



TRAINING

**EMSA ACADEMY
LEARNING SERVICES
CATALOGUE 2023**

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 design, develop and deliver learning services outside formal education in the maritime domain to all beneficiary organizations and individuals working in them. Beneficiary organizations come from 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.

EMSA Academy has been certified by TÜV Rheinland Portugal for the design, development and delivery of learning services outside formal education in the maritime domain as per ISO 29993:2017

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

- **Common Core Curricula (CCC):** A consistent set of learning activities designed to meet defined learning objectives and learning outcomes, and leading to certification verifying achievement of learning outcomes, and the demonstration of knowledge and specific skills for relevant job profiles (PSC, Sulphur Inspectors, FSI, AI, Auditors, etc.). They are delivered on a blended mode (presential, online synchronous and asynchronous) and enriched with realistic scenarios using VRESI. Their duration varies, but as a principle each participant will need to devote, on average, up to 2 hours per day (Monday to Thursday or Friday) over a number of non-consecutive weeks. An EMSA Academy certificate is provided verifying achievement of learning outcomes, participation, and the demonstration of knowledge and specific skills on the basis of pre-defined thresholds (per CCC). A certificate of attendance is delivered attesting only participation if thresholds are not met.
- **Part time online courses:** A consistent set of learning activities designed to meet defined learning objectives and learning outcomes, and leading to certification verifying achievement of learning outcomes, and the demonstration of knowledge related to the course outline. They are delivered entirely ONLINE and on a PART-TIME basis. Each participant will need to devote, on average, up to 2 hours per day (Monday to Thursday or Friday) over a maximum of 8 non-consecutive weeks. These courses could be divided into several paths, with a mandatory "Introduction" module. The participants can opt to follow any of the paths or all of them. An EMSA Academy certificate is provided verifying achievement of learning outcomes, participation, and the demonstration of knowledge and specific skills on the basis of pre-defined thresholds (per PTOC). A certificate of attendance is delivered attesting only participation if thresholds are not met.

- **Short courses:** Designed to cater the requirements of a specific legal act (EU or International) or of a maritime application developed by EMSA on the basis of defined learning objectives and learning outcomes and leading to certification verifying achievement of learning outcomes, and the demonstration of knowledge and/ or specific skills. These courses are delivered either in a presential form or on a live synchronous mode and their duration does not exceed 4 days. An EMSA Academy certificate is provided verifying achievement of learning outcomes, participation, and the demonstration of knowledge and specific skills on the basis of pre-defined thresholds (per SC). A certificate of attendance is delivered attesting only participation if thresholds are not met.
- **Awareness sessions – webinars:** info days, normally addressing the users of maritime applications developed by EMSA. They do not follow the principles of the EMSA Academy on design and development and participants are not assessed against pre-defined learning objectives and learning outcomes. A certificate of attendance is delivered if the participant attends the entire session and submits the post course evaluation form.

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 enables 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 LEARNING SERVICES CATALOGUE

The present catalogue indicates the Learning services that will be developed and delivered during 2023.

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

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CATALOGUE OF LEARNING SERVICES

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TITLE	COMMON CORE CURRICULUM FOR FLAG STATE INSPECTORS (BASIC LEVEL)
DURATION	60 hours
AUDIENCE	Personnel from the relevant administrations working or having just started to work on a regular basis as Flag State Inspectors.



COURSE AIM

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 Basic Level of the Common Core Curriculum on Principles and Techniques for Flag State Inspections is characterised as an entry level for the FSI professional profile.

COURSE STRUCTURE

The course is offered in blended format (i.e. combination of online synchronous and asynchronous activities).

COURSE CONTENT

The Basic Level consists of 13 "Units" :

- Laws, policies, rules and procedures;
- Ship's features;
- Inspection and Survey;
- Stability;
- Safe Manning;
- Safety of Crew;
- Certificates and Documents;
- Communication;
- People Management Supervision and Leadership;
- Reporting and logging;
- Tools and Equipment;
- Resource Management;
- Health and Safety at work.



TITLE	COMMON CORE CURRICULUM FOR FLAG STATE INSPECTORS (INTERMEDIATE LEVEL)
DURATION	100 hours
AUDIENCE	Personnel from the relevant administrations working or on a regular basis as Flag State Inspectors or those who have completed the Basic Level.



COURSE AIM

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 Intermediate Level covers more operational issues, focusing on the inspection process of the different ship areas (Units from 7 to 18). The Intermediate Level is advised for professionals that have already started working as Flag State Inspectors, or that have completed the Basic Level of the curriculum.

COURSE STRUCTURE

The course is offered in blended format (i.e. combination of online synchronous and asynchronous activities).

COURSE CONTENT

The course consists of 29 Units across 11 learning areas:

- Laws, policies, rules and procedures (Units from 1 to 6);
- Inspection and survey (Units from 7 to 18);
- Certificates and standards (Unit 19);
- Communication (Unit 20 and 21);
- People management, supervision and leadership (Unit 22);
- Reporting and logging (unit 23 and 24);
- Information and data management (Unit 25);
- Tools and equipment (Unit 26);
- Resource management (Unit 27);
- Health and safety at work (Unit 28);
- Strategy an planning (Unit 29).



TITLE	COMMON CORE CURRICULUM FOR SULPHUR INSPECTORS
DURATION	58 hours
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) 2015/253).



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.

COURSE STRUCTURE

The course is offered in blended format (i.e. combination of online synchronous and asynchronous activities). Most of the curriculum is to be delivered online, complemented by a 3-day session in EMSA which covers practical on-board learning activities through the Virtual Reality Environment for Ship Inspections (VRESI)

COURSE CONTENT

The course consists of 9 "learning areas":

- General, Legal and Technical Requirements;
- Preboarding;
- Fuel Based and Emissions Abatement Methods;
- On-board Sampling;
- Communication and Professional Behaviour;
- THETIS-EU Reporting and Logging;
- Information and Data Management;
- Tools and Equipment;
- Health and Safety at Work.



TITLE	COMMON CORE CURRICULUM FOR PORT STATE CONTROL OFFICERS
DURATION	Currently under development and will be delivered as from 2024
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 training policy.



COURSE AIM

This curriculum is designed to develop the necessary individual competencies for carrying out duties associated with the inspection of ships to verify compliance with the relevant international instruments, EU-maritime legislation (when applicable) and adheres to the Paris MoU procedures. 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 including those that derive from the Paris MoU Procedures. The curriculum is therefore targeted at individuals at different stages of professional development as Port State Control Officers in the Paris MoU working area, at a level over and above that of the competencies established in the Curriculum on Principles and Techniques for Flag State Inspections.

COURSE STRUCTURE

The course is offered in blended format (i.e. a combination of online synchronous and asynchronous activities).

COURSE CONTENT

The course consists of 10 "learning areas":

- International regulations;
- EU legislation;
- Paris MoU;
- EU/Paris MoU relationship;
- Paris MoU reporting;
- EU PSC reporting;
- RuleCheck;
- Paris MoU website;
- PSCO Manual;
- Inspection.



TITLE	COMMON CORE CURRICULUM FOR ACCIDENT INVESTIGATORS
DURATION	Currently under development and will be delivered as from 2024
AUDIENCE	Accident investigators who conduct, or participate in marine safety investigations in accordance with Directive 2009/18/EC.



COURSE AIM

This course is designed to develop the necessary individual competencies for carrying out duties associated with the investigation of marine accidents. After the course the students shall be able to identify the relevant legislation framework and know how to cooperate in an international setting and how to exhibit an impartial and ethically correct investigation behaviour. Following the course, the students shall be able to understand the relevance and key principles of accident investigation as well as its legislation boundaries. The curriculum is therefore targeted at individuals at different stages of professional development as accident investigators in the EU setting, from entry level to advanced learners.

COURSE STRUCTURE

The course is offered in blended format (i.e. combination of online synchronous and asynchronous activities).

COURSE CONTENT

The content of the Common Core Curriculum encompasses and blends the content of the three short courses for accident investigators while replacing them. It will cover:

- EMSA and its role in the accident investigation policy;
- Relevant EU and international legislation on accident investigation;
- Operational readiness and work process;
- Accident site assessment;
- Site hazard identification and risk assessment;
- Physical evidence collection ;
- Human element;
- Media handling;
- Witness interviewing and practical exercises;
- Evidence analysis;
- Developing Safety Recommendations and follow up;
- Safety reports;
- Final exercise on accident investigation;
- 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;
- 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;
- Relevant legal provisions and standards;
- How VDR & ECDIS work;
- Other electronic evidence;
- Practical issues when retrieving electronic evidence from AI perspective;
- VDR technical data, hardware examples and practice;
- ECDIS technical data, limitation, examples and practice.



TITLE

COMMON CORE CURRICULUM FOR MARITIME AUDITORS

DURATION

Currently under development and will be delivered in Q4 2023

AUDIENCE

Personnel from the relevant maritime administrations responsible for verifying compliance with the requirements of the ISM and ISPS Codes.



COURSE AIM

This Common Core Curriculum is designed to develop the necessary individual skills & competencies for carrying out duties associated with the verification of compliance with ISM and ISPS Codes. It aims to provide learners with the opportunity to develop the knowledge, skills and attitudes required to carry out audits professionally, efficiently, effectively and to the required standards. The curriculum is therefore targeted at individuals at different stages of professional development as officers of maritime administrations carrying out duties related with the verification of compliance with ISM and ISPS Codes.

COURSE CONTENT

The course consists of 4 learning areas:

- The requirements of the ISM and ISPS Codes and their interpretation and application;
- The principles and practice of management systems auditing;
- Shipboard operations and shipboard security including emergency preparedness and response;
- Mandatory International and EU rules and regulations and applicable codes, guidelines and standards.

PART-TIME ONLINE COURSES

- EU MARITIME LAW 28
- MARITIME SEARCH AND RESCUE 30
- ENHANCED MARITIME PICTURE VIA INTEGRATED MARITIME SERVICES 32



TITLE	EU MARITIME LAW
DURATION	100 hours
AUDIENCE	Relevant staff from national maritime administrations at the entrance level.

INTENDED LEARNING OUTCOMES

- Outline 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 the 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 offered in blended format: a presential part and a combination of online synchronous and asynchronous activities.



COURSE CONTENT

- 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;
- EU institutional setting, EU legislative process, as well as EU maritime transport and other relevant policies;
- European Maritime Safety Agency, its remit, tasks, as well as its tools and services;
- 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.



TITLE	MARITIME SEARCH AND RESCUE
DURATION	20 hours
AUDIENCE	Junior maritime search and rescue coordinators who will conduct, or participate in, marine search and rescue operations.
RECOMMENDED PRE-TRAINING REQUISITE	Participants should have a general understanding of maritime SAR operations and of the relevant legal basis. Experience in maritime SAR operations would be advantageous to foster discussion during the course.



COURSE AIM

This course aims at providing knowledge to Maritime Search and Rescue coordinators for the carrying out of maritime search and rescue operations in line with the international requirements, with a focus on the European dimension of such operations, boosting cooperation and strengthening their understanding of the legal basis connected to their duties, as well as improving their capacity to apply internationally recognised procedures and European or regional agreements' standards in the field of maritime search and rescue operations, as well as in maritime non-SAR assistance operations.

COURSE STRUCTURE

The course is offered in blended format (combination of online synchronous and asynchronous activities).

COURSE CONTENT

- SAR framework in terms of procedures related with general planning within the SAR organisation;
- SAR agreements identifying their strength point and cooperation procedures;
- European Legislation dealing with international cooperation within European countries;
- Coordinating a SAR activity, preparation and actions to be performed to set up and run a maritime SAR service;
- Standard terminology and phraseology in SAR messages;
- Radio systems used in maritime SAR communications ;
- Radar and satellite communications in maritime SAR operations;
- Activities to perform in the different maritime SAR phases;
- Reply to a SAR alert;
- Steps to prepare for a possible maritime SAR operation;
- Continuous planning and flow of information;
- Information in each specific maritime SAR emergency event;
- Potential available resources for the maritime SAR operations;
- Legal limitations and responsibilities in the use of maritime SAR resources;
- Risks for the SAR resources in use and how to mitigate them;
- Actions to be performed closing or suspending a maritime SAR operation;
- Maritime non-SAR operation;
- Formatting and standards in each layer of communication;
- Different layers of communication in closing or suspending a SAR or non-SAR operation.



TITLE **ENHANCED MARITIME PICTURE VIA INTEGRATED MARITIME SERVICES**

DURATION 24 hours

AUDIENCE New maritime traffic monitoring and surveillance operators, duty officers working in MRCCs, maritime safety centres, pollution response services and other maritime authorities; officers with no previous or little experience using the IMS service, and IMS users who seldomly use IMS during exercises, specific operations, or emergencies.



INTENDED LEARNING OUTCOMES

- Understand the background, legal basis and governance of IMS;
- Recognise the principles of data integration and information sharing and co-operation;
- Recognise the reporting and surveillance technologies used in the service and their limitations;
- Use IMS Graphical interface (SEG) functions to obtain a complete maritime picture and view, search and query the data;
- Interpret the vessel information and other IMS data layers;
- Combine data layers, tools and functionalities for analysis;
- Recognise how to automatically detect anomalous and specific vessel behaviours in IMS;
- Identify Automated Behaviour Monitoring (ABM) algorithms and their usage in different scenarios;
- Use the maritime surveillance picture to operations at sea;
- Recognise the basic functionalities and limitations of the IMS Mobile App.

COURSE STRUCTURE

The course is offered online in asynchronous mode with scheduled live Q&A sessions.

Participants may take the course part time, at their own pace, over 8 weeks.

COURSE CONTENT

- Operational capabilities of the IMS service, applicable data access rights, data sharing principles and legal and governance framework;
- Basic functions of the IMS user interfaces (i) the SafeSeaNet Ecosystem Graphical (SEG) and (ii) IMS App;
- Graphical User Interface demonstrations and exercises on specific functionalities (e.g. Area Centric Query, Vessel Track Query, SafeSeaNet enrichment);
- Automated Based Monitoring (ABM) tools;
- Tailored practical exercises, scenarios, case studies.

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TITLE	PREPARATORY TRAINING SESSION TO IMSAS
DURATION	14 hours
AUDIENCE	Staff of maritime administrations and other relevant actors involved in the implementation and enforcement of international maritime conventions within the scope of the III Code at the level of Contracting Governments as well as at the level of Flag, Coastal and Port State.
RECOMMENDED PRE-TRAINING	Persons to be trained should have primary technical knowledge of the IMO conventions and practical experience with their implementation and enforcement framework in the context of their administration. Optimally, they should be involved and working in at least one of the four areas covered by the III Code.



INTENDED LEARNING OUTCOMES

The course is designed to provide knowledge in the areas covered by the IMSAS to the staff of the Maritime Administrations engaged in different areas, such as those of the Contracting Government, and Flag, State, and Port States. It aims to provide the learners with the necessary understanding of the standards and procedures before, during, and after the IMSAS.

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

- Recall IMSAS background and its framework;
- Recall the main responsibilities of the entities involved during an audit for the learning area of Responsibilities as Contracting Government, Flag State, Coastal and Port State;
- Recognise the main responsibilities of the Contracting governments under the “Common Areas” of the III Code;
- Indicate the main responsibilities of the Contracting governments as “Flag State” acc. to the III Code;
- Summarise the necessary process adopted by the administration to provide guidance on the requirements of the international instruments that are “to the satisfaction of the Administration”;

- Outline the main responsibilities of the Contracting Governments as “Coastal State” acc. to the III Code;
- Indicate the main responsibilities of the Contracting Governments as “Port State” acc. to the III Code;
- Recall the main definitions in the audit process;
- Identify the main steps in the IMSAS cycle including the roadmap to the audit and its planning;
- Recall the main objectives and content of the Memorandum of Cooperation;
- Outline the responsibilities of the Single Point of Contact, the Member State, and the IMO in the audit planning;
- Outline the responsibilities of the Single Point of Contact, the Member State, and the IMO in the audit preparation;
- Draft the pre-audit questionnaire;
- Identify the main administrative arrangements during the audit;
- Recall how to behave during the audit;
- Determine main elements to be covered in the opening and closing meeting, and during the audit;
- Prioritise what evidence should be collected in preparation of the audit;
- Present information to the Audit Team while the audit is conducted;
- Illustrate how the audit is reported;
- Recall what is an observation and what is a finding;
- Determine what is the scope of the different documentation prepared during the audit;
- Simulate how to prepare the Corrective Action Plan and the follow-up.

COURSE STRUCTURE

The course is offered in classroom (face-to-face) or in online synchronous format.

COURSE CONTENT

The course covers the following areas:

- IMSAS Framework;
- Responsibilities of IMO member States as Flag, Port and Coastal States;
- IMSAS Procedures.



TITLE	SHIP INSPECTIONS FOR WASTE DELIVERY TO PORT RECEPTION FACILITIES IN THE EU
DURATION	10 hours
AUDIENCE	Staff of relevant national administrations responsible for the implementation and enforcement of Directive (EU) 2019/883 (PRF Directive) and more specifically staff involved in the area of ship inspections.



INTENDED LEARNING OUTCOMES

- Develop a better understanding of the requirements of the Directive (EU) 2019/883 on Port Reception Facilities for the delivery of waste from ships;
- Develop the necessary knowledge and skills to carry out ship inspections within the context of the PRF Directive in an effective and harmonized manner;
- Get acquainted with the use of tools and services offered by EMSA in order to facilitate the implementation and enforcement of the PRF Directive.

COURSE STRUCTURE

The course is offered in classroom (face-to-face) or in online synchronous format.

COURSE CONTENT

The course consists of 3 “learning areas”:

- Requirements of the Directive (EU) 2019/883 for the delivery of waste from ships;
- Ships’ inspections under the PRF Directive;
- Reporting of ships’ PRF inspections in THETIS-EU.



TITLE	PRINCIPLES AND TECHNIQUES FOR SHIP RECYCLING INSPECTORS
DURATION	8 hours
AUDIENCE	Port State Control Officers and designated inspectors of EU Member States responsible for the control of the implementation of relevant provisions of Regulation (EU) 1257/2013 and Directive 2009/16/EC.



INTENDED LEARNING OUTCOMES

This course aims at providing the necessary knowledge and skills to designated inspectors of carrying out ship inspections in the context of the Ship Recycling Regulation implementation and enforcement.

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

- Identify the specific EU and international legal instruments (Conventions, Regulations, guidelines, recommendations, procedures) relevant to Ship Recycling and describe their scope and main provisions. (Intermediate level);
- Describe the scope and objectives of an SR inspection;
- Identify the relevant information to be gathered prior to initiating an SR inspection;
- Identify and review/verify the accuracy/validity of the SRR-related mandatory/certificates documents that should be carried out by a ship which is subject to an SRR inspection;
- Explain the circumstances of “clear grounds” under which a more detailed inspection or the enforcement of other control measures to the ship may be required;
- Identify, describe typical cases of SR non-compliances and classify them into detainable and non-detainable ones;
- Explain the circumstances under which a “specific sampling” may be considered and describe the methodology to be followed in such cases;
- Determine and take the appropriate enforcement actions in cases of identified SR non-compliances.

COURSE STRUCTURE

The course is offered in classroom (face-to-face) or in online synchronous format.

COURSE CONTENT

The SR inspectors training course covers the following areas:

- Ship Recycling legal framework (EU and International);
- How to conduct SR inspections;
- Reporting of SR inspections in relevant databases (THETIS EU).

TITLE	VDR FOR ACCIDENT INVESTIGATORS
DURATION	21 hours
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, 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 offered in classroom (face-to-face) or in online synchronous format.

COURSE CONTENT

- Relevant legal provisions and standards;
- How VDR & ECDIS work;
- Other electronic evidence;
- Practical issues when retrieving electronic evidence from AI perspective;
- VDR technical data, hardware examples and practice;
- ECDIS technical data, limitation, examples and practice.

TITLE	CORE SKILLS FOR ACCIDENT INVESTIGATORS
DURATION	25 hours
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	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 offered in classroom (face-to-face) or in online synchronous format.

COURSE CONTENT

- EMSA and its role in the accident investigation policy;
- Relevant EU and international legislation on accident investigation;
- Operational readiness and work process;
- Accident site assessment;
- Site hazard identification and risk assessment;
- Physical evidence collection;
- Human element;
- Media handling;
- Witness interviewing and practical exercises;
- Evidence analysis;
- Developing Safety Recommendations and follow up;
- Safety reports.

TITLE	ADVANCED COURSE FOR ACCIDENT INVESTIGATORS
DURATION	28 hours
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 offered in classroom (face-to-face) or in online synchronous format..

COURSE CONTENT

- 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.



TITLE	CYBERSECURITY IN THE MARITIME DOMAIN
DURATION	24 hours
AUDIENCE	National administrations staff engaged in maritime verifications, controls, audits, and inspections related to security.
RECOMMENDED PRE-TRAINING REQUISITE	Participants should have a general understanding of the relevant maritime security regulatory framework. Experience in maritime security inspections would be advantageous to foster discussion during the course.



INTENDED LEARNING OUTCOMES

- This course is designed to develop the necessary individual competencies for carrying out duties associated with cybersecurity in the process of implementation and enforcement of the relevant maritime regulatory framework. After the course the students shall be able to;
- Identify the existing cyber threats, challenges and opportunities for the maritime sector;
- Recognize the importance of addressing cybersecurity for maritime operations;
- Distinguish the OT and IT systems and explain their vulnerabilities and potential consequences of cyber incidents;
- Identify, describe and discuss the existing regulatory framework, guidance and best practices;
- Recognize and describe the existing cyber risk management and assessment tools;
- Treat Cybersecurity issues during maritime audits and inspections.

COURSE STRUCTURE

The course is offered in blended format: a presential part and a combination of online asynchronous activities.

COURSE CONTENT

- Fundamentals of Cybersecurity: Threats, Actors and Motives;
- Cybersecurity in the Maritime Sector;
- Maritime Cybersecurity EU and international Regulatory Framework, Best Practices and Basic Cyber-Hygiene;
- Maritime Cyber Risk Management and Assessment;
- Cybersecurity in Audits and Inspections;
- Practical Cybersecurity Crisis exercise.


TITLE SAFESEANET

DURATION 7 hours

AUDIENCE 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 REQUIREMENT 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 offered in classroom (face-to-face) or in online synchronous format.

COURSE CONTENT

- 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;
- Planned future developments.


TITLE CLEANSEANET FOR BASIC USERS

DURATION 7 hours (presential) or 10.5 hours online

AUDIENCE Officers working in MRCCs, VTS Centres, maritime administrations and pollution response services with no or low level of experience with the CSN service.

INTENDED LEARNING OUTCOMES

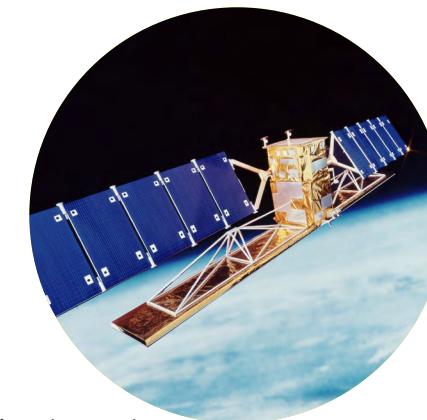
- Identify the main characteristics of Synthetic Aperture Radar (SAR) and optical imagery;
- Oil spill and vessel detection principles in SAR imagery;
- Describe the procedure(s) to activate the CSN service during emergencies;
- Apply the procedure to request CSN support during exercises and special operations;
- Interpret the alert report;
- Use the CSN feedback form;
- Demonstrate the use of SEG/CSN operation basic functions.

COURSE STRUCTURE

The course is offered in classroom or online in asynchronous mode with scheduled live Q&A sessions.

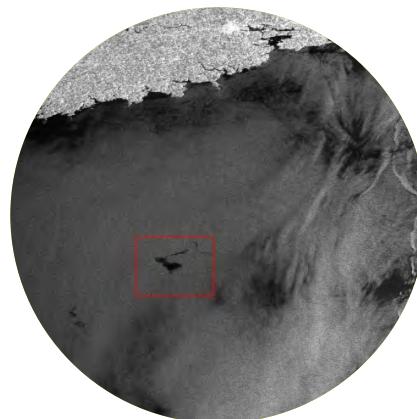
COURSE CONTENT

- 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 on SafeSeaNet Ecosystem Graphical User Interface (SEG).





TITLE	CLEANSEANET FOR ADVANCED USERS
DURATION	7 hours (presential) or 10.5 hours online
AUDIENCE	Officers with experience using CSN service or managers responsible for the coordination of CSN service within their national administrations.



INTENDED LEARNING OUTCOMES

- Name the main elements of the CSN service legal framework, recall the role of the CSN User Group;
- Identify the scope of the CSN Conditions of Use, summarize the intellectual property rights applicable to CSN data;
- Identify the main principles of spatial resolution, images acquisition and delivery times;
- Remember the key aspects of image planning;
- Interpret CSN alert reports and alert area;
- Identify potential polluters by querying AIS data and CSN detections in SEG;
- Analyse CSN detections;
- Demonstrate the use of SEG/CSN operation advanced functions.

COURSE STRUCTURE

The course is offered in classroom or online in asynchronous mode with scheduled live Q&A sessions.

COURSE CONTENT

- Legal framework of CleanSeaNet service;
- Governance of CSN: User Group and Conditions of Use;
- CSN image acquisition procedure and processing chain;
- Information displayed in the CSN alert report;
- CSN feedback form: concept of priority;
- Different user profiles;
- Advanced use of SEG/CSN service.

**TITLE****COPERNICUS MARITIME SURVEILLANCE****DURATION**

7 hours (presential) or 10.5 hours online

AUDIENCE

Operational users of the CMS service such as officers working in national authorities with responsibilities at sea, EU Institutions and bodies, with or without previous experience on the usage of CMS services.

**INTENDED LEARNING OUTCOMES**

- Describe the benefits, constraints and limitations of different CMS products available;
- Identify the different procedures for ordering EO services;
- Access, search and visualise CMS data and ancillary information in the SEG.

COURSE STRUCTURE

The course is offered in classroom or online in asynchronous mode with scheduled live Q&A sessions.

COURSE CONTENT

- 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;
- Tailored practical exercises, scenarios and case studies on SafeSeaNet Ecosystem Graphical User Interface (SEG).

AWARENESS SESSIONS AND WEBINARS

- HANDS-ON TRAINING SESSIONS ON THE EMSA EQUIPMENT ASSISTANCE SERVICE (EAS) STOCKPILES 58
- EMSA/ PARIS MOU PORT STATE CONTROL SEMINAR 60
- MAR-ICE SERVICE NATIONAL FAMILIARISATION SESSION 62
- REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS) DATA CENTRE 63
- MED DATABASE 64

TITLE **HANDS-ON TRAINING SESSIONS ON THE EMSA EQUIPMENT ASSISTANCE SERVICE (EAS) STOCKPILES**

DURATION 27 hours

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.

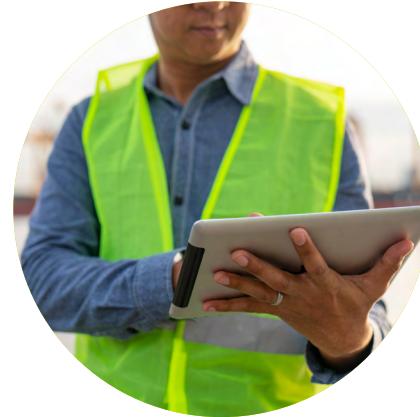
COURSE STRUCTURE

The course is offered in classroom (face-to-face) format.

COURSE CONTENT

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

TITLE	EMSA/ PARIS MOU PORT STATE CONTROL SEMINAR
DURATION	25 hours
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 training policy.
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);
- 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 offered in classroom (face-to-face).

COURSE CONTENT

- 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.

TITLE	MAR-ICE SERVICE NATIONAL FAMILIARISATION SESSION
DURATION	2.5 hours
AUDIENCE	Staff of national and local authorities of EU Member States and EFTA coastal States who are users of the MAR-ICE service or wish to know more about the service.
RECOMMENDED PRE-TRAINING REQUISITE	(Some) working experience with oil or chemical pollution response operations or at-sea incident management.



INTENDED LEARNING OUTCOMES

- Recognise the scope and objective of MAR-ICE service;
- Identify the service's activation procedures and expected outputs.

COURSE STRUCTURE

The course is conducted on-line.

COURSE CONTENT

- Description of the response to chemical emergencies at sea and its key challenges;
- Overview of EMSA's chemical pollution response services;
- MAR-ICE service, how to activate it and what it can offer;
- Case studies of incidents where the MAR-ICE service was activated;



TITLE	REMOTELY PILOTED AIRCRAFT SYSTEM (RPAS) DATA CENTRE
DURATION	3 hours
AUDIENCE	This course is designed for Member States which are 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 offered in classroom (face-to-face) or in online synchronous format.

COURSE CONTENT

- 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	MED DATABASE
DURATION	3 hours
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.



COURSE CONTENT

- 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.

INTENDED LEARNING OUTCOMES

- Know the legal basis and legal obligations for each group of the stakeholders stemming from the Directive 2014/90/EU;
- 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);
- Recognise the purpose of the MED data circulation and exchange with other MED stakeholders.

COURSE STRUCTURE

The course is offered in classroom (face-to-face) or in online synchronous format.



ABOUT THE EUROPEAN MARITIME SAFETY AGENCY

The European Maritime Safety Agency (EMSA) is one of the European Union's decentralised agencies. Based in Lisbon, Portugal, 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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