#### European Maritime Safety Agency

# **EMSA ACADEMY 2022**

**COURSE CATALOGUE** 



#### THE EMSA ACADEMY

Training has been from the outset a core task of EMSA. Its founding Regulation requires the Agency to work with the Member States and organise relevant training activities in fields which are the responsibility of the Member States. In addition upon the request of the Commission, provide technical assistance, including the organization of relevant training activities, as regards relevant legal acts of the Union, to States applying for accession to the Union, and, where applicable, to European Neighbourhood partner countries and to countries taking part in the Paris MoU. The overall goal of the training provided by EMSA is to build capacity at national level, to foster cooperation and to disseminate best practices, thus achieving optimal and uniform implementation of maritime legislation and ensuring a level playing field.

Competent authorities (in the EU and beyond) are often faced with an extensive and increasing range of obligations stemming from a vast and continuously growing regulatory framework, which they need to implement in their capacity as flag, port and coastal States; the appropriate implementation is to a large extent dependent on the knowledge and skills of their staff, and their ability to perform duties related to more than one job or professional profile. Notably, qualifications for these critical roles are not (often) part of formal academic education. States are therefore put in the position where they are required to develop and deliver costly national training programmes for newly recruited personnel before they take up their duties or for further skill development of existing staff. Due to the time and resource pressures often imposed on States in the assigning of duties to staff, sometimes training courses restrictively focused on the content and interpretation of legal acts, thus lacking opportunities for learners to develop skills from practice and experiential learning.

In pursuit of this goal, the EMSA Academy has been established in order to provide learning services outside formal education to all beneficiary organization and individuals working in them. Beneficiary organizations include the EU Member States and countries in the European Economic Area (EEA), the European neighbouring countries, the EU candidate and potential candidate countries, EU and non-EU States members of the Paris MoU and any other third country for which the Agency has been requested by the European Commission to provide technical assistance.

#### **EMSA ACADEMY ACTIVITIES**

The EMSA Academy aims to become an EU-wide and global centre of excellence for the design, development and delivery of quality learning services outside formal education in the maritime domain. The EMSA Academy supports the acquisition and development of knowledge, skills and competencies through teaching and learning and by adopting curricula and professional development pathways to satisfy learning needs and expectations of beneficiary individuals and organizations.

The reference standard used to develop and implement relevant processes for the Agency's training and capacity building activities, is ISO 29993:2017 and based on this standard the EMSA Academy Management System (AMS) has been developed and is implemented as the reference framework for all the training and capacity building activities that the Agency offers to its beneficiaries.

The needs of the beneficiaries for new training or modification of the existing courses is identified through a structured Training Need Analysis (TNA), thus using a bottom-up approach, whilst a process for Curriculum Development and Design is applied for all learning services offered by the Agency. Teaching and learning activities for delivery are guided by the educational philosophy and approach of the EMSA Academy, following the principle that intended learning outcomes, assessment tasks and teaching and learning activities are aligned with each other to facilitate the achievement of the learning outcomes. Finally, the feedback provided by the participants through the Evaluation and Review methodology foreseen by the quality management system strives for continuously improved services.

#### THE LEARNING SERVICES OF THE EMSA ACADEMY

Given the variety of EMSA's beneficiary organizations and the Agency itself as well as the necessity of ensuring that a wide array of learners have access to learning contents and activities, the Academy has adopted blended learning as its delivery approach. Blended learning entails a combination of face-to-face (traditional) and online instruction (synchronous and asynchronous).

The type of learning services offered by the Academy can be grouped as follows:

• Training on specific topics on EU/International maritime legislation – These are short courses delivered to tackle new or amended legislation and are offered both face-to-face and online.

• Training on EMSA's operational maritime applications, tools and services – These are short courses delivered to familiarise users with services, tools and applications developed by the Agency and are offered both face-to-face and online.)

• Part time online trainings delivered on a longer time spam (from 8 to 10 weeks), where learners follow a set of relatively small units of instruction comprising a sequence of educational activities in a particular field or range of related fields of education

• Common Core Curricula (CCC) – A sequence of learning activities prepared by EMSA which describes the aims, content (i.e., syllabi), learning strategies and resources, and learning outcomes related to professional profiles. CCC intensify the upskilling and continuous development of staff from national competent authorities, through innovative and modern courses and training activities complemented by state-of-the-art tools, such as the Learning Platform MakCs and the Virtual Reality Environment for Ship Inspections (VRESI).

Learning Services offered by the Academy cover a wide range of areas of maritime safety, sustainability, technical assistance, surveillance and digital services.

#### THE LEARNING TOOLS OF THE ACADEMY

The Academy is supported by state-of-the-art technology. An eLaboratory that is used to produce media contents for innovative training activities as well as delivering online trainings and webinars has been established. It is a 44 sq./m multimedia room insulated from acoustic and light noise with walls felt isolation, acoustic foam absorbers and electrical blackout opaque blinds. It is equipped with an innovative 12 m2 4k curved screen, high-tech and state-of-art technologies and equipment a fully-fledged chroma-key stage, 4k video cameras, and an integrated audio system. In principle, it enable trainers to develop more elaborated and engaging content which is key for successful online learning activities

The Maritime Knowledge Centre (MaKCs), where trainers and trainees using a world-wide used and recognised learning management system (LMS), Moodle, engage in innovative online and blended learning experiences, which includes interactive contents, live meetings, synchronous and asynchronous learning activities, whilst monitoring and supervising participants' completion of tasks and coursework is ensured.

The Virtual Reality Environment for Ship Inspection (VRESI), a state-of-art simulator which build realistic, immersive and configurable spaces where trainees perform ship inspections in a safe and controlled environment. Users connect to the platform from anywhere through internet, by either wearing their VR goggles or by using a normal computer. VRESI allows EMSA and the learners to obtain first-hand experience on a wide variety of ship types, bypassing the problem of finding available ships in port to perform a collective inspection.

#### **THE COURSE CATALOGUE**

The present catalogue indicates the courses that will be delivered during 2022.

The catalogue will be updated every six months or whenever a course has been revised or whenever a new course has been developed.

#### CONTACTS

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# SUSTAINABILITY

The aim of these courses is to build up the national capacity in the implementation of International and EU legislation within the area of sustainability and protection of maritime environment, to foster the knowledge and skills of relevant staff of national administrations, and their ability to perform operational duties in the relevant areas, as well as to encourage the exchange of best practices among the beneficiaries of the EMSA Academy.

- COURSE ON PORT RECEPTION FACILITIES DIRECTIVE
- COURSE ON SHIP RECYCLING REGULATION FOR PSCOS
- SULPHUR INSPECTORS COMMON CORE CURRICULUM
- HANDS-ON TRAINING SESSIONS ON THE EMSA EQUIPMENT ASSISTANCE SERVICE (EAS) STOCKPILES

### Sustainability

# TITLE COURSE ON PORT RECEPTION FACILITIES DIRECTIVE DURATION 2 DAYS

AUDIENCEInspectors and staff of relevant administrationsAUDIENCEresponsible for the implementation of Directive (EU)2019/883



#### INTENDED LEARNING OUTCOMES

- Describe the basic provisions, from a ship inspection perspective, of Directive (EU) 2019/883 on Port Reception Facilities for Waste from Ships, particularly for the enforcement activities;
- Identify the main steps proposed in EMSA Guidance for a harmonised approach to an inspection of ships within the context of the new PRF Directive: ascertaining their compliance, identifying noncompliances, applying enforcement procedures and follow-up actions;
- Recognise the scope and objective of the THETIS-EU PRF Module system, and particularly to understand how to report the results of a PRF Inspection.

#### **COURSE STRUCTURE**

The course is available both in a presential form and on a live synchronous mode

- Presentation of the PRF Directive (EU) 2019/883 on Port Reception Facilities for the Delivery of Waste from Ships, including related implementing acts
- Presentation on enforcement activities, based on an updated version of the 'EMSA Guidance for Ship Inspections under the Port Reception Facilities Directive'
- Practical exercises on the new PRF Directive
- Presentation of the THETIS-EU PRF module supporting the reporting of inspections under the new PRF Directive
- Practical exercises on the usage of THETIS-EU PRF Module to report inspections

TITLE	COURSE ON SHIP RECYCLING REGULATION FOR PSCOs
DURATION	2 days
AUDIENCE	Port State Control Officers and designated inspectors responsible for the control of the implementation of relevant provisions of Regulation (EU) 1257/2013 and Directive 2009/16/EC
RECOMMENDED PRE-TRAINING REQUISITE	MaKCs module "Ship-related aspects of the EU Ship Recycling Regulation"



#### INTENDED LEARNING OUTCOMES

- Describe the relevant EU legislation, rules and regulations for ships that need to comply with the SRR
- Understand the procedures that need to be carried out to confirm that a ship complies with the SRR
- Identity the differences between inspections carried out for EU and non-EU ships
- Explain the concept of the "clear grounds" for further inspection and "control actions" for non-EU ships
- Explain when a detailed inspection needs to be carried out for EU ships and the Control of the statement of compliance for non-EU ships
- Discuss the available enforcement actions
- Recognise the scope and objective of the reporting mechanism for inspections in THETIS-EU

#### COURSE STRUCTURE

The course is available both in a presential form and on a live synchronous mode.



- Description of the rules ensuring that hazardous waste from ship recycling is subject to environmentally sound management
- Presentation of the elements of the ship on board inspection, concept of "clear grounds for EU ships" and "control actions for non-EU ships", as well as enforcement activities
- Live demo of THETIS-EU and presentation of the reporting mechanism
- Case studies in groups on the EU enforcement of the SRR Regulation and providing feedback

TITLE	SULPHUR INSPECTORS COMMON CORE CURRICULUM
DURATION	9 weeks
AUDIENCE	Officials from the Competent Authorities within the Member States already authorized or that may be authorized to verify compliance with the provisions of Directive (EU) 2016/802 ("Sulphur inspectors" as defined in Article 2 of Commission Implementing Decision (EU) (EU) 2015/253).
RECOMMENDED PRE-TRAINING REQUISITE	MaKCs module "Sulphur Inspector Informative Session"

#### COURSE AIM

This course is designed to develop the necessary individual competencies for carrying out duties associated with the inspection of ships for compliance with the international and EU instruments regarding the limits of sulphur in marine fuels (MARPOL Annex VI and the EU Sulphur Directive). It aims to provide learners with the opportunity to increase the knowledge, skills and attitudes required to carry out inspections professionally, efficiently and effectively and to the required standards established by law and benchmarked industry practice. The Course consists of 9 "learning areas" and each of them has specific intended learning objectives.

#### COURSE STRUCTURE

The course will be delivered in a blended learning fashion, including synchronous and asynchronous teaching and learning activities.

#### **COURSE CONTENT**

The course consists of 9 learning areas:

- General, Legal and Technical Requirements
- Preboarding



- On board Fuel Based Methods and Abatement Methods
- Sampling
- Communication and Professional Behaviour
- Reporting and Logging
- Information and Data Management
- Tools and Equipment
- Health and Safety at Work

TITLE	HANDS-ON TRAINING ON THE EMSA EQUIPMENT ASSISTANCE SERVICE (EAS) STOCKPILES	
DURATION	3 days	
AUDIENCE	The target audience are counter-pollution authorities from the Member States directly involved in response operations, with the following profile: equipment operators who may deal with the equipment on board national vessels of opportunity, team leaders, oil pollution response trainers, vessel captains and members of vessel crew.	
RECOMMENDED PRE-TRAINING REQUISITE	MaKCs module "EMSA's Equipment Assistance Service (EAS)"	

#### INTENDED LEARNING OUTCOMES

The Equipment Assistance Service (EAS) consists of stand-alone oil pollution response equipment systems stored in stockpiles located in selected areas around Europe. This service complements the response capacity available through EMSA's network of oil spill response vessels. The EAS equipment is on stand-by, ready to be mobilised around-the-clock to anywhere in European waters and shared sea basins.

At the end of the course the participants will be able to:

- Demonstrate and practice the use of selected equipment sets at the stockpile location
- Build expertise among the EAS users
- Familiarise the operators with the use of EAS equipment systems



#### COURSE STRUCTURE

The course is available in a presential form

- **•** Briefing onsite and familiarization with the equipment systems
- Practical training on the deployment, operation and retrieval of selected equipment sets

# **MARITIME SAFETY**

The aim of these courses is to build up the national capacity in the implementation of relevant international and EU legislation within the area of maritime safety, to foster the knowledge and skills of relevant staff of national administrations, and their ability to perform operational duties in the relevant areas as well as to encourage the exchange of best practices among the beneficiaries of the EMSA Academy.

- CORE SKILLS COURSE FOR ACCIDENT INVESTIGATORS
- ADVANCED COURSE FOR ACCIDENT INVESTIGATORS
- VDR COURSE FOR ACCIDENT INVESTIGATORS



TITLE	CORE SKILLS COURSE FOR ACCIDENT INVESTIGATORS
DURATION	5 days
AUDIENCE	Junior marine accident investigators who will conduct, or participate in, marine accident safety investigations in accordance with Directive 2009/18/EC.
RECOMMENDED	

PRE-TRAINING REQUISITE

G MaKCs module "Accident Investigation Legislation"



#### INTENDED LEARNING OUTCOMES

- Learn to investigate factors that influence human performance and explain human element
- Plan and prepare an interview roadmap. Explain different steps in an interview and identify barriers to effective interviewing
- Independently complete a time event line and apply it to an accident investigation using a causal event and a factor chart in order to produce a logical explanation of how and why the accident happened
- Plan and prepare a communication plan during an accident investigation

#### **COURSE STRUCTURE**

The course is available both in a presential form and on a live synchronous mode

- Presentation on EMSA and its role in the accident investigation policy
- Presentation of the relevant EU and international legislation on accident investigation
- Presentation on operational readiness and work process
- Presentation on accident site assessment
- Presentation on site hazard identification and risk assessment
- Presentation on physical evidence collection

- Presentation on human element
- Presentation on media handling
- Presentation on witness interviewing and practical exercises
- Presentation on evidence analysis
- Developing Safety Recommendations and follow up
- Presentation on safety reports
- Final exercise on accident investigation

TITLE	ADVANCED COURSE FOR ACCIDENT INVESTIGATORS
DURATION	5 days
AUDIENCE	Accident investigators who conduct, or participate in marine safety investigations in accordance with Directive 2009/18/EC.
RECOMMENDED PRE-TRAINING REQUISITE	As a prerequisite, participants should already have an understanding of the main principles of accident investigation and legislation, including Directive 2009/18/EC and the IMO Casualty Investigation Code.



#### INTENDED LEARNING OUTCOMES

- Identify tools to investigate and classify human factors to apply the discussed analysis methods on a specific scenario in order to analyse an incident and identify the root cause for human error
- Recognise the analysing methods on specific scenarios and synthesize the main findings of an accident investigation by their application
- Compare writing styles and outline the distinction between Action Taken and Safety Recommendation. Understand what a good safety recommendation is and outline the process of report writing

#### **COURSE STRUCTURE**

The course is available both in a presential form and on a live synchronous mode.

- Identification of human elements
- Classification of human element. Description of the models to understand human element and human element factors. SRK, GEMS, EMCIP and HFIT
- Differentiation of human elements. Performance shaping factors. HFIT-extended, HFACS and SHELL
- Investigation of human elements. MMI



- Explanation of human elements. WAI-WAP-WAD-WAD
- Presentation on analysis methods: simple linear, complex linear and non-linear analysis models. Method selection
- Accimap (theory and practice)
- B-Scat (theory and practice)
- Tripod-B (theory and practice)
- MORT/ECFA (theory and practice)
- Report wording
- Setup investigation reports
- Safety recommendations and actions taken
- Report consultation and publication

# TITLEVDR COURSE FOR ACCIDENT INVESTIGATORSDURATION3 daysAUDIENCEAccident investigators who conduct, or participate<br/>in marine safety investigations in accordance with<br/>Directive 2009/18/EC.RECOMMENDED<br/>PRE-TRAINING<br/>REQUISITEAs a prerequisite, participants should already have<br/>an understanding of the main principles of accident<br/>investigation and legislation, including Directive<br/>2009/18/EC and the IMO Casualty Investigation Code.



#### INTENDED LEARNING OUTCOMES

- Identify, describe, explain and discuss legal principles and standards on (S-)VDR, ECDIS and other electronic data
- Identify, describe, explain and discuss practical issues when retrieving information from (S-)VDR, ECDIS or other electronic evidence
- Understand evidence analysis and how to translate data into information

#### COURSE STRUCTURE

The course is available both in a presential form and on a live synchronous mode

- Presentation of relevant legal provisions and standards;
- Presentation on how VDR & ECDIS work
- Presentation on other electronic evidence



- Discussion and groups work regarding practical issues when retrieving electronic evidence from AI perspective
- VDR technical data, hardware examples and practice
- ECDIS technical data, limitation, examples and practice

TITLE	FLAG STATE INSPECTORS COMMON CORE CURRICULUM
DURATION	ТВС
AUDIENCE	Personnel from the relevant administrations working or having just started to work on a regular basis as Flag State Inspectors



#### INTENDED LEARNING OUTCOMES

This course is designed to develop the necessary individual competencies for carrying out duties associated with the inspection of ships to check for compliance with the relevant international and EU-level instruments by flag States. It aims to provide learners with the opportunity to develop the knowledge, skills and attitudes required to carry out inspections professionally, efficiently and effectively and to the required standards established by law and benchmarked industry practice. The curriculum is therefore targeted at individuals at different stages of professional development as flag State inspectors in the EU, from entry level to advanced learners.

#### COURSE STRUCTURE

The course is available on blended learning, including synchronous and asynchronous teaching and learning activities

#### **COURSE CONTENT**

The course consists of 13 "learning areas" across Basic, Intermediate, and Advanced levels:

- Laws, policies, rules and procedures
- Communication
- Reporting and logging
- Tools and equipment
- Health and safety at work

- Reporting and Logging
- People management, supervision and leadership
- Operational management
- Inspection and survey
- Certificates and standards
- Resource management
- Strategy and planning
- Information and data management



# Maritime safety

# **TECHNICAL ASSISTANCE**

The aim of these courses is to build up the national capacity in the implementation of International and EU legislation, to foster the knowledge and skills of relevant staff of national administrations, and their ability to perform operational duties in the relevant areas, as well as to encourage the exchange of best practices among the beneficiaries of the EMSA Academy.

- EU INSTITUTIONS AND EU MARITIME LEGISLATION COURSE
- EMSA / PARIS MOU PORT STATE CONTROL SEMINAR

# Technical Assistance

TITLE	EU INSTITUTIONS AND EU MARITIME LEGISLATION COURSE	
DURATION	8 WEEKS	
	Relevant staff from national maritime administrations	
AUDIENCE	at the entrance level	

#### INTENDED LEARNING OUTCOMES

- Describe the EU institutional setting
- Describe the EU legislative process
- Define the areas covered by the EU maritime legislation
- Explain the interaction between EU and international maritime legislation
- Identify the general content, scope and objective of existing acts of EU maritime legislation
- Name the tasks of European Maritime Safety Agency
- Recognise the scope and objectives of the tools and services offered by EMSA in order to facilitate the implementation of the relevant EU legislation

#### **COURSE STRUCTURE**

The course is available both in a presential form and on a live synchronous mode

- Presentations on the role and competences of the International Maritime Organisation, in particular relating to the adoptions of conventions, as well as the identification of the role of the EU in the work of the IMO
- Presentations on EU institutional setting, EU legislative process, as well as EU maritime transport and other relevant policies
- Presentations on European Maritime Safety Agency, its remit, tasks, as well as its tools and services
- Presentations on relevant EU legislation acts as well as case studied within the areas of flag state and port state prerogatives and obligations, maritime safety, maritime security, human element, pollution prevention, detection and response and liability & compensation over 8 modules



TITLE	EMSA / PARIS MOU PORT STATE CONTROL SEMINAR
DURATION	4 days
AUDIENCE	New Entrant Port State Control Officers and experienced Port State Control Officers aiming to comply with the Professional Development Scheme as it is described by the Paris MoU
RECOMMENDED PRE-TRAINING REQUISITE	MaKCs modules foreseen by the Paris MoU training policy



#### INTENDED LEARNING OUTCOMES

- Recognize the structure of Paris MoU and the historical events that lead to the establishment of the Paris MoU
- Identify the Paris MoU text, and also be aware for the IMO PSC Resolution
- Demonstrate the use of the Paris MoU Manual during a PSC inspection
- List the relevant applicable international instruments and the relevant EU legislation (EU Member States)
- **F** Recognise the scope of RuleCheck and be able to find relevant regulations and deficiency codes
- Evaluate the possible actions to be taken based on findings during a PSC inspection
- List the relevant instruments that are applicable during an inspection
- Analyse the findings during a PSC inspection and use the appropriate PSCC instruction to take the necessary actions
- Use the Code of good practice to ensure that the inspection is performed with integrity, Professionalism, and transparency

#### COURSE STRUCTURE

The course is available both in a presential form and on a live synchronous mode



- Paris MoU manual and the relevant procedures for a PSC inspection
- The relevant international instruments to conduct a PSC inspection
- Guidance on type of inspections
- Guidance on the ISM Code for the PSC officer
- Directive 2009/16/EC as amended requirements to conduct a PSC inspection
- Fundamental principle of the Code of Good Practice

# SURVEILLANCE

The aim of these courses is to build up the national capacity and provide support to Member States on the appropriate operation of their national SafeSeaNet (SSN) systems, on the EU Long Range Identification and Tracking Cooperative Data Centre (EU LRIT CDC), Integrated Maritime Services and CleanSeaNet and Copernicus Maritime Surveillance services. The training processes are based in user interaction and are delivered using theoretical and practical approaches, including hands-on exercises and scenarios using the EMSA graphical user interfaces.

Training for SSN and the EU LRIT CDC is organised at the request of the Member States National Competent Authority (NCA). The courses are offered at basic or advanced level and consist of theory and hands-on work using the application interfaces guided by EMSA trainers. Participants follow practical exercises and scenarios which are tailored to meet operational needs, for example for incident reporting or for HAZMAT reporting. The course modules are continuously updated to take into account system developments.

For Integrated Maritime Services trainings are provided to maritime authorities of the Member States, EFTA countries and European Neighbourhood Policy Countries (ENP), as well as to other users including the EU Naval Forces (EUNAVFOR), the European Fisheries Control Agency (EFCA), the European Border and Coast Guard Agency (Frontex), the Maritime Analysis and Operations Centre – Narcotics (MAOC-N).



For CleanSeaNet and Copernicus Maritime Surveillance services dedicated training sessions are regularly organized at EMSA for the operational users in the Member States. Additional training sessions, including tailored-made courses or webinars focusing on specific topics, may be organised depending on users' needs and upon request from the users.

- CLEANSEANET COURSE FOR DUTY OFFICERS
- COURSE ON INTEGRATED MARITIME SERVICES (IMS) FOR EU MEMBER STATES
- COURSE ON INTEGRATED MARITIME SERVICES (IMS) FOR EU AGENCIES AND OTHER BODIES
- COPERNICUS MARITIME SURVEILLANCE (CMS) TRAINING
- SAFESEANET ADVANCED TRAINING

#### EMSA Academy Course Catalogue

#### TITLE CLEANSEANET COURSE FOR DUTY OFFICERS

DURATION 1.5 days

AUDIENCE Officers working in MRCCs, VTS Centres, maritime administrations and pollution response services



#### INTENDED LEARNING OUTCOMES

- Become familiar with the main components of the CleanSeaNet service
- Learn how to use the service proficiently in the day-to-day work
- Be able to use the main functions and features of CSN user interface
- Identify potential polluters by querying AIS data and CSN detections in the graphical interface (SEG)
- Interpret the alert report and learn how to provide feedback on the service using the feedback form

#### COURSE STRUCTURE

The course is available both in a presential form and on a live synchronous mode

- Overview of CleanSeaNet service
- Main characteristics of SAR and optical missions
- Alert report and feedback form
- Support of CleanSeaNet during emergencies, exercises and operations
- Live demo of CleanSeaNet in SafeSeaNet Ecosystem GUI (SEG)
- Tailored practical exercises, scenarios, case studies.

#### Surveillance

#### TITLE COURSE ON INTEGRATED MARITIME SERVICES (IMS) FOR EU MEMBER STATES

# DURATION 1-2 days This course is designed for EU Member States public authorities' operational staff, working in the maritime administrations, maritime safety centers, MRCC, AUDIENCE pollution response services, VTS centers, coastal stations, FSC, PSC, police or border control. On completion of the course, the participants will be able to use IMS in their day-to-day work.



#### INTENDED LEARNING OUTCOMES

- Understand the background, legal basis and governance of IMS
- **W** Recognise the principles of data integration and information sharing and cooperation in IMS
- Recognise the reporting and surveillance technologies used in the service and their limitations
- Identify the terminology, interfaces and applications used within the service
- Use IMS Graphical interface (SEG) to obtain a complete maritime picture, and to view, search and query the data
- Know how to interpret the vessel information and other IMS data layers
- Apply different data layers, tools and functionalities may be combined for analysis
- Recognise how to automatically detect anomalous and specific vessel behaviors in IMS
- Identify the Automated Behavior Monitoring (ABM) algorithms for different operational scenarios
- Use the maritime picture during operations at sea
- Recognise the basic functionalities and limitations of the IMS Mobile App

#### COURSE STRUCTURE

The course is available both in a presential form and on a live synchronous mode

- Presentation on the Integrated Maritime Services (IMS) for Member States
- Presentation on Data access rights policy & Description of the conditions of use Vessel position data sources
- Overview of the Earth Observation data and products available in IMS
- Description of the graphical and System-to-system IMS interfaces
- Demonstration and exercise Graphical User Interface main features and functionalities, data layers and client preferences
- Graphical User Interface demonstrations and exercises on specific functionalities (e.g. Area Centric Query, Vessel Track Query, SafeSeaNet enrichment, Automated Based Monitoring (ABM)
- Tailored practical exercises, scenarios, case studies
- Summary of the future developments
- User feedback

### Surveillance

# TITLE COURSE ON INTEGRATED MARITIME SERVICES (IMS) FOR EU AGENCIES AND OTHER BODIES DURATION 1-2 days AUDIENCE Participants from EU Agencies and stakeholders that wish to learn about the available services, data products, system-to-system and user application interfaces available from EMSA.



#### INTENDED LEARNING OUTCOMES

This course provides an overview of EMSA's Integrated Maritime Services for EU Agencies and other bodies. Integrated maritime services include maritime border control support for Frontex, fisheries monitoring support for EFCA, counter-narcotic operations support for MAOC-N, anti-piracy support for EU NAVFOR operations as well as support for Europol operations. On a case-by-case basis, potential new stakeholders may request training on EMSA services and systems.

On completion of the course, participants will be able to use the system in their day-to-day work

#### **COURSE STRUCTURE**

The course is available both in a presential form and on a live synchronous mode

- ▼ Overview of Integrated Maritime Services for EU Agencies and other bodies, background, legal basis
- Data access rights policy & conditions of use Ship position data sources
- Automated vessel behaviour monitoring Earth Observation data sources
- Vessel Detection and identification Service
- Behaviour analysis, risk assessment, classification of non-compliant targets, intelligence led information
- Graphical User Interface main features and functionalities
- Graphical User Interface Specific functionalities (e.g. Area Centric Query, Vessel Track Query, Integrated Ship Profile Datasheet (ISPD), Activity Based Monitoring (ABM) and SAR SURPIC
- Tailored practical exercises, scenarios, case studies

TITLE	COURSE ON COPERNICUS MARITIME SURVEILLANCE (CMS)	1
DURATION	1.5 days	K
AUDIENCE	Operational users of the CMS service	
RECOMMENDED PRE-TRAINING REQUISITE	MaKCs module "Copernicus Maritime Surveillance service e-learning course"	



#### INTENDED LEARNING OUTCOMES

- **v** Recognise the benefits, constraints and limitations of different EO products available through the CMS
- Gain experience in accessing and using the data and information that is available through SEG Identify
- the different procedures for ordering EO services

#### **COURSE STRUCTURE**

The course is available both in a presential form and on a live synchronous mode

- Overview of Copernicus Maritime Surveillance service
- Main characteristics of SAR and optical missions
- Earth Observation product catalogue: basic products; value added products; fusion products
- Procedures for requesting CMS services: registration form and service request
- Use of cases from different areas of activity
- Practical scenarios using the SEG

#### Surveillance

#### TITLE SAFESEANET ADVANCED COURSE

DURATION	1 day
AUDIENCE	This course has been developed for SSN National Competent Authorities (NCAs) and operators working in MRCCs, SAR services, VTS centres, maritime administrations, pollution response services, as well as for PSC Officers, Security Officers and Port Reception Facilities.
RECOMMENDED PRE-TRAINING REQUISITE	Participants should have already completed the SSN basic training and have previous operational experience with SSN.



#### INTENDED LEARNING OUTCOMES

- Learn about the new and planned future developments of SSN
- Enable the operators to use SSN at an advanced level in their day-to-day work

#### COURSE STRUCTURE

The course is available both in a presential form and on a live synchronous mode

- User Web Interface advanced features and functionalities
- Update on latest release new features: new waste information, waste receipt, persons on board passenger ships for SAR purposes and improved incident reporting.
- Tailored practical exercises, scenarios, case studies Planned future developments
- User feedback

# **DIGITAL SERVICES**

The aim of these courses is to build up the national capacity and provide support to Member States on operating digital services, applications and databases offered by EMSA, such as Remotely Piloted Aircraft Systems and Marine Equipment Database in order to help Member States to build up their national capacity in the implementation of International and EU legislation.

- COURSE ON REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS) DATA CENTRE
- MED DATABASE TRAINING FOR INDUSTRY/MANUFACTURERS

# **Digital Services**

# TITLE COURSE ON REMOTELY PILOTED AIRCRAFT<br/>SYSTEM (RPAS) DATA CENTRE DURATION 1 day AUDIENCE This course is designed for Member States which are<br/>users of RPAS services provided by EMSA

#### INTENDED LEARNING OUTCOMES

- Identify the main functions offered by the RPAS Data Centre to effectively use this platform in an operational context
- Plan and monitor real-time flights, including visualizing live video feeds, detecting targets of interest, interacting with RPAS pilots through the chat, use measurements tools on the map, take screenshots, download pictures amongst other;
- Access the operational data post mission and share mission reports.

#### **COURSE STRUCTURE**

The course is available both in a presential form and on a live synchronous mode

- Navigating Deployment and Missions
- Following a RPAS live flight and accessing mission replays
- Communicating with all stakeholders involved
- How to use the system to support vessel and suspicious targets detection
- Analysing and exporting data (videos/images)
- Sharing files and mission reports
- Collecting evidence for surveillance and emission monitoring.



#### TITLE COURSE ON MED DATABASE

DURATION	1 day
AUDIENCE	This course has been developed for various group of stakeholders, such as MS Administrations (Market Surveillance Authorities, including inspectors), Notifying Authorities), USCG, MS MED Experts, Notified Bodies and manufacturers of the MED equipment
RECOMMENDED PRE-TRAINING REQUISITE	MaKCs module "Marine Equipment Directive"



#### INTENDED LEARNING OUTCOMES

- Know the legal basis and legal obligations for each group of the stakeholders steaming from the Directive 2014/90/EU
- E Become familiar with the main components and features of the MED Database
- Be able to filter and find the required data
- Submit the required data including Declaration of Conformity (DoC)
- Understand the purpose of the MED data circulation and exchange with other MED stakeholders

For the course on MED Database for manufacturers the objectives are the following:

- Understand the obligations of the manufacturers, especially to provide the Declaration of Conformity
- Be able to submit of the Declaration of Conformity
- Know how to provide the additional supporting information
- Learn how to implement the MED e-tag

#### COURSE STRUCTURE

The course is available both in a presential form and on a live synchronous mode



- General overview of the system
- User interface overview
- Data submission requirements
- Product data submission and Declaration of Conformity
- MED mobile application
- Practical demonstration of the system

#### APPENDIX 1 - LIST OF ELEARNING MODULES AVAILABLE ON MAKCS

The following eLearning modules are made available to the registered users of MaKCs. Modules are grouped in categories and each category can be accessed by the relevant user community.

#### **CAPACITY BUILDING – Users from the EU Member States**

Accident Investigation Legislation Awareness in Maritime Cybersecurity Ballast Water Management - Inspection (2019 update) Copernicus Maritime Surveillance service e-learning course Course on Anti-Fouling Systems (AFS) EMSA's Equipment Assistance Service (EAS) EU Legislation for the Prevention of Pollution from Ships Fire Protection and Fire Fighting (Edition 2020) Inspection principles and techniques for Flag State Inspectors Introduction to the new MaKCs Liability and Compensation for Marine Pollution MARine Chemical Information Sheets (MAR-CIS) Marine Equipment Directive Maritime Radio and Communications - Paris MoU 2018 update Maritime Security Maritime Spatial Planning MARPOL Annex I - Oil tankers (2019 edition) MARPOL Annex I All Ships (machinery spaces) MLC, 2006 Flag State Responsibilities National Extension - Adult Learning National Extension - Instructional Design Reporting HAZMAT in SafeSeaNet (SSN) with the Central Hazmat Database (CHD) Ship-related aspects of the EU Ship Recycling Regulation SSN and CECIS-MP: Incident reporting and requesting assistance for oil spills.

Sulphur Inspector Informative Session



#### ENLARGEMENT COUNTRIES – Countries that applied for the "Instrument for Pre-Accession Assistance (IPA)"

Accident Investigation Legislation Awareness in Maritime Cybersecurity Ballast Water Management - Inspection (2019 update) Cargoes Course on Anti-Fouling Systems (AFS) Engine Room EU Legislation for the Prevention of Pollution from Ships Hull and Construction Liability and Compensation for Marine Pollution Marine Equipment Directive Maritime Labour Convention, 2006 Maritime Radio and Communications - Paris MoU 2018 update Maritime Security Maritime Spatial Planning MARPOL Annex I - Oil tankers (2019 edition) MARPOL Annex I All Ships (machinery spaces) MARPOL Annex II MARPOL Annex III MARPOL Annexes IV - V - VI MLC, 2006 Flag State Responsibilities Safety Equipment Security Ship-related aspects of the EU Ship Recycling Regulation Special Ships The STCW Convention

#### FRONTEX – Users that are part of the FRONTEX network

EMSA surveillance services for Frontex and Eurosur

# PORT STATE CONTROL MEMORANDA1 – Countries that are member of one or more regional Agreements on PSC

Ballast Water Management – Inspection (2019 update) Cargoes CIC on Emergency Systems and Procedures 2019 CIC on MARPOL Annex VI CIC on Ship's Stability in general Engine Room Fire Protection and Fire Fighting (Edition 2020) Guidance on procedures for operational controls Hull and Construction Human Element Introduction to the new MaKCs ISM Code Maritime Labour Convention, 2006 Maritime Radio and Communications (2018 update) MARPOL Annex I - All Ships (machinery spaces) MARPOL Annex I - Oil tankers (2019 edition) MARPOL Annex II MARPOL Annex III MARPOL Annexes IV - V - VI Paris MoU Inspection Procedures - Revision after PSCC52<sup>2</sup> Polar Code Inspection Campaign Safety Equipment Security **Special Ships** The STCW Convention Mediterranean MoU Inspection Procedures<sup>3</sup>

- Available only to Paris MoU users
- <sup>3</sup> Available only to Mediterranean MoU users

<sup>&</sup>lt;sup>1</sup> The following memoranda are currently supported: Paris MoU, Mediterranean MoU, Black Sea MoU, Caribbean MoU, Indian Ocean MoU, Ryiad MoU



# BLACK AND CASPIAN SEA PROJECT – Users of countries participating in the "Black and Caspian Sea Project"

Accident Investigation Legislation Awareness in Maritime Cybersecurity Ballast Water Management - Inspection (2019 update) Cargoes Course on Anti-Fouling Systems (AFS) Engine Room EU Legislation for the Prevention of Pollution from Ships Fire Protection and Fire Fighting (Edition 2020) Hull and Construction Liability and Compensation for Marine Pollution Marine Equipment Directive Maritime Labour Convention, 2006 Maritime Spatial Planning MARPOL Annex I - Oil tankers (2019 edition) MARPOL Annex I All ships (machinery spaces) MARPOL Annex II MARPOL Annex III MARPOL Annexes IV - V - VI MLC, 2006 Flag State Responsibilities Safety Equipment Security Ship-related aspects of the EU Ship Recycling Regulation Special Ships The STCW Convention



# ABOUT THE EUROPEAN MARITIME SAFETY AGENCY

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



#### Get in touch for more information

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