EMSA 5-YEAR STRATEGY 2020-2024
**TABLE OF CONTENTS**

Foreword from the Executive Director ......................................................... 4
Statement by the Chairman of the Administrative Board ................. 5

**CHAPTER 1**

1. SETTING THE SCENE ................................................................. 6
   1.1 Overview of the 5-Year Strategy ........................................... 7
   1.2 EMSA’s mandate .............................................................. 8
   1.3 Institutional context and policy framework ......................... 9
   1.4 Methodology for developing the 5-Year Strategy ............... 12
   1.5 Implementation and indicators ....................................... 13
   1.6 The EU maritime cluster ................................................. 14

**CHAPTER 2**

2. VISION, MISSION AND VALUES ............................................... 20

**CHAPTER 3**

3. EMSA’S STRATEGIC PRIORITIES ........................................... 22
   3.1 Sustainability ............................................................... 23
   3.2 Safety ........................................................................ 26
   3.3 Security ..................................................................... 30
   3.4 Simplification ............................................................. 32
   3.5 Surveillance ................................................................ 34

**CHAPTER 4**

4. EMSA’S APPROACH AND IDENTITY ........................................ 38
   4.1 Roles and relationships in the sector .............................. 39
   4.2 Organisational identity ................................................. 47
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 the 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 Artificial Intelligence. But these opportunities come with safety and security challenges that need to be carefully managed, cybersecurity being the key concern.

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.

My sincere thanks go to all those who have contributed in time and energy to this process of putting together the strategy, to our Administrative Board both chair and members who put their heads together back in March 2019 and to our staff who facilitated this interactive exchange.

Maja Markovčić Kostelac
Executive Director
It is a pleasure to present EMSA’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 when the maritime sector – both in the EU and globally – is facing historical challenges and opportunities. Zero pollution, decarbonisation, sustainability, digitalisation, 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 key to cope effectively with the challenges and move ahead and beyond. With the strategy, EMSA takes on this task of 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 its successful implementation.

Andreas Nordseth
Chairman of the Administrative Board
CHAPTER 1

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

An introduction to EMSA’s five 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.
1.2 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 support to the establishment of a European maritime transport space without barriers, thereby 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.
EMSA has an important role to play in the implementation of the European Commission’s 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.

**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 strand 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 emission reduction targets for zero while 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 are 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 interagency 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 have 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 supports the approximation of EU standards and covers 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 strand 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 longstanding work contributes directly to this priority: 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.

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.

On 20-21 March EMSA’s Administrative Board members met to exchange their views on the priorities of the upcoming five year period.
1.4 METHODOLOGY FOR DEVELOPING THE 5-YEAR STRATEGY

This is the third 5-year strategy document for EMSA and it is intended to cover the period 2020-2024. It builds on the well-established structure and activities that have positioned EMSA over time 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 – which new challenges and opportunities lie ahead for them in the EU maritime sector and how EMSA can capitalise on its unique resources to help them to 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 mandate and resources.

The Agency’s sphere of action is regulated chiefly by its Founding Regulation (section 11) but is also affected by the evolving institutional and policy context (section 1.2), which currently includes the prospect of Brexit. The outcome of the ongoing 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 5-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 EMSA’s main 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 responses to the questions -

1/ What word do you most associate with EMSA ?

2/ Which new area should EMSA be active in?
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 EMSA’s 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 a 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.
1.6 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 people. 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

**EU OWNERSHIP**

**EU FLAG**

![Graphs showing EU ownership and flag statistics](image)

<table>
<thead>
<tr>
<th>Ship Type</th>
<th>EU Ownership</th>
<th>EU Flag</th>
</tr>
</thead>
<tbody>
<tr>
<td>RO-RO Passenger Ships</td>
<td>60%</td>
<td>20%</td>
</tr>
<tr>
<td>LPG/LNG</td>
<td>46%</td>
<td></td>
</tr>
<tr>
<td>Chemical Tankers</td>
<td>43%</td>
<td></td>
</tr>
</tbody>
</table>

**TOP 3 SHIP TYPES BASED ON OWNER**

- 60% RO-RO Passenger Ships
- 46% LPG/LNG
- 43% Chemical Tankers

**TOP 3 SHIP TYPES BASED ON FLAG**

- 58% RO-RO Passenger Ships
- 36% Passenger Ships
- 27% Container Ships
Setting the scene

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 /five.LP

NON-EU COUNTRIES WITH MOST OFFICERS RECOGNISED BY EU COUNTRIES

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

TOP /five.LP

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 /five.LP

TOP 5 EU COUNTRIES WITH MOST OFFICERS RECOGNISED BY EU COUNTRIES

Poland (9 260)
Romania (5 227)
Greece (3 893)
United Kingdom (3 689)
Roatia (3 483)

TOP /five.LP

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)

TOP /five.LP

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 /five.LP

TOP 5 EU COUNTRIES WITH MOST OFFICERS RECOGNISED BY EU COUNTRIES

Poland (9 260)
Romania (5 227)
Greece (3 893)
United Kingdom (3 689)
Roatia (3 483)

TOP /five.LP

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)

87 810

MASTERS AND OFFICERS RECOGNISED BY EU COUNTRIES

202 190

MASTERS AND OFFICERS CERTIFIED BY EU COUNTRIES

* Reference to EU or EU member states includes Norway and Iceland
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**: 85,382
- **Greece**: 72,520
- **Denmark**: 63,774
- **Spain**: 36,093
- **Croatia**: 32,658

Gross weight of goods handled in ports

Data source: Eurostat  
Unit: Thousand tonnes

### Top 5 countries
- **Netherlands**: 595,810
- **Spain**: 485,805
- **Germany**: 299,189
- **United Kingdom**: 281,815
- **Italy**: 175,164
## Surveillance

Traffic density maps displaying ship movement patterns

Data source: EMSA, SafeSeaNet Ecosystem Graphical User Interface (SEG)

### 16 million

Total messages received by EMSA in one day

<table>
<thead>
<tr>
<th>Source</th>
<th>Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td>T - AIS</td>
<td>8 713 927</td>
</tr>
<tr>
<td>S - AIS</td>
<td>7 325 601</td>
</tr>
<tr>
<td>VMS</td>
<td>78 973</td>
</tr>
<tr>
<td>LRIT</td>
<td>38 286</td>
</tr>
</tbody>
</table>

### 96 265

Distinct vessels detected in one day from different sources

<table>
<thead>
<tr>
<th>Source</th>
<th>Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td>T - AIS</td>
<td>61 803</td>
</tr>
<tr>
<td>S - AIS</td>
<td>39 907</td>
</tr>
<tr>
<td>VMS</td>
<td>6 685</td>
</tr>
<tr>
<td>LRIT</td>
<td>4 717</td>
</tr>
</tbody>
</table>

## Marine accidents

Breakdown of figures

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

- **CARGO SHIPS**: 43%
- **SERVICE SHIPS**: 13%
- **FISHING VESSELS**: 13.4%
- **OTHERS**: 7.8%
- **PASSENGER SHIPS**: 22.8%

21 262 total marine casualties

### Distribution of fatalities by category of person

- Crew: 53
- Passenger: Less serious
- Other: Very serious
- Marine incident: Serious

2012-2019 total: 3174

### Number of marine casualties and incidents by severity
Detection of possible spills

Trends over a decade

Data source: EMSA, CleanSeaNet, oil spill and vessel detection service

The overall trend over most of the past decade has been a year-on-year reduction in the number of possible spills detected per million km² monitored, with a marked decrease in 2008-2010 and a more gradual decrease in 2010-2015. In 2016 this trend reversed, with the new Sentinel-1A improving detection capabilities, particularly for smaller spills.

Port State Control

Working towards consistent compliance

Data source: Paris MoU, Annual report “Consistent Compliance” 2018

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

17 952
INSPECTIONS

9 368
WITH DEFICIENCIES

566
DETENTIONS

24
BANS

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
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 capitalises 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.
CHAPTER 3
EMSAA’S STRATEGIC PRIORITIES
For each of the five strategic priorities, EMSA has identified a number of objectives. These are highlighted below, under each text.

3.1 SUSTAINABILITY

**STRATEGIC PRIORITY:**

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

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 – thereby 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 to support 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 the European Sustainable Shipping Forum (ESSF).

In relation to pollution from plastics, EMSA will contribute to developing guidance on minimising the impact of shipping, for instance reducing the use of plastics on board vessels, as well as 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 remotely piloted aircraft systems (RPAS) services, are available to spot or monitor potential or actual spills and identify polluters. Maintaining the EU SafeSeaNet and CleanSeaNet 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 EMSA has not touched before, for instance how response mechanisms could be adapted for 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 to independently audit 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's strategic priorities

EMSA will continue to support the competent authorities of the EU Member States in relation to their Flag State 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 from EMSA. In addition, technical assistance will continue to be provided in relation to the implementation of the relevant EU legislation 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 on the technical expertise and knowledge gained 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 efforts

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 over time, 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 forum for technical 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 enhance the 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 a 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, bringing 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 the 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 each 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 systems to support the improvements brought to the EU system of recognition by revised EU 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, thereby improving working and living conditions of seafarers.

Attention could also be paid to the dimension of ‘social responsibility’ in shipping, and to possible ways of enhancing 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

STRASTRATIFIC PRIORIY

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 services to alert 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 alongside ‘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 EMSA’s systems and operations. Appropriate measures must be taken at the level of the Agency to protect EMSA maritime’s 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 has a longstanding role in the context of the Action Plan for the EU Maritime Security Strategy. Given the Agency’s tasks in relation to European cooperation on coast guard functions; the response to the migration and security crisis; the transition phase of CISE (the Common Information Sharing Environment for the EU maritime domain), and building on these tasks, there will be more opportunities to demonstrate the added value of EMSA and to use the existing tools to support an even wider community.

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

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 is 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 advance the 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 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 datasets/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 onboard could be focussed on what really needs to be verified, with all documentary checks performed in advance through the trusted platform of THETIS. A forum offering 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 the 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 grounds 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 the overall efficiency of shipping in Europe where feasible
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’, by effectively implementing the original concept of a community vessel traffic monitoring and information system to 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 to deliver a maritime picture that is both rich and integrated. An important addition to this, has been the Copernicus Maritime Surveillance Service which helped extend EMSA’s user base and remains a cornerstone of surveillance information for 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 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, 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 the functionality and efficiency of the EU maritime traffic monitoring and information system
In terms of new technologies with the potential to enhance the EU’s surveillance capability, EMSA has started to assess the usability of the 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 in order to offer new services to Member States, which otherwise would not be available at national level.

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

In order to get more out of the information gathered by 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 (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 maritime services and add more value for the EU**
Search and rescue (SAR) features prominently in the original objectives of SafeSeaNet: to 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 EMSA’s RPAS services for the 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 to identify the best way for the Agency to support national SAR planning, cooperation and operations.

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

Figures show that there are more and more users of EMSA’s maritime applications interested in vessel position data. Increasingly, the historical and day-to-day position data is available for vessels. Users want to gain access to real time data with tools that help to manage and analyse this data. To keep high performance 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**
EMSA's strategic priorities
CHAPTER 4

EMSA’S APPROACH AND IDENTITY
From a horizontal perspective, across the five 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, together with their 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 built on 15 years of operation. 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 the potential to export 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.

---

**4.1 ROLES AND RELATIONSHIPS IN THE SECTOR**

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 involved in updating and developing legislation, including implementing measures. One of the essential sources of information should come from visit 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 among 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, VTMIS personnel and the like.

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

Extend and formalise EMSA training schemes
EMSA’s approach and identity

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 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
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 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 and the European Fisheries Control Agency to enhance European cooperation on coast guard functions.
Industry

Follow the 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 the e-learning platform could be offered to the wider public and different stakeholders.

Actively engage with industry to generate the transfer of knowledge and provide non-commercial technical maritime advice.

Project-funded 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-funded 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 to avoid duplication of efforts. Current project-funded actions include Frontex SLA, EFCA SLA, Copernicus Maritime Surveillance Services, THETIS-MRV, THETIS-EU (Sulphur Module), Interoperability Project and the 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, thereby 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.
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
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 to offer 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 the exchange of knowledge.

Support innovation and development of new technologies
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 towards increasing its gender balance so that equal opportunities are a clear factor in the EMSA environment.
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

European Maritime Safety Agency
Praça Europa 4
Cais do Sodré
1249–206 Lisboa
Portugal

Tel +351 21 1209 200 / Fax +351 21 1209 210
emsa.europa.eu / Twitter@EMSA_Lisbon