IMO will continue to be followed, with active technical contribution by EMSA. In addition technical assistance will continue to be provided in relation to the implementation of the relevant EU Acquis and International Conventions. The information gathered at EMSA through visits and audits represents a valuable asset that through safety analyses and horizontal analyses could support decision-making and risk assessments both at national and EU level.

Building up on the technical expertise and knowledge built over the years, the Agency will enhance its support to Member States for the IMO Member State Audit Scheme (IMSAS) audits. Moreover, through its initiative of a Dynamic Overview of National authorities (DONA), statistics will be offered on a regular basis to the maritime administrations to support their daily work.

Modern maritime administrations need to be more flexible and agile than ever; they also need to monitor their performance and the work of Classification Societies authorised to work on their behalf (ROs). EMSA shall support with capacity building actions and at the same time the Agency will offer its expertise in relation to Quality Management Systems (Flag State Directive). In addition, the experience, expertise and information from EMSA's inspections to ROs could be a very useful and effective tool to complement the monitoring activities of ROs performed by the Member States.

→ Support Maritime Administrations in their Flag State implementation effort

EMSA is also supporting Member States in their capacity as Port States, as well as the wider community of the Paris MOU bearing in mind the contribution of harmonised enforcement to fighting sub-standard shipping and ensuring a level playing field. This support takes the form of the PSC information system (THETIS) developed and maintained by the Agency as well as the variety of training and support tools (e.g. RuleCheck) including e-learning tools developed by EMSA for the Member States' PSC inspectors.

The high standards set by the Paris MOU attract the interest of other PSC regimes from around the world. Bearing in mind EMSA's role in the provision of support to the Paris MOU there is potential to further develop tools and export EU solutions in this area.

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

Maritime transport is no exception to the fast-changing environment we are living in. Building on the strength and capacities developed overtime EMSA is well positioned to explore and address emerging safety challenges on board ultra-large container and passenger ships and fishing vessels.

Recent accidents demonstrated the need to re-visit and re-evaluate the safety levels of certain categories of ships especially in case of an emergency. The Agency will contribute through its technical work on the analysis of the safety standards, lessons learnt from accidents, and developments at IMO, aiming at a higher level of safety design and performance for these ships. The Agency is best positioned to offer a technical table for discussions with the experts of the Member States on issues such as fire safety, fires in containers, safety issues related to new types of fuel, evacuation, steering and manoeuvrability.

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

Contributing to higher maritime standards also means participating actively to enhancing safety of ships outside thresholds of relevant international conventions (e.g. pleasure crafts, fishing vessels).

The Agency will look at the “gaps” currently present in the International Conventions and EU legislation and facilitate technical discussions providing for example technical support in relation to the follow-up of the REFIT exercise, in particular with focus on passenger ships less than 24 metres in length, ships built in materials other than steel or equivalents and sailing passenger ships.

EMSA could work together with the experts from the Member States and look at options by providing a technical platform for discussion on the issue of pleasure crafts. The Agency could also look at standards and operational aspects for fishing vessels and provide a forum for technical discussions, exchange of information on national standards. Risk areas could be identified for further action.

→ **Explore further work on safety standards for vessels not covered by relevant international conventions**

Autonomous ships and systems are generating new challenges in terms of safety standards, marine equipment, human element, risk management, safety of navigation in a hybrid environment and SAR operations. At EU level, EMSA should become the platform for technical structured discussions, putting together administrations, industries and academia. At international level, EMSA shall assist the Commission with the work started at IMO level on Maritime Autonomous Surface Ships (MASS) by proposing specific actions in line with EU interests.

→ **Become the technical facilitator in relation to autonomous ships**

People are key for safe manning and running of a ship. People are also key for an environmentally sustainable manning and running of a ship. In fact, quality shipping in all respects depends very much on the quality and well-being of seafarers and therefore on essential factors affecting their careers, as well as the gender balance in the sector: motivation to become seafarers, the education and training available, and the living and working conditions. Efforts to improve the quality of all aspects of shipping will have to address all of these factors.

The STCW Convention is an essential component of maritime safety and the Agency’s support to the Commission and the Member States in relation to its implementation is a core task. EMSA will develop an effective and efficient programme of inspections of third countries’ training and certification system to support the improvements brought to the EU system of recognition by the EU revised legislation. EMSA will also provide technical assistance regarding the forthcoming revision of the STCW Convention. The STCW-IS (information system) will be enhanced, including looking at options to better support national competent authorities in relation to certificates and endorsements.

Looking further afield, to where the Agency may be able to add value, the experience gained in relation to the STCW Convention could be used in support of the implementation of the MLC Convention and other pertinent ILO instruments, in terms of implementation, enforcement and tools, thus improving working and living conditions of seafarers.

Attention could also be paid to the dimension of “social responsibility” in shipping, and to possible ways to enhance motivation in a profession that is rapidly changing on board and ashore due also to technological development. A continuous commitment to these issues from all stakeholders needs to be maintained.

→ **Enhance role in relation to the human component of shipping**

3.3 Security



Strategic priority: *Strengthen maritime security in Europe and globally where there is a European interest*

EMSA contributes actively to the implementation of the EU Maritime Security Strategy. The Agency's role in helping to assess and verify the implementation of EU maritime security legislation has increased over the years, in step with the demand for support to the Commission and the EFTA Surveillance Authority, which is expected to continue upwards, reflecting the growing priority at EU level. This technical assistance in relation to ship and port facility security, in line with the International Ship and Port Facility Security Code (ISPS), will therefore be enhanced.

- **Support proper implementation of EU and International maritime security legislation**

Originally designed for maritime safety and pollution response, EMSA's traffic monitoring and satellite detection systems now provide an integrated real-time maritime picture to a range of actors in the EU maritime sector performing various functions related to preventing illegal acts (EU NAVFOR for piracy, EFCA and national FMCs for fisheries, MAOC-N for drug trafficking, EUROPOL and National Police and coast guard authorities, FRONTEX, national customs authorities). The Agency's surveillance capacity has the potential to support security worldwide and EMSA should explore in particular how the EU merchant fleet could be further protected from piracy and armed robbery globally by extending the reach and scope of its Integrated Maritime Services (IMS).

Other alerting services to the EU merchant fleet on security infringements could be set up to support an EU role in the global real-time monitoring of piracy-related and other security incidents and attacks on a world-wide scale. Options include extending the geographical reach, such as to the Gulf of Guinea, and type of integrated maritime services and other information tools, also using Copernicus, along the lines of the service provided by the Agency to EU NAVFOR.

- **Provide further information services to protect the EU merchant fleet worldwide**

Cybersecurity is already an important element for the safe operation of a ship added to the 'traditional' safety factors like the human element, safety standards and safety management. EMSA should help exchange knowledge-based practices, raise awareness and build capacity to address this risk in the maritime context, in alignment with initiatives ongoing at IMO (IMO guidance), and in cooperation with ENISA and with other transport agencies and possibly also industry.

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

Cybersecurity is clearly also a concern at the level of the EMSA systems and operations. Appropriate measure must be taken at the level of the Agency to protect EMSA maritime applications and other information streams and services, such as the RPAS missions. The cybersecurity measures have to be kept in place and, in case of networks such as SafeSeaNet, similar security measures will also have to be taken by the connected Member States. In parallel, EMSA should assist Member States in ensuring adequate security measures in relation to common networks.

- **Develop robust solutions to protect its maritime applications and information services**

The Agency is mentioned since the beginning in the context of the Action Plan for the EU Maritime Security Strategy. Building on the Agency's tasks in relation to the European cooperation on coast guard functions; bearing in mind its contribution to the response to the migration and security crisis; and with the role of the Agency in the transition phase of CISE, the Common Information Sharing Environment for the EU maritime domain, there will be more opportunities to demonstrate the added value of EMSA and to use existing tools for a wider community.

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

3.4 Simplification (SMART shipping/maritime transport)



Strategic priority: *Facilitate the simplification of EU shipping by supporting EU-wide digital maritime solutions*

One of the factors affecting the efficiency of maritime traffic and transport are the administrative requirements that ships carrying goods and persons are subject to at each port of call. Ensuring harmonised reporting and reusing information that has already been reported and pushing that information to the next port of call will contribute to a swifter, more seamless journey. The Agency should develop open data applications for the benefit of the maritime cluster.

EMSA will assist the Commission and the Member States to facilitate the implementation of the Regulation on the European Maritime Single Window (EMSW) environment, and to progress on simplification, harmonisation and rationalisation of reporting formalities. EMSA will continue implementing and enhancing the necessary functions in the EU maritime traffic monitoring and information exchange system SafeSeaNet.

Interoperability between the range of reporting and data transmission systems at national and EU level, as well as between industry and administrations, needs to be addressed. EMSA will provide support, within the framework of the European Maritime Single Window (EMSW) environment

- **Support further simplification, harmonisation and rationalisation of reporting formalities**

EMSA should support the transition of the EU maritime sector to a paperless environment. THETIS will be enhanced to make available relevant data sets/eCertificates, including STCW certificates, and consequently facilitate the work of the Member States in their capacity as Flag States and Port States. In particular the work of PSC Inspectors could be focussed on board on what really needs to be verified, with all documentary checks performed in advance through the trusted platform of THETIS. A platform to offer regular opportunities for the different stakeholders to share best practices and lessons learnt will also be envisaged.

- **Support the transition of the EU maritime sector to a paperless environment including e-certificates**

In order to move towards a single window, the process of digitalisation and integration has to go beyond ship reporting formalities and the reuse and pushing of information “horizontally” between ports or between ships and ports. In the future, it should be possible to also drill down “vertically” into the contiguous processes, notably port and ship logistics, and reuse and push selected information to facilitate those processes.

In the longer term, EMSA will have an important role to play to facilitate the optimisation of port services to gain efficiency and reduce environmental impact of shipping operations. Based on the vessel position information held at EMSA, with new (cloud based – machine learning) tools, more tailor-made information could be generated for average waiting times before port calls are possible (at mooring ground for example), better prediction of arrival times and turn-around times of vessels in port, which all will facilitate the efficiency of logistics.

- **Facilitate the improvement of overall efficiency of shipping in Europe where feasible**

3.5 Surveillance



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

EMSA has become the “EU’s eyes on the sea”, implementing the original concept of a community vessel traffic monitoring and information system that would enhance safety and efficiency of maritime traffic, improve response to incidents, accidents, and potentially dangerous situations at sea and contribute to better prevention and detection of pollution by ships – and taking support to Coastal States to another level. Building on its investments over the years in hardware, software and knowledge, EMSA today has the capability to fuse many different data sensors and services and deliver a maritime picture that is both rich and integrated. An important input to this is the Copernicus Maritime Surveillance Service which helped to extend EMSA’s user base and will remain a cornerstone of surveillance information in the years to come. The latest entry in the surveillance portfolio is the RPAS data which now provides a much more complete level of surveillance in the area of open seas.

With the Integrated Maritime Services, the Agency is the main provider of the maritime picture in Europe today, serving a potentially endless number of maritime actors and more, for example the security and law enforcement communities or other EU Agencies. While part of this information is closed, a part of it could be provided to the general public.

SafeSeaNet, the name given to the original concept, remains the cornerstone of information on maritime traffic in the EU to support its safety and efficiency. The system will continue to be enhanced in response to user needs and technological developments.

- **Continue improving functionality and efficiency of the EU maritime traffic monitoring and information system**

In terms of new technologies with the potential to enhance the EU surveillance capability, EMSA started to assess the usability of VDE system (VHF Data Exchange) for ship-to-shore communications. Satellite communications will provide worldwide coverage. This voluntary front-end based on satellite communications can also be used for SAR communications, exchange of voyage plans, actual weather and ice information, etc.

In different domains, the Agency is following the latest technological developments of a pre-operational nature which could be of interest for Member States and/or the Commission. For the maritime picture, for example, the Agency is looking at new satellite constellations and new sensors to add data and new ship information sources (e.g. radar signature detection, high altitude pseudo satellites, etc.). This activity is important to stay at the forefront of technological developments to offer new services to Member States, which otherwise would not become available at national level.

→ **Monitor the emergence of promising technologies and operationalize them for new services for Member States and the Commission**

In order to get more out of the information kept at the Agency over the last 15 years, machine learning, and artificial intelligence (AI) data analytics could be further developed to assist Member States in a wide range of tasks, ranging from ship statistics to environmental and safety hot spots in their waters, predicting positions of vessels now or in the immediate future, improving filtering of vessels of interest, Automatic Behaviour Monitoring, etc. The development and operation of these new functionalities should be formulated and fine-tuned in close cooperation with the users in Member States.

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

Capitalising on EMSA's surveillance experience i.e. collecting, processing, fusing, integrating, transforming and delivering a bespoke maritime picture, the Agency is now supporting the development of CISE, the common information sharing environment, enhancing the potential to deliver situational awareness to multiple other (non-maritime) communities. The Agency will thereby enhance its role and profile in the surveillance sector and potentially further enrich the maritime picture, when CISE enters its operational phase.

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

SAR (search and rescue) features prominently in the original objectives of SafeSeaNet: improve response to "incidents, accidents, and potentially dangerous situations at sea, including search and rescue operations". EMSA could contribute to this by enhancing tailored information tools and building capacity through training and exercises.

The Agency is offering the SARSURPIC (Search and Rescue Surface Picture) functionality for those that are using Integrated Maritime Services. In dialogue with the users the Agency can explore if other functionalities can be offered to assist during SAR cases. In addition, an operating procedure could be developed to better utilise the EMSA RPAS services for SAR missions of Member States. The Agency will also pursue the shortening and increased availability of satellite tasking in support of national SAR requests (emergency ordering).

The Agency could also contribute with training, guidance and table top exercises, gathering technical experts from the Member States around the table to identify the best way for the Agency to support national SAR planning, cooperation and operations.

→ **Support Search & Rescue efforts of Member States**

The overall trend in vessel position information is that there are more and more users of the maritime applications of the Agency, there is a growing number of vessel historical data and positions per day available and users want to have as close as possible to real time data with more tools to manage or analyse the data on line. To keep performant services, the Agency could move to the cloud to further accommodate the growth of users, data and services. The technologies currently used are at their limit.

Having cloud-based services would make it easier to expand and accommodate any growth in volume or functionality. This is a pre-condition before the Agency is able to offer a new generation of services, which may include Business-to-Administration services, e-Certificates, machine learning and artificial intelligence, as developed under other points of this strategy.

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

4. EMSA'S APPROACH AND IDENTITY

Shaping our interactions and our profile to support the strategic priorities and better fulfil our mission

4.1 Roles and relationships in the sector

From a horizontal perspective, across the 5 S's, EMSA should shape its interactions with stakeholders and its profile in the maritime sector in such a way as to support the strategic priorities outlined in the previous section and better fulfil its mission. In order to achieve this, four **cross-cutting strategic roles** have been identified, and corresponding **cross-cutting strategic objectives**.

EMSA's core mission is to assist to Member States and the Commission to implement EU policy. As a **service provider** to these two key stakeholders, EMSA will seek to enhance this assistance with renewed and consolidated services after 15 years of operations. EMSA also engages with a range of other stakeholders as a **reliable partner** to various EU entities and in the wider European maritime cluster. On the external front, the Agency has potential for exporting EU solutions and could develop further as an **international reference**, in support of EU aims and interests. Finally, and underlying all (inter)actions, there is know-how: EMSA must be firmly **knowledge-based**, technology driven and innovative.



EMSA as a service provider

Law making and enforcing

The technical assistance provided by EMSA to the Commission is essential and one of its key tasks when it was set up in 2002. After more than 15 years of operation, EMSA has built-up extensive experience and expertise in its fields of competence. The Agency will step up efforts to capitalise on its knowledge to optimise support to the Commission for the preparatory work for updating and developing legislation, including implementing measures. One of the essential sources of information should come from visits cycles in the form of horizontal analyses. As stated in section 3.2, EMSA can provide a unique platform for technical discussions and facilitate mutual understanding and convergence of views amongst Member States, thereby supporting the Commission for initiating EU legislation and for ensuring EU coordination regarding international policy and legislative development.

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

Learning

Learning and professional development is paramount to support the up-skilling and competences of Member State experts and on-the field operators. Seminars, workshops, webinars and information days, as well as online activities and tools would aim at supporting professional development and qualification paths, using the unique expertise and knowledge present in the Agency. The Agency will develop a modular approach to training and professional development, supporting the competent authorities and taking into account other EU developments such as the Sectoral Qualification Framework, for the training of Flag State inspectors, Port State Control officers, Environment Protection officers, Search & Rescue personnel, VTMS personnel and the like.

New technologies will support this new concept, through the use of Distant Learning and Virtual Reality, thus supporting Member States' training and capacity building needs.

→ **Extend and formalize EMSA training schemes**

From data to information and from information to knowledge

Evolve from data management to information management, building new tools to analyse data. The Agency is collecting a number of rich data sets in different maritime domains. With new tools, partly based on machine learning, more information and derived services can be extracted from the existing data to the benefit of Member States and the Commission.

Accident Investigation data from EMCIP and other available sources will be used to support safety analysis and identification of risk areas, as well as policy and legislative developments.

A more interactive and integrated management and analysis of existing data should be pursued for the benefit of EMSA's stakeholders. For example, it could be envisaged to analyse and fuse all available data to provide respective information for a ship in a single environment simply by clicking on the ship's figure on a screen.

Identify trends, risks, lessons learnt and improvements to implementation/legislation. A modest step is for example the Traffic Density Maps and the Automated Behaviour Monitoring tools. Together with the Member States and the Commission more can be developed. Like the identification of maritime safety hotspots in European waters, this can also be done for deliberate discharges at sea, trends in particular kinds of maritime traffic, detection of patterns of traffic or behaviours at sea, "chained Automatic Behaviour Monitoring" to filter out vessels of interest, and customised alerts to simplify the work of coast guard authorities.

In addition, through the new portal DONA (Dynamic Overview of National Authorities) the Agency will be able to provide regular statistics and trends targeted to the needs of the Member States, to support them in their capacity as Flag, Port and Coastal States.

→ **Expand information services to analyse data and identify trends and risks to support safety, security and sustainability**



EMSA as a reliable partner

Interagency cooperation on coastguard functions

Utilise EMSA's strength in maritime knowledge, maritime expertise and the maritime picture in the development of coast guard cooperation. EMSA shall consolidate its role as the maritime safety,

security and environment pillar in the framework of the interagency cooperation on coast guard functions. While more and more cross sectoral initiatives are developed by the three agencies, EMSA will continue to promote, together with the European Border and Coast guard Agency (Frontex) and the European Fisheries Control Agency (EFCA), close cooperation between the relevant national authorities responsible for coast guard functions. Products and services ranging from information sharing to surveillance capacity, from risk analysis to capacity building will serve a wider community. The Agency should expand its client's portfolio by serving more and new authorities in the EU and beyond (expanding the coast guard functions' concept to ENP countries for example).

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

Industry

Follow latest pre-operational technologies developed by industry and turn them into services to Member States where relevant. This has proven to be successful with SAT-AIS and new opportunities are on the horizon (e.g. VDES VHF Data Exchange System). Where possible and as relevant, similar to what was already done with the module on "raising awareness on maritime cybersecurity", some modules from its e-learning platform could be offered to the wider public and different stakeholders.

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

Project financed actions

EMSA partners with an increasing number of actors across the EU maritime landscape through a series of actions. Many of these are so-called "Project Financed Actions" articulated through agreements with other EU Agencies or the Commission and distinct resource arrangements. These actions tend to build on the Agency's existing know-how, tools and services to add value for other relevant EU entities and communities, and potentially complement or enrich what the Agency has to offer to its primary stakeholders, for example directly with additional data sources or indirectly by contributing to a cycle of innovation and enhancement that may bring future benefits. This type of cooperation helps to create synergies and avoid duplication of efforts. Current project financed actions include Frontex SLA, EFCA SLA, Copernicus Maritime Surveillance Services, THETIS-MRV, THETIS-EU (Sulphur Module), Interoperability Project and CISE Transitional phase.

- **Seek synergies with complementary EU bodies and communities to add more value for the EU**

From borders to basins and regions

Non-EU countries sharing EU sea basins have an impact on the safety and sustainability of those basins. EMSA contributes in the context of the IPA and ENP mechanisms to enhancing the level of compliance with international rules and developing capacity in those countries thus supporting safer and cleaner maritime transport around the EU. This commitment will continue and is expected to expand both geographically and in scope, including through a sea basin approach and enhanced cooperation with the Regional Seas Conventions for the protection of the marine and coastal environment in the four marine regions around Europe.

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



EMSA as an international reference

International organisations and external policy

Enhance cooperation with IMO, WMU, ILO, IALA. By providing technical expertise in support of the Commission and the Member States in relevant international organisations, EMSA can further enhance the contribution of the EU to safe, secure and sustainable shipping.

As an increasingly recognised player in the international maritime arena, the Agency could also strengthen its relations with international partners such as IMO, ILO, WMU, etc. particularly in the capacity building area.

Investigate options to contribute to targeted initiatives related to development cooperation. Safety and protection of the marine environment could be the subject of targeted initiatives with countries for which there is an EU policy to offer support within the framework of development cooperation, and the Agency could be the technical partner to support such actions.

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



EMSA as knowledge hub

Open data

Strengthen the critical mass of maritime information by adding new types of information and new ways of processing/presenting information, open up information to more users in the governmental domain and beyond. The general trend of governments is offering open data to the public at large, an EU example is the open data policy of Copernicus. A first example of EMSA going beyond its support to Member States and the Commission is THETIS-MRV, which offers a reporting tool to industry and the public. In the meantime a discussion is ongoing to establish a Public Maritime Picture (PMP). This trend will continue and the Agency should be enabled to deliver this type of service as well.

- **Provide the central EU maritime information hub and access point for open data**

Research

EMSA will continue to develop technical knowledge in the areas of safety, security, climate and environment. The Agency should support the exchange of information on maritime research within its mandate in the EU and at global level. Ongoing initiatives should be monitored and events at regular intervals could be organised as an opportunity for stakeholders to gather and exchange views. In this way the Agency will be able to support its stakeholders in their efforts to follow developments and create added value by facilitating exchange of knowledge.

- **Support innovation and development of new technologies**

4.2 Organisational identity

Implement efficient, transparent, SMART, client-oriented and gender balanced management principles

The above-mentioned initiatives and tasks require a dynamic and flexible organisation to accommodate the challenges and opportunities identified in the previous pages.

EMSA's staff expertise will continue to be the main driving force for the provision of the unique services, technical assistance and support from the Agency to its main stakeholders. In doing that EMSA will strive to be even more efficient and green as an organisation both in internal processes and in the way it interacts with external stakeholders.

The increased use of task forces to harness specific skills in the Agency for the best results will be a way to respond to the growing variety and complexity of the issues daily at hand. Combined with an increased level of digitalisation, this will allow EMSA to be more agile in adapting to the future working environment.

The Agency has also taken measures in the direction of increasing its gender balance so that equal opportunities are factored in the EMSA environment.