



MAKCS

E-LEARNING CATALOGUE

© **European Maritime Safety Agency 2019**

Photo credits: Igor Kardasov/Shutterstock.com; Rasti Sedlak/Shutterstock.com; tonton/shutterstock.com; ChameleonsEye/shutterstock.com; High Voltage/shutterstock.com; Andrej Polivanov/shutterstock.com; EpicStockmedia/shutterstock.com.

INTRODUCTION

The European Maritime Safety Agency (EMSA) over the years, has developed, hosted and maintained technical solutions to support the building up of the necessary national capacity for the implementation of relevant legal acts of the Union as well as international legislation. One of the technical solutions offered is the learning management system “Maritime Knowledge Centre” (MaKCs), which, in principle, is a web based e-Learning platform offering a comprehensive set of courses to a number of communities.

The platform was originally developed in support of the Professional Development Scheme of the Paris MoU. The tool was designed to improve the professional competency and to ensure a harmonised approach by PSCOs during PSC inspections.

Considering that the development of an e-learning course is a cost-effective and efficient way of ensuring the distribution of up-to-date training material to a large number of users and bearing in mind the enhanced tasks assigned to the Agency in relation to capacity building, EMSA has extended the accessibility of the platform to users beyond the Paris MoU domain. In this respect, a number of courses have been developed for targeted groups from EU Members States, ENP countries as well as other PSC regimes around the globe.

The variety of topics cover the existing maritime-related legislation from the perspective of implementation and enforcement and facilitate the training to ensure the fulfilment of port State, flag State and coastal State responsibilities. MaKCs as the platform for learning management also provides the means for monitoring and evaluating users’ training activities and, if so necessary, the system could be tailored to serve as the digital repository for learning content developed by national authorities.

Any potential user who may need to get access to the e-learning modules should contact the national administrators which could be found by following the link below:

<http://www.emsa.europa.eu/technical-assistance-to-member-states/cnta-contacts.html>



TABLE OF CONTENTS

COURSES DEVELOPED FOR PORT STATE CONTROL COMMUNITIES (RESTRICTED)

1. Hull and Construction	6
2. Safety Equipment	6
3. Fire Protection and Fire Fighting	6
4. Safety of Navigation and COLREG	7
5. Maritime Radio and Communications - 2018 update New edition!	7
6. Engine Room	7
7. Security	7
8. Cargoes	8
9. Special Ships	8
10. MARPOL Annex I (machinery spaces) New!	8
11. MARPOL Annex I (Oil tankers)	9
12. MARPOL Annex II	9
13. MARPOL Annex III	9
14. MARPOL Annex IV - V- VI	9
15. The STCW Convention	10
16. Maritime Labour Convention, 2006	10
17. Human Element	10
18. ISM	10
19. CIC on Maritime Labour Convention, 2006	11
20. CIC on Safety of Navigation (Incl. ECDIS)	11
21. Paris MoU Inspection Procedures	11
22. Guidance on procedures for operational controls New!	12
23. CIC on MARPOL Annex VI	12
24. Ballast Water Management Inspection – 2019 update New edition!	12
25. Med MoU Inspection Procedures	13
26. Black Sea MoU inspection procedures	13
27. Ballast Water Management Inspection – (IMO based)	13
28. CIC on Emergency Systems and Procedures 2019 New!	14

COURSES DEVELOPED FOR MARITIME ADMINISTRATIONS AND NATIONAL COMPETENT AUTHORITIES

29. EU Maritime Legislation	16
30. Ballast Water Management Convention - General Overview	16
31. Guidelines for Approval of Ballast Water Management Systems (G8)	16
32. Procedures for Approval of Ballast Water Management System (G9)	16

33. Ballast Water Management – Inspection (IMO based)	17
34. MARPOL Annex I All Ships (machinery spaces)	17
35. Sulphur Directive and associated implementing acts	17
36. Sulphur Inspector’s Guide including THETIS-EU	18
37. Introduction to the STCW Convention and Code	18
38. Marine Equipment Directive	18
39. Accident Investigation Legislation	18
40. Ship-related aspects of the EU Ship Recycling Regulation	19
41. EU Legislation for the Prevention of Pollution from Ships	19
42. MLC, 2006 Flag State Responsibilities	19
43. Reporting HAZMAT in SafeSeaNet (SSN) with the Central Hazmat Database (CHD)	19
44. MARine Chemical Information Sheets (MAR-CIS)	20
45. EMSA’s Public Key Infrastructure and Digital Certificates	20
46. EMSA’s Equipment Assistance Service (EAS)	20
47. Awareness in Maritime Cybersecurity	21
48. Maritime security	21
49. Course on Anti-Fouling Systems (AFS)	21
50. SSN Incident Reporting and CECIS-MP New!	22
51. Maritime Spatial Planning New!	22
52. Liability and Compensation for Marine Pollution New!	22
COURSES FOR THE FRONTEx COMMUNITY (RESTRICTED)	
53. EMSA surveillance services for Frontex and Eurosur	20

- Courses developed for Port State Control Communities
- Courses developed for Maritime Administrations and National Competent Authorities
- Courses for the Frontex Community

COURSES DEVELOPED FOR PORT STATE CONTROL COMMUNITIES

1. HULL AND CONSTRUCTION

This course contains information relevant to the hull and construction of ships. In particular and in reference to the topic of the module, the learner can obtain a complete picture of the applicable instruments, the list of the certificates and other documentation that certify an appropriate maintenance of the ship and its substantial compliance to the applicable rules.

The learner will also receive information about structures, stresses, the corrosion phenomenon and the relevant methods of protection.

In addition, the learner will get information on what a PSCO should or may verify on board describing in depth the various types of inspections.

2. SAFETY EQUIPMENT

This course provides general knowledge regarding the ship safety equipment with special care given to life-saving appliances and on board drill organisation.

It also provides information on the role of port State control in relation to the above and the way life-saving appliances are verified.

3. FIRE PROTECTION AND FIRE FIGHTING

This course provides the basic knowledge regarding fire protection and fire-fighting, as well as the role of PSCOs when verifying the related equipment.

4. SAFETY OF NAVIGATION AND COLREG

This course provides the basic knowledge regarding safety of navigation and the prevention of collisions at sea as well as the role of port State control when verifying the related equipment.

NEW EDITION!

5. MARITIME RADIO AND COMMUNICATIONS

The aim of this course is to provide the Paris MoU Port State Control Officer with enough knowledge to assess the compliance of the ship and her crew with the International legislation in relation to maritime radiocommunications.

6. ENGINE ROOM

This course provides knowledge regarding the engine room and relevant items of machinery and systems, as well as the role of port State control in relation to the Engine Room and how the machinery installations can be verified.

7. SECURITY

This course contains the relevant knowledge regarding Maritime Security and how port State may enforce the ISPS provisions.

8. CARGOES

This course summarises the relevant knowledge regarding the requirements of the Load Lines Convention and the carriage of dry and break bulk cargoes as well as the operational procedures and arrangements to verify in relation to different types of ships and cargoes.

9. SPECIAL SHIPS

This course includes the basic knowledge regarding special ships like, among others, High-speed Craft, Ro-Ro Passenger Ships with a focus on “special category spaces” and Offshore Supply Vessels. The course also provides insights for getting a better understanding how special ships can be verified.

10. MARPOL ANNEX I (MACHINERY SPACES)

NEW!

This course aims at presenting practical lessons on different aspects of the prevention of oil pollution from ships, tackling the requirements for machinery spaces: technical, operational and construction. There is a dedicated module in the course for Paris MoU PSCOs.

The original course MARPOL Annex I has been split into two -All ships (machinery spaces) and Oil tankers*- which substitute the old single course.

* MARPOL ANNEX I – Oil Tankers will be available in late 2019.

11. MARPOL ANNEX I (OIL TANKERS)

Will be available in late 2019.

12. MARPOL ANNEX II

This course provides the relevant knowledge regarding the prevention of pollution by noxious liquid substances in bulk (MARPOL Annex II) and identifies the ship's operational procedures and arrangements which should be verified in relation to different types of ships and also different types of liquid bulk cargoes.

13. MARPOL ANNEX III

This course contains the basic knowledge regarding the MARPOL Annex III and its related IMO instruments, mainly the SOLAS Convention, the IMDG Code and the INF Code and explains the way in which compliance with the regulations for the prevention of pollution by harmful substances carried by sea in packaged form can be verified.

14. MARPOL ANNEX IV - V- VI

This course includes the relevant knowledge regarding the prevention of pollution by sewage from ships, the prevention of pollution by garbage from ships and the prevention of air pollution from ships.

It also provides an overview to understand the ship's operational procedures and arrangements which have to be verified in relation to the prevention of pollution by sewage, garbage and exhaust gases.

15. THE STCW CONVENTION

This course contains the basic knowledge regarding the international requirements on training, certification and watchkeeping for seafarers, and on the safe manning of ships. The course also provides the tools to understand how crew-related documentation, crew's composition in relation to the minimum safe manning document, and watchkeeping schemes should be verified during port State control.

16. MARITIME LABOUR CONVENTION, 2006

This course provides a general overview about the MLC, 2006 and focuses on the enforcement of its provisions during port State control.

17. HUMAN ELEMENT

This course identifies the different approaches (cultural, communication, diversity, practices, etc) that an inspector may apply when conducting a PSC inspection and underlines scenarios such as problem solving on board and resolving conflict

18. ISM

This course presents the ISM requirements by describing the roles of all parties in the Code's implementation. It also helps to enhance the understanding of the Safety Management System and provides a practical approach to the PSC inspection.

19. CIC ON MARITIME LABOUR CONVENTION, 2006

The course focuses on the Concentrated Inspection Campaign, aiming at checking the conformity of seafarers' living and working conditions accordingly to the requirements established in the MLC, 2006.

20. CIC ON SAFETY OF NAVIGATION (INCL. ECDIS)

The course focuses on the Concentrated Inspection Campaign, aiming at checking the conformity of safety regulations for ships, the overall status of the vessel's navigation safety, and the competency of crew involved in navigation operations.

21. PARIS MOU INSPECTION PROCEDURES

This course guides the inspector on the general and specific procedures to be observed when preparing, undertaking and completing a port State control inspection.

The contents align with the instructions, circulars and other documents included in the manual for port State control officers.

As an underlying course to complement the national training provided by Member States, after its completion, the inspector will gain the knowledge and understanding for demonstrating the competence required to perform her/his duties.

22. GUIDANCE ON PROCEDURES FOR OPERATIONAL CONTROLS

NEW!

The goal of this course, based on the PSCC Instruction, is to provide port State control officers with the information on procedures to carry out operational controls, including drills, during an inspection.

23. CIC ON MARPOL ANNEX VI

The course focuses on the Concentrated Inspection Campaign. It aims to check the conformity of requirements on air pollution from ships and underline the responsibility of port State control with regard to a harmonized enforcement of the requirements of MARPOL Annex VI.

24. BALLAST WATER MANAGEMENT INSPECTION – (2019 UPDATE)

NEW EDITION!

This is an updated course, intended to provide basic guidance to the Port State Control Officers in the Paris MoU PSC region for the conduct of an inspection, to verify compliance with the requirements of the International Convention for the Control and Management of Ship's Ballast Water and Sediments, 2004 (BWM 2004). It reflects the relevant PMOU PSCC Instruction 51/2018/09 and IMO's legal framework up to MEPC 73 held in October 2018.

25. MED MOU INSPECTION PROCEDURES

This course guides the inspector on the general and specific procedures to be observed when preparing, undertaking and completing a port State control inspection.

The contents align with the instructions, circulars and other documents included in the manual for port State control officers.

As an underlying course to complement the national training provided by Med MoU Member States, after its completion, the inspector will gain the knowledge and understanding for demonstrating the competence required to perform her/his duties.

26. BLACK SEA MOU INSPECTION PROCEDURES

This course guides the inspector on the general and specific procedures to be observed when preparing, undertaking and completing a port State control inspection.

The contents align with the instructions, circulars and other documents included in the manual for port State control officers.

As an underlying course to complement the national training provided by Black Sea MoU Member States, after its completion, the inspector will gain the knowledge and understanding for demonstrating the competence required to perform her/his duties.

27. BALLAST WATER MANAGEMENT INSPECTION – (IMO BASED)

This is an updated course, intended to provide basic guidance to the Port State Control Officers in your region for the conduct of an inspection, to verify compliance with the requirements of the International Convention for the Control and Management of Ship's Ballast Water and Sediments, 2004 (BWM 2004). It reflects the relevant PMOU PSCC Instruction 51/2018/09 and IMO's legal framework up to MEPC 73 held in October 2018.

28. CIC ON EMERGENCY SYSTEMS AND PROCEDURES 2019

NEW!

The questions in the Concentrated Inspection table were selected in order of the number of deficiencies (%) and the number of detainable deficiencies (Code 30) in the last three years by analysing the number of deficiencies related to the emergency system areas (ratios) during the Asia- Pacific and European-North Atlantic ports.

During the Concentrated Inspection, it is required to verify normal operation of the main emergency equipment, such as emergency fire pumps, emergency generators, and steering gear and whether these systems are maintained and operated at proper intervals. Furthermore, the familiarity of the ship's officer and crew with the equipment operation and emergency systems must be evaluated.

The Concentrated Inspection Campaign should be carried out in addition to the Port State Control Inspection, and Port State Control Officers (PSCOs) are encouraged to fully understand the information and materials on the guidelines in advance and engage in the inspection.

This course on CIC Emergency Systems and Procedures helps the PSCO to understand the guidance prior to the inspection.



COURSES DEVELOPED FOR MARITIME ADMINISTRATIONS AND NATIONAL COMPETENT AUTHORITIES

29. EU MARITIME LEGISLATION

The course provides a general overview on EU Maritime Legislation by detailing the requirements and the tools to facilitate its enforcement.

30. BALLAST WATER MANAGEMENT CONVENTION - GENERAL OVERVIEW

This course provides general information on the International Convention for the Control and Management of ship's Ballast Water and Sediments, 2004 (BWM Convention).

31.. GUIDELINES FOR APPROVAL OF BALLAST WATER MANAGEMENT SYSTEMS (G8)

This course provides a follow-up on the latest developments of the IMO Guidelines for Approval of Ballast Water Management Systems (G8)

32. PROCEDURES FOR APPROVAL OF BALLAST WATER MANAGEMENT SYSTEM (G9)

This course provides a follow-up on the latest developments of the IMO Procedures for approval Water Management Systems that make use of Active Substances (G9) of Ballast Water Convention and how this procedure and Guidelines for approval of ballast water management systems (G8) act together.

33. BALLAST WATER MANAGEMENT – INSPECTION (IMO BASED)

This course is intended to provide basic guidance to the Flag State surveyors and Port State Control Officers for the conduct of an inspection, to verify compliance with the requirements of the International Convention for the Control and Management of Ship's Ballast Water and Sediments, 2004 (BWM 2004). It reflects IMO's legal framework up to MEPC 73 held in October 2018.

34. MARPOL ANNEX I ALL SHIPS (MACHINERY SPACES)

This course aims at presenting practical lessons on different aspects of the prevention of oil pollution from ships, tackling the requirements for machinery spaces: technical, operational and construction. The original course MARPOL Annex I has been split into two -All ships (machinery spaces) and Oil tankers*- which substitute the old single course.

*MARPOL ANNEX I – Oil Tankers will be available in late 2019.

35. SULPHUR DIRECTIVE AND ASSOCIATED IMPLEMENTING ACTS

This course provides guidance for the understanding of the requirements of the Sulphur Directive and the associated implementing acts, monitoring compliance with the provisions, ensuring uniform conditions for their implementation and applying control procedures of sampling and reporting.

36. SULPHUR INSPECTOR'S GUIDE INCLUDING THETIS-EU

This course provides guidance for a harmonized approach by the Sulphur Inspectors to the inspection of ships, ascertaining their compliance, identifying non-compliances and applying control procedures for the enforcement of Directive (EU) 2016/802 of the European Parliament and of the Council and the associated implementing acts as regards the sulphur content of marine fuels.

37. INTRODUCTION TO THE STCW CONVENTION AND CODE

This course identifies the obligations of a Party under the Convention and classifies the minimum requirements and endorsement under the Convention and provides a complete overview of the STCW.

38. MARINE EQUIPMENT DIRECTIVE

The objective of this course is to provide an in-depth insight in the purpose, the scope, the actors, the amendment procedures, the provisions and their implementation in the EU Member States pertaining to the Marine Equipment Directive 2014/90.

39. ACCIDENT INVESTIGATION LEGISLATION

This course introduces the fundamental principles governing the investigation of accidents in the maritime transport sector as set by Directive 2009/18/EC.

40. SHIP-RELATED ASPECTS OF THE EU SHIP RECYCLING REGULATION

This course focuses on Title II –“Ships”- SRR and related IMO/EU instruments. It addresses ship-related requirements before recycling, but not the organisation and standards of ship recycling facilities.

Check plans and sampling methods for hazardous materials are described to understand the functioning of the SRR.

41. EU LEGISLATION FOR THE PREVENTION OF POLLUTION FROM SHIPS

This course presents the most relevant EU Directives and Regulations on maritime-related environmental protection, including their purpose, scope, main requirements and enforcement.

42. MLC, 2006 FLAG STATE RESPONSIBILITIES

This course presents the MLC, 2006 responsibilities under Title 5 and ensures a proper comprehension of its related provisions.

43. REPORTING HAZMAT IN SAFESEANET (SSN) WITH THE CENTRAL HAZMAT DATABASE (CHD)

This course provides training on how to use the Central Hazmat Database (CHD) to support the accurate reporting of dangerous or polluting goods (DPG) information in SafeSeaNet. The module also includes a section on the MARine Chemical Information Sheets (MAR-CIS) and how to access these through the CHD.

44. MARINE CHEMICAL INFORMATION SHEETS (MAR-CIS)

This course introduces EMSA's MARine Chemical Information Sheets (MAR-CIS). MAR-CIS datasheets contain relevant information for responding to marine spills of hazardous and noxious substances (HNS). These datasheets provide concise information on the substances' physical and chemical properties, handling procedures and emergency spill response procedures, as well as maritime transport requirements for safe transport at sea.

45. EMSA'S PUBLIC KEY INFRASTRUCTURE AND DIGITAL CERTIFICATES

This course details the EMSA's Public Key Infrastructure services and explains how to request, renew and revoke digital certificates. This course is aimed at organisations that have a System-2-System connection to EMSA's maritime applications.

46. EMSA'S EQUIPMENT ASSISTANCE SERVICE (EAS)

This course presents EMSA's Equipment Assistance Service (EAS) focusing on elements of interest to the service's users. The module is aimed at relevant counter-pollution authorities and administrations and provides a step-by-step procedure for the EAS mobilisation, associated costs, as well as technical information about the capabilities of the various oil pollution response equipment systems available in the EAS stockpiles.

47. AWARENESS IN MARITIME CYBERSECURITY

This course aims to introduce the cybersecurity concept and its importance in today's society and in the maritime domain. It also presents the international legal instruments which deal with the problem of cybersecurity for shipping and illustrates the different approaches to cybersecurity for shipping: safety and security.

48. MARITIME SECURITY

This course aims to provide basic knowledge to conduct tasks arising from the international instruments and the EU legislation on maritime security. It also describes the maritime security obligations for Administrations, Companies, Ports and Ships.

49. COURSE ON ANTI-FOULING SYSTEMS (AFS)

This course aims at officials of the EU MS administrations, its goal is to provide knowledge on the EU legal framework relevant to anti-fouling systems and the main aspects of the IMO's International Convention on the Control of Harmful Anti-fouling Systems on Ships, 2001 (the AFS Convention) and IMO guidelines.

50. SSN INCIDENT REPORTING AND CECIS MP: HOW TO REPORT, CONSULT AND REQUEST INTERNATIONAL ASSISTANCE DURING A MARITIME POLLUTION EMERGENCY

NEW!

The course refers to the Incident Reporting Guidelines for SafeSeaNet and the management of marine pollution emergencies in CECIS-MP. The course is aimed at national maritime competent authorities responsible for requesting international assistance in CECIS-MP. The course explains in detail how to report and consult POLREP in SSN and also how to manage resources in CECIS-MP.

51. MARITIME SPATIAL PLANNING

NEW!

This course presents the content of Directive 2014/89/EU establishing a framework for maritime spatial planning and identifies examples and best practices implemented by some EU Member States with regard to the topic.

52. LIABILITY AND COMPENSATION FOR MARINE POLLUTION

NEW!

The goal of this course is to provide a basic overview on the matter of Liability and compensation and submission of claims. The learners will be guided through the multitude of International and European legal acts while providing comprehensive but concise overview of the main definitions, principles and provisions in an International and European context.

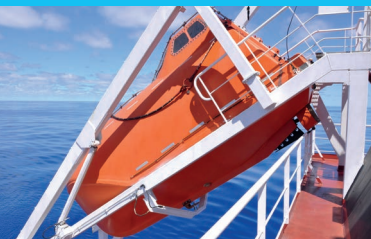
COURSES FOR THE FRONTEX COMMUNITY

53. EMSA SURVEILLANCE SERVICES FOR FRONTEX AND EUROSUR

This course aims to provide an overview of the EMSA – FRONTEX activities on vessel monitoring, detection and vessel reporting services.







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.

emsa.europa.eu

Get in touch for more information

European Maritime Safety Agency

Praça Europa 4
Cais do Sodré
1249-206 Lisboa
Portugal

Tel +351 21 1209 200 / Fax +351 21 1209 210
emsa.europa.eu / [Twitter@EMSA_Lisbon](https://twitter.com/EMSA_Lisbon)