

Maritime
Chile



**MARITIME EDUCATION
AND TRAINING IN CHILE**

MARITIME SAFETY AND PORT SECURITY



IMO MODEL COURSE 3.11 SAFETY INVESTIGATION INTO MARINE CASUALTIES AND MARINE INCIDENTS

GENERAL CONTENT:

1. Regulatory framework.
2. Methodology for casualty investigation.
3. Types of evidence.
4. Human factors.
5. Reporting and communication to IMO.
6. Practical activity (case studies and role/playing exercises).

TOTAL HOURS:

60.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

THE COURSE INCLUDES THE IMO MODEL COURSE 3.11 CERTIFICATE.

OBJECTIVE: To provide Flag State Investigators with a methodology for conducting accident investigations, and to update personnel from the Maritime Administration involved in the development of maritime regulations related to accidents, according to the Casualty Investigation Code.

TARGET GROUP: Personnel from the Maritime Administration and/or Maritime Authority who will act as Marine Casualty and Incident Investigators under the IMO model, such as Maritime Authority Officers, Flag State Inspectors, and professionals from competent technical areas.

INTERNATIONAL INSTRUMENT:

Although not mandatory, the course is recommended within the framework of the IMO Member State Audit Scheme (IMSAS).

- SOLAS Convention, Regulation 1/21 establishes the obligation for Administrations to conduct an investigation into any casualty experienced by ships subject to the provisions of the Convention, whenever deemed necessary for the improvement of maritime safety.
- MARPOL Convention, Article 12. Administrations undertake to investigate any marine casualty involving any of their ships subject to the regulations if the casualty has caused significant adverse effects on the marine environment.
- Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code).

ASSOCIATED GOVERNANCE STATE:
Flag State / Coastal State.

LINKAGE WITH THE III CODE:
Parts 2 and 3.

WORKSHOP ON MARINE CASUALTY AND INCIDENT INVESTIGATION

GENERAL CONTENT:

1. Regulatory framework.
2. Methodology for casualty investigation.
3. Types of evidence.
4. Human factors.
5. Reporting and communication to IMO.
6. Practical activity (case studies and role-playing exercises).

TOTAL HOURS:

20 - 30.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

THE WORKSHOP IS A SIMPLIFIED VERSION OF THE IMO MODEL COURSE 3.IT.

OBJECTIVE: To provide Flag State Investigators with general knowledge on the methodology for casualty investigations and the formulation of related maritime regulations related, using the Casualty Investigation Code.

TARGET GROUP: Personnel from the Maritime Administration and/or Maritime Authority who will act as Marine Casualty and Incident Investigators under the IMO model, such as Maritime Authority Officers, Flag State Inspectors, and professionals from competent technical areas.

INTERNATIONAL INSTRUMENT:

Although not mandatory, the workshop is recommended within the framework of the IMO Member State Audit Scheme (IMSAS).

- SOLAS Convention, Regulation 1/21 establishes the obligation for Administrations to conduct an investigation into any casualty experienced by ships subject to the provisions of the Convention, whenever deemed necessary for the improvement of maritime safety.
- MARPOL Convention, Article 12. Administrations undertake to investigate any marine casualty involving any of their ships subject to the regulations if the casualty has caused significant adverse effects on the marine environment.
- Code of the International Standards and Recommended Practices for a Safety Investigation into a Marine Casualty or Marine Incident (Casualty Investigation Code).

ASSOCIATED GOVERNANCE STATE:
Flag State / Coastal State.

LINKAGE WITH THE III CODE:
Parts 2 and 3.

IMO MODEL COURSE 7.11 BASIC TRAINING FOR SHIPS OPERATING IN POLAR WATERS

GENERAL CONTENT:

1. Course introduction.
2. Regulations and standards.
3. Vessel characteristics.
4. Manoeuvring in ice.
5. Passage planning and reporting.
6. Icebreaker assistance.
7. Vessel performance in polar waters.
8. Crew preparation.
9. Environment.

TOTAL HOURS:

34.

MODE:

Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

IMO MODEL COURSE 7.11

OBJECTIVE: To contribute to the safe operation of vessels in polar waters by providing knowledge on ice characteristics, low temperatures, and applicable legal requirements. The course promotes safe navigation, maneuvering, and pollution prevention practices, ensuring proper crew preparation and compliance with international maritime safety standards.

TARGET GROUP: Officers and crew on board ships operating in polar waters, as well as maritime personnel responsible for supervising safe operations and regulatory compliance in ice-covered areas.

INTERNATIONAL INSTRUMENT:

The course is delivered in accordance with the International Code for Ships Operating in Polar Waters (Polar Code) adopted by the International Maritime Organization (IMO) and under the framework of the SOLAS, MARPOL, and STCW Conventions.

- The Polar Code establishes safety and environmental protection standards for ships operating in Polar Regions, considering extreme ice and low temperature conditions.
- SOLAS, MARPOL, and STCW Conventions incorporate the Polar Code as an international requirement, establishing the safety, operational, and training standards for maritime personnel navigating in polar waters.

ASSOCIATED GOVERNANCE STATE:
Flag State.

LINKAGE WITH THE III CODE:
Part 2.

IMO MODEL COURSE 7.12 ADVANCED TRAINING FOR SHIPS OPERATING IN POLAR WATERS

GENERAL CONTENT:

1. Course introduction, regulations, standards and shipboard documentation.
2. Vessel characteristics.
3. Manoeuvring in ice.
4. Planning.
5. Icebreaker operations.
6. Crew preparation, working conditions and safety.

TOTAL HOURS:

35.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

IMO MODEL COURSE 7.12.

OBJECTIVE: To develop advanced competencies for planning and conducting safe ship operations in polar waters, taking into account the risks associated with ice, low temperatures, pollution, and navigation limitations. To promote proper decision-making and leadership under extreme conditions in accordance with the Polar Code and IMO standards.

TARGET GROUP: Deck Officers holding the functions of Master or Chief Mate who are responsible for directing or supervising ship operations in polar waters, and who have already completed the basic training (IMO Model Course 7.11).

INTERNATIONAL INSTRUMENT:

The course is conducted according to the International Code for Ships Operating in Polar Waters (Polar Code), adopted by the International Maritime Organization (IMO) as a supplement to the SOLAS, MARPOL, and STCW Conventions (Regulation V/4 and Section A-V/4-2).

- The Polar Code establishes the requirements for advanced risk management and operational planning under polar conditions, including ship safety, environmental protection, and crew training.
- The SOLAS, MARPOL, and STCW Conventions integrate the Polar Code as a mandatory international standard, ensuring the competence of officers in charge of the navigational watch and masters of ships operating in polar waters.

ASSOCIATED GOVERNANCE STATE:
Flag State.

LINKAGE WITH THE III CODE:
Part 2.

TRAINING COURSE FOR PORT STATE CONTROL OFFICERS (PSCOs)

GENERAL CONTENT:

1. Related International Conventions (SOLAS, MARPOL, STCW, and MLC).
2. Codes that implement the International Conventions.
3. Knowledge and application of IMO Resolution A33/Res.1185 (2024) on Procedures for Port State Control.
4. Correct identification of deficiencies and reporting them in both Spanish and English.
5. Classroom table-top exercise for the analysis of deficiencies and determination of the nature of each finding.

TOTAL HOURS:

35.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To train Port State Control Officers (PSCOs) and enhance the ability of personnel responsible for verifying compliance with international conventions of foreign-flagged ships.

TARGET GROUP: Port State Control Officers or Flag State Inspectors seeking qualification as PSCOs.

INTERNATIONAL INSTRUMENT:

- SOLAS Convention and all related Codes leading to certification. MARPOL Annexes I, II, IV, and VI; International Tonnage Convention; International Load Line Convention.

ASSOCIATED GOVERNANCE STATE:
Port State.

LINKAGE WITH THE III CODE:
Part 4.

TRAINING COURSE FOR FLAG STATE INSPECTORS

GENERAL CONTENT:

1. What is the International Maritime Organization (IMO)?
2. Flag State obligations.
3. IMO Conventions (SOLAS, MARPOL, Load Line, STCW, and other IMO instruments).
4. Ship certification.
5. Maritime Labour Convention (MLC).
6. Recognized Organizations (ROs).
7. National legislation.

TOTAL HOURS:

35.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To train Flag State Inspectors and enhance the ability of personnel responsible for effectively implementing international and national standards on ship safety and pollution prevention.

TARGET GROUP: Personnel to be qualified as Flag State Inspectors.

INTERNATIONAL INSTRUMENT:

- IMO Instruments Implementation Code (III Code) - Inspector Training.
- SOLAS and related codes leading to certification - MARPOL, International Tonnage Convention, International Load Line Convention.

ASSOCIATED GOVERNANCE STATE:
Flag State and Port State.

LINKAGE WITH THE III CODE:
Parts 2 and 3.

IMO MODEL COURSE 3.21 PORT FACILITY SECURITY OFFICER (PFSO)

GENERAL CONTENT:

1. Maritime security framework.
2. Port Facility Security Assessment (PFSA).
3. Port Facility Security Plan (PFSP).
4. Port security measures and procedures.
5. Security awareness and surveillance.
6. Contingency planning.
7. Security training.

TOTAL HOURS:

30.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

THE COURSE INCLUDES THE IMO MODEL COURSE 3.21 CERTIFICATE.

OBJECTIVE:

- To develop, maintain, and supervise the implementation of the Port Facility Security Plan (PFSP).
- To assess risks, threats, and vulnerabilities related to port security.
- To carry out regular inspections at the port facility to ensure the effective implementation of security measures.
- To ensure that all security equipment operates properly.
- To promote awareness and surveillance in support of port security.

TARGET GROUP: Individuals working or intending to work in the field of port security.

INTERNATIONAL INSTRUMENT:

- The course is a requirement to serve as a Port Facility Security Officer (PFSO), in accordance with the provisions of the International Ship and Port Facility Security (ISPS) Code.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINKAGE WITH THE III CODE:
Not applicable.

WORKSHOP ON PORT FACILITY SECURITY ASSESSMENT

GENERAL CONTENT:

1. Risk management concepts under the ISPS Code.
2. Types of threats affecting port facilities.
3. Characteristics of a Port Facility Security Assessment (PFSA).
4. Analysis of the external and internal context of a port facility.
5. Risk assessment methodology.

TOTAL HOURS:

24.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To provide participants with the knowledge necessary to understand and identify the elements involved in the elaboration of a Port Facility Security Assessment (PFSA).

TARGET GROUP: Personnel from the Maritime Administration and/or Maritime Authority engaged in port security activities, as well as those serving as Port Facility Security Officers (PFSOs).

INTERNATIONAL INSTRUMENT:

- The workshop is not mandatory; however, it provides useful tools for personnel involved in the development, evaluation, and updating of Port Facility Security Assessments, in accordance with the ISPS Code.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINKAGE WITH THE III CODE:
Not applicable.

COURSE FOR INTERNATIONAL SAFETY MANAGEMENT (ISM) CODE AUDITORS

GENERAL CONTENT:

1. Introduction (risk and human factor).
2. International Safety Management (ISM) Code.
3. Safety Management System (SMS).
4. Certification.
5. Audit process.
6. Reporting of non-conformities.
- 7.

TOTAL HOURS:

35.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To train inspectors as auditors of the International Safety Management (ISM) Code.

TARGET GROUP: Flag State Inspectors, Port State Control Officers, and Maritime Administration personnel who will perform duties as ISM Code Auditors.

INTERNATIONAL INSTRUMENT:

- International Safety Management (ISM) Code, Resolution A.741(18).
- SOLAS Convention, Chapter IX.

ASSOCIATED GOVERNANCE STATE:
Flag State and Port State.

LINKAGE WITH THE III CODE:
Parts 2 and 3.

COURSE ON MANAGEMENT, OPERATION AND MAINTENANCE OF AIS ATON DEVICES

GENERAL CONTENT:

1. AIS: Purpose, operating principles, types, and messages.
2. AIS AtoN base stations and repeaters: Purpose, shore-based equipment, and messages.
3. AIS AtoN: Display, monitoring and Message 21.
4. Installation and configuration of AIS equipment: AIS AtoN identification and programming, base station programming, MMSI, and slot management.
5. Maintenance and testing: AIS receiver and AIS base station.

TOTAL HOURS:

35.

MODE:

Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

TECHNICIAN TRAINING COURSE - LEVEL 2.

IALA INTERNATIONAL CERTIFICATION.

OBJECTIVE: To provide the theoretical and practical AIS AtoN training required for participants to acquire the knowledge and skills needed to install, maintain or replace Automatic Identification Systems within marine aids to navigation services in their organizations.

TARGET GROUP: Technicians involved in supporting the safe and efficient operation of marine aids to navigation, either within the Competent Authority or any public or private entity responsible for delivering this service.

INTERNATIONAL INSTRUMENT:

Although not mandatory, the course is an IALA recommendation.

- SOLAS Convention, Chapter V, Regulation 13/1: Each Contracting Government undertakes to provide, as it deems practical and necessary either individually or in co-operation with other Contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires.
- IALA Guideline - Training and Certification of Marine Aids to Navigation Personnel, Recommendation E-141.141.
- IALA Guideline - IALA Model Course - Technician Training Level 2 - Course General Description.
- IALA Guideline - IALA Model Course L2.8.1 - Technician Training Level 2, Section 8.1 - AIS AtoN Operation.
- The SOLAS, MARPOL, and STCW Conventions include the Polar Code as a mandatory international standard for officers in charge of the navigational watch and masters of ships operating in polar waters.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINKAGE WITH THE III CODE:
Part 3.

IALA MODEL COURSE MASTER OF ATON MANAGEMENT

GENERAL CONTENT:

1. Strategic planning for AtoN authorities.
2. Policy development.
3. Stakeholder management.
4. Corporate risk management for AtoN authorities.
5. Management skills and best practices.
6. Strategic procurement of Aids to Navigation.
7. Scenario planning in the AtoN sector.
8. Overview of key planning tasks.
9. Application of strategic planning tools.

TOTAL HOURS:

35.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

IALA MODEL COURSE LI.2 - LEVEL 1 - ATON MANAGERS.

IALA INTERNATIONAL CERTIFICATION.

OBJECTIVE: To address key aspects of AtoN governance from a strategic perspective and provide practical skills for effectively leading and managing AtoN operations.

TARGET GROUP: Senior management personnel concerned with AtoN service provision or its supervision.

INTERNATIONAL INSTRUMENT:

Although not mandatory, the course is an IALA recommendation.

- SOLAS Convention, Chapter V, Regulation 12/3: Contracting Governments planning and implementing VTS shall, wherever possible, follow the guidelines developed by the Organization.
- SOLAS Convention, Chapter V, Regulation 13/2: In order to obtain the greatest possible uniformity in aids to navigation, Contracting Governments undertake to take into account the international recommendations and guidelines when establishing such aids.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINKAGE WITH THE III CODE:
Part 3.

COURSE ON THE USE OF THE IALA RISK MANAGEMENT TOOLBOX - SIRA/IWRAP

GENERAL CONTENT:

1. Toolbox comprising five instruments: IWRAP, PAWSA
2. MK II, SIRA, IRMAS, and Simulation.
3. IW IWRAP: Quantitative and standardized method to assess the probability of collisions, groundings, and allisions within waterways.
4. SIRA: Simplified qualitative method to assess traffic volume and risk levels based on the probability and consequences of marine accidents, including the identification of potential mitigation options.

TOTAL HOURS:

35.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

IALA MODEL COURSE LI.3 - LEVEL 1 - ATON MANAGERS.

IALA INTERNATIONAL CERTIFICATION.

OBJECTIVE: Upon completion, participants will have an in-depth understanding of the IWRAP and SIRA tools and will be able to apply them for managing navigational risks in waterways.

TARGET GROUP: All personnel involved in the safe and efficient movement of vessels, including VTS and AtoN service providers, port authorities, pilotage services, waterway managers, allied services, marine spatial planners, maritime regulators, training organizations and consultants.

INTERNACIONAL INSTRUMENT:

Although not mandatory, the course is an IALA recommendation.

- SOLAS Convention, Chapter V, Regulation 12/2: Contracting Governments undertake to arrange for the establishment of VTS, where in their opinion, the volume of traffic or the degree of risk justifies such services.
- SOLAS Convention, Chapter V, Regulation 13/1: Each Contracting Government undertakes to provide, as it deems practical and necessary either individually or in co-operation with other Contracting Governments, such aids to navigation as the volume of traffic justifies and the degree of risk requires.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINKAGE WITH THE III CODE:
Part 3.

COURSE ON VOLUNTARY OBSERVING SHIPS (VOS)

GENERAL CONTENT:

1. IMO + IHO + WMO regulatory framework.
2. Observation and communication systems.
3. Reporting of data in plain text.
4. Use of the TurboWin+ software.
5. Use of the JVCOMM.3 software.
6. Quality-control tools.

TOTAL HOURS:

40.

MODE:

In-person / Remote.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

The course does NOT include the issuance of a certificate.

OBJECTIVE: Training in methods for observing and reporting environmental data, extreme meteorological phenomena, and the use of available supporting information, as well as the best practices in data quality-control techniques and the selection of new platforms for recruitment as mobile observing stations.

TARGET GROUP: Officers and ratings of all types of vessels, Port Meteorological Officers, and specialists from Marine Meteorological Centers.

INTERNATIONAL INSTRUMENT:

The course is not mandatory, but it falls within activities related to compliance with the IMO Audit Scheme (IMSAS); SOLAS Convention, Chapter V, Safety of Navigation, Regulation 5 Meteorological services and warnings; IMO Circular MSC 102/22/3; STCW Convention; and WMO Publications Nos. 9, 488, and 702.

ASSOCIATED GOVERNANCE STATE:
Flag State and Coastal State.

LINKAGE WITH THE III CODE:
Parts 2 and 3.

COURSE ON BASIC, COASTAL, AND ANTARCTIC METEOROLOGY

GENERAL CONTENT:

1. IMO + IHO + WMO regulatory framework.
2. Observation and communication systems.
3. Marine meteorology.
4. Applied climatology.
5. Operational planning.
6. Meteorological support.

TOTAL HOURS:

80.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

The course does NOT include the issuance of a certificate.

OBJECTIVE: Exchange of practical experience and updating of professional knowledge for a safe navigation, planning of maritime and coastal operations, reporting of conditions, monitoring of extreme events, and interpretation of forecasts and other available information.es.

TARGET GROUP: Local Maritime Authorities, officers and ratings of all types of vessels, maritime regulators, training organizations, and consultants.

INTERNATIONAL INSTRUMENT:

The course is not mandatory, but it falls within activities related to compliance with the IMO Audit Scheme (IMSAS); SOLAS Convention, Chapter V, Safety of Navigation, Regulation 5 Meteorological services and warnings, and Regulation 6 Ice Patrol Service (; IMO Circulars MSC 102/22/3 and MEPC 8/15/2 RSMC.MER; STCW Convention; Polar Code, and WMO Publications Nos. 1205 and EC 76.

ASSOCIATED GOVERNANCE STATE:
Flag State and Coastal State.

LINKAGE WITH THE III CODE:
Parts 2 and 3.

COURSE ON LIQUEFIED NATURAL GAS IN SHIPPING

GENERAL CONTENT:

1. Liquefied Natural Gas.
2. LNG carriers.
3. LNG terminals.
4. LNG transfer operations.
5. Certification of LNG carriers and terminals.

TOTAL HOURS:

30.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To provide basic knowledge on Liquefied Natural Gas, its storage, transport and transfer, for the purpose of conducting the necessary inspections of LNG carriers and maritime terminals.

TARGET GROUP: Personnel involved in inspection and surveys of carriers and maritime terminals.

INTERNATIONAL INSTRUMENT:

- SOLAS Convention.
- MARPOL Convention, Annex II.
- Gas Carrier Code (IGC).

ASSOCIATED GOVERNANCE STATE:
Flag State and Port State.

LINKAGE WITH THE III CODE:
Parts 2 and 4.

WORKSHOP ON STATUTORY CERTIFICATION OF SHIPS

GENERAL CONTENT:

1. Fundamentals of Certification
2. Maritime Inspections and Audits
3. SOLAS Convention and Safety Certificates
4. MARPOL Convention and Pollution Prevention
5. Tonnage and Load Line Conventions
6. Practical Application and Integration of Conventions

TOTAL HOURS:

30.

MODE:

In-person

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: Provide personnel from the administration that deals with the Flag State, Port State Control, knowledge of ship certification processes in order to provide objective evidence of compliance with international conventions ratified by each Member State. Additionally, provide the experience necessary to issue certificates when acting as a recognized organization on behalf of the administration, ensuring that all statutory services are delivered by qualified staff.

TARGET GROUP: Personnel from the Administration (technical and professional), and/or Maritime Authority who will serve as Flag and Port State Inspectors, ship registry staff, personnel in charge of supervising regulatory compliance of ships, personnel related to the implementation of international standards, and supervisors of Recognized Organizations.

INTERNATIONAL INSTRUMENT:

- SOLAS and all its mandatory Codes that generate certification. MARPOL annexes I, II, IV y VI. International Tonnage Convention, International Load Line Convention.

ASSOCIATED GOVERNANCE STATE:
Flag State, Port State, and Coastal State.

LINKAGE TO THE III CODE:
Parts 2, 3 and 4

COURSE ON MARITIME SEARCH AND RESCUE

GENERAL CONTENT:

1. Procedures for carrying out SAR operations.
2. Functions of Maritime Rescue Coordination Centres.
3. Standardized operational procedures in a maritime emergency.
4. Relevant aspects of the IAMSAR Manual Vol. II.
5. Evaluation, planning, and execution methodology of an SAR operation in all its stages.

TOTAL HOURS:

25.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: The subject provides the technical content required to standardize the professional profile of operators, enabling them to meet competency requirements in operational functions within a “Maritime Search and Rescue Coordination Centre” at a global level. It is both theoretical and practical, integrating administrative (documentary) and operational knowledge for the development of an SAR operation..

TARGET GROUP: Personnel working in Maritime Search and Rescue Coordination Centres.

INTERNATIONAL INSTRUMENT:

- International Manual for Aeronautical and Maritime Search and Rescue Services, which provides guidance for organizing and delivering SAR services.
- International Convention on Maritime Search and Rescue.
- International Convention for the Safety of Life at Sea.
- World Maritime Distress and Safety System.
- United Nations Convention on the Law of the Sea.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINKAGE TO THE III CODE:
Part 3.

WORKSHOP ON EXPERIENCES IN THE IMPLEMENTATION OF THE STCW CONVENTION IN MARITIME ADMINISTRATION

GENERAL CONTENT:

1. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).
2. STCW Experience in Chile.
3. National regulations pertaining to the implementation of the STCW Convention.
4. Internal processes or procedures for supervising and auditing training/qualification centers.
5. The Manila Amendments 2010 and subsequent amendments, and the national legal instruments issued for their implementation.
6. Analysis of findings and observations made in the last independent evaluation.

TOTAL HOURS:

35.

MODE:

In-person

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To provide tools, guidance, and practical experiences necessary for the effective implementation of the STCW Convention, verifying that the training and certification system complies with the international standards required to prepare maritime personnel and educational institutions for an independent evaluation.

To raise awareness about the application of the information dissemination provisions established in Regulations I/7 and I/8 of the Convention.

TARGET GROUP: Personnel of the Maritime Administration responsible for the implementation, control, and monitoring of the STCW Convention and Code.

INTERNATIONAL INSTRUMENT:

- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
- Code for the Implementation of IMO Instruments (III Code).

ASSOCIATED GOVERNANCE STATE:
Flag State.

LINKAGE TO THE III CODE:
Parts 1 and 2.

INDEPENDENT EVALUATION OF COMPLIANCE WITH THE STCW CONVENTION

GENERAL CONTENT:

1. International Convention on Standards of Training, Certification and Watchkeeping for Seafarers.
2. Verify the capacity of the Maritime Authority, in accordance with the requirements of the STCW Convention/2010.
3. Ensure that the provisions of the Convention and the Code, including their amendments, are included in the quality standards system of the Maritime Administration.
4. Verify that the implementation of objectives, defined in accordance with the provisions of paragraph 1 of Regulation I/8, is found in all activities related to the training, evaluation of competence, certification, including medical certificates, endorsements, and revalidation.
5. Verify the qualifications and experience of the instructors and evaluators.
6. Check the application and degree of knowledge and compliance with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, STCW/78 as amended.

TOTAL HOURS:

35.

MODE:

In-person

LANGUAGE:

Spanish, with simultaneous interpretation into English.

DESK STUDY BY EVALUATORS: 4 MONTHS.

OBJECTIVE: To ensure that the national regulations comply with the objectives of instruction and training, as well as the related competence standards that must be attained, are clearly defined, and that the appropriate levels of knowledge, understanding, and competence for the examinations and evaluations stipulated by the Convention are determined.

TARGET GROUP: Maritime Administrations to comply with Regulations I/7 and I/8 provided for in the STCW Convention.

INSTRUMENT INTERNATIONAL:

- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers.

ASSOCIATED GOVERNANCE STATE:
Coastal State

LINK TO THE III CODE:
Part 1 and 2.

PROTECTION OF THE MARINE ENVIRONMENT



IMO MODEL COURSE 4.02 OIL POLLUTION RESPONSE OPERATOR (OPRC LEVEL 1)

GENERAL CONTENT:

1. Introduction to oil spills
2. Current regulations.
3. Properties and behavior in the marine environment.
4. System for commanding incidents.
5. Means and equipment for response operations.
6. Actions for containing, recovering, and temporary storage in the event of these types of spills.
7. Use of mechanical and chemical means for the absorption and dispersion of hydrocarbons.
8. Type of cleanup for coasts, seas, and the aquatic environment.
9. Sampling and testing system
10. Health and safety in response and environmental impact operations.

TOTAL HOURS:

27.

MODE:

In-person / Online.

IDIOMA:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To prepare and train operators to respond effectively to oil pollution emergencies, providing the basic theoretical knowledge for the initial management of spills and to act appropriately in an environment affected by hydrocarbons in the aquatic environment.

TARGET GROUP: Personnel from the oil industry, personnel working in the maritime sector (public or private), who perform duties in areas of operation, prevention, and response actions to events that may generate pollution from a discharge into the marine environment, and generate a response action to contamination by hydrocarbons, their derivatives, or other liquid noxious substances.

INTERNATIONAL INSTRUMENT:

- International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention, 1990).
- MARPOL Convention for the Regulation of Pollution from Ships by Discharges of harmful substances carried by ships.
- International Convention on Civil Liability for Oil Pollution Damage, 1969, as amended by the Protocols of 1976 and 1992 (CLC Convention).

ASSOCIATED GOVERNANCE STATE:
Flag State and Coastal State.

LINKAGE TO THE III CODE:
Part 1 and 2.

IMO MODEL COURSE 4.03 FIRST RESPONSE OPERATOR (OPRC LEVEL 2)”

CONTENIDO GENERAL:

1. Coordinate and evaluate response operations to an oil spill in the aquatic environment.
2. Crisis management for oil spills.
3. Incident management team and incident command system.
4. Decision-making in cases of oil spills.
5. Contingency planning and response options.
6. Behaviour and destination of oil.
7. Environmental sensitivity mapping and waste management.
8. Oil containment and recovery.
9. Emergency and contingency planning exercises.
10. Public emergency information and communication

TOTAL HOURS:

35.

MODE:

In-person / Online

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To prepare and train supervisors and managers to lead and manage the response to oil spills, including the planning, coordination, and mitigation of environmental impacts, following IMO international standards. Upon completion, the student is prepared to make decisions, mitigate the consequences of said spills, and advise management appropriately.

TARGET GROUP: Supervisors or managers at the incident site who are in charge of response operations against pollution or who perform high-level management duties in public and private maritime organizations and who have completed IMO Course 4.02.

INTERNATIONAL INSTRUMENT:

- International Convention on Oil Pollution Preparedness, Response and Co-operation (OPRC Convention, 1990)”.
- MARPOL Convention for the Regulation of Pollution from Ships by Deliberate Discharges of Harmful Substances from Ships.
- International Convention on Civil Liability for Oil Pollution Damage, 1969, as amended by the Protocols of 1976 and 1992 (CLC Convention).

ASSOCIATED GOVERNANCE STATE:
Flag State and Coastal State.

LINKAGE TO THE III CODE:
Parts 2 and 3.

IMO MODEL COURSE 3.12 ASSESSMENT, EXAMINATION AND CERTIFICATION OF SEAFARERS

GENERAL CONTENT:

The purpose of this course is to help institutions that impart training or qualification, and teaching staff to plan, organize, and teach new courses or to update or complement existing teaching material when quality can be improved. The intention of the IMO is not to impose a rigid program, nor to replace the instructor's work with audiovisual material; the knowledge, experience, and suitability of the instructors are key components in the transfer of knowledge and skill development of the participants.

TOTAL HOURS:

38.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To apply international provisions related to the training, evaluation, and certification of masters, officers, and crews of merchant ships, ensuring their adequacy to national legislation. The course seeks to implement evaluation methodologies for development projects and capacity building, analyze the needs for training and certification processes in the maritime sector, and determine the most appropriate methods for evaluating competencies. It also aims to properly plan, administer, and carry out examinations and evaluations of competence, in addition to expediting and controlling the certification titles issued to maritime personnel, thereby strengthening the quality and standardization of education in the sector.

TARGETED GROUP: Teaching staff who work in centers for competence evaluation, in the preparation of assessment instruments to measure performance, and the verification of competencies acquired by students.

INTERNATIONAL INSTRUMENT:

- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).

ASSOCIATED GOVERNANCE STATE:
Flag State and Coastal State.

LINKAGE TO THE III CODE:
Part 2.

IMO MODEL COURSE 6.09 TRAINING COURSE FOR INSTRUCTORS

GENERAL CONTENT:

1. Introduction to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW).
2. Design of instructional objectives oriented toward competence.
3. Didactic communication.
4. Audiovisual media
5. Pedagogical evaluation.
6. Planning of a course.

TOTAL HOURS:

60.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To plan, program, prepare, and implement training courses for maritime personnel within their own specialty. To apply and utilize different teaching methods according to the objectives to be achieved, for application individually or in groups as appropriate.

TARGET GROUP: According to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, STCW 78 and its subsequent amendments, Regulation I/6, which establishes that the training, qualification, training and/or evaluation, both on land and on board merchant ships, must be structured in conformity with published programs and include the necessary methods and means of delivery, procedures, and educational material to achieve the prescribed competence standards, and must be delivered, supervised, evaluated, and endorsed by qualified personnel. Therefore, this course is mandatory for all personnel who provide training, qualification, or instruction to merchant, fishing, or pleasure boat seafarers.

INTERNATIONAL INSTRUMENT:

- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), Regulation I/6 of the Convention and Section A-I/6 of the Code.

ASSOCIATED GOVERNANCE STATE:
Not applicable.

LINKAGE TO THE III CODE:
Not applicable.

WORKSHOP ON IMPLEMENTATION OF MARPOL ANNEX VI

GENERAL CONTENT:

1. Climate Change and Maritime Transport.
2. IMO-MARPOL Relationship.
3. Chapter 1 - Annex VI.
4. Chapter 2 - Annex VI.
5. Chapter 3 - Emission Control.
6. Chapter 4 - Energy Efficiency.
7. Chapter 5 - Net Zero Emissions Framework.
8. Chapter 6 - Inspections and Certification

TOTAL HOURS:

30.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To provide basic knowledge of MARPOL Annex VI for its implementation within the national regulatory framework.

TARGET GROUP: Personnel who carry out inspection and surveys of ships and maritime terminals.

INTERNATIONAL INSTRUMENT:

- MARPOL Convention, Annex VI.
- IMO Strategy for the reduction of GHG (Greenhouse Gas).

ASSOCIATED GOVERNANCE STATE:
Flag State, Coastal State and Port State.

LINKAGE TO THE III CODE:
Parts 2, 3 and 4.

FISHING INSPECTION ON THE HIGH SEAS

GENERAL CONTENT:

1. International regulations applicable to fishing.
2. Regional Fisheries Management Organizations (RFMOs).
3. Fisheries Conservation Measures.
4. Surveillance, control, and alert of fishing fleets.
5. Planning of Fisheries Inspection Operations.
- 6.

TOTAL HOURS:

20.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To apply monitoring, control, and surveillance procedures on the High Seas, in consonance with the conservation measures established in the international agreements of which our country is a Member or Cooperating Party.

TARGET GROUP: Personnel from institutions related to the fishing sector, who participate in the control of foreign fishing fleets and the planning of high seas fishing inspection operations.

INTERNATIONAL INSTRUMENT:

- UNCLOS: (Convention on the Law of the Sea): Part V Exclusive Economic Zone and Part VII High Seas, establishes obligations for Coastal States regarding the conservation and cooperation of migratory.
- New York Agreement: Establishes the bases for organization at a regional level of RFMOs (Regional Fisheries Management Organizations)
- FAO Compliance Agreement: Establishes the obligations of Flag States regarding the fishing vessels flying their flag.
- AMERRP (Agreement on Minimum Requirements for Entry of Foreign Fishing Vessels): Establishes the obligations of Coastal States to carry out inspections and apply entry requirements to foreign fishing vessels.
- SPRFMO; CCAMLR; CIAT: and their various conservation measures.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINKAGE TO THE III CODE:
Not applicable.

WORKSHOP ON MARINE PROTECTED AREAS (MPA) AT THE REGIONAL LEVEL AND BEYOND NATIONAL JURISDICTION

GENERAL CONTENT:

1. Marine Protected Areas and actors involved in effective creation and management processes.
2. International guidelines applied to MPAs.
3. Challenges and opportunities of the regional and high seas biodiversity treaty (BBNJ – Biodiversity Beyond National Jurisdiction).
4. Projects under development (RAMPAS - Regional Marine).
5. Protected Area Network of the South East Pacific).

TOTAL HOURS:

20.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To provide experiences in the national and regional administration of MPAs, with special focus on regional cooperation, projects in execution, and challenges and opportunities related to the High Seas Treaty (BBNJ).

TARGET GROUP: Personnel involved in the management of Marine Protected Areas.

INTERNATIONAL INSTRUMENT:

- World Commission on Protected Areas (WCPA), through the International Union for Conservation of Nature (IUCN). Particularly Sensitive Sea Areas (PSSAs), through the Marine Environment Protection Committee (MEPC), dependent on the
- International Maritime Organization (IMO).
- Special Areas of the International Convention for the Prevention of Pollution from Ships (MARPOL), dependent on the IMO.
- Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction BBNJ.
- Regional Marine Protected Area Network of the Southeast Pacific (RAMPAS), dependent on the Permanent Commission for the South Pacific (CPPS).
- Convention on Biological Diversity (CBD), dependent on the United Nations Environment Programme (UNEP).

ASSOCIATED GOVERNANCE STATE:
Flag State, Coastal State and Port State.

LINKAGE TO THE III CODE:
Not applicable.

WORKSHOP ON PHASE OF BUILDING EXPERIENCES ON RADIATED UNDERWATER NOISE FROM MARITIME TRANSPORT

GENERAL CONTENT:

1. International guidelines associated with URN Underwater Radiated Noise – Phase of Building Experiences of IMO guidelines and working groups.
2. GEF UNDP IMO GLONOISE Project.
3. Measures for mitigating negative impacts in the short, medium, and long term.
4. Relationship between URN and GHG.
5. Experiences of measuring and implementing voluntary guidelines at the national level, and linkage with Marine Protected Areas.

TOTAL HOURS:

20.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To provide tools that allow for the development of capabilities for a better evaluation of the impacts of URN, based on the phase of building experiences of the revised IMO guidelines and the GLONOISE project. The above with a special focus on developing countries and regional cooperation.

TARGET GROUP: Personnel who participate in the management of Marine Protected Areas and the establishment of technical guidelines related to the protection and conservation of the marine environment.

INTERNATIONAL INSTRUMENT:

- International Convention for the Prevention of Pollution from Ships (MARPOL).
- Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of Areas beyond National Jurisdiction, BBNJ.
- Network of Marine and Coastal Protected Areas of the Southeast Pacific (RAMPAS)
- IMO Guidelines

ASSOCIATED GOVERNANCE STATE:
Flag State, Coastal State and Port State.

LINKAGE TO THE III CODE:
Not applicable.

WORKSHOP ON IMPLEMENTATION OF MEASURES FOR THE PREVENTION OF INVASIVE EXOTIC SPECIES BY MEANS OF BIOFOULING

GENERAL CONTENT:

1. International context.
2. Invasive exotic species.
3. Biofouling.
4. Biofouling project.
5. National level regulations.
6. Experience and lessons learned.

TOTAL HOURS:

12.

MODE:

In-person / Online..

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To Present the IMO guidelines for the management of biofouling and experiences of their implementation in the national scope.

TARGET GROUP: Personnel from the maritime industry who are involved in the management of waste from ships, Shipyards, workshops and professional diving activities for hull cleaning.

INTERNATIONAL INSTRUMENT:

- MEPC.378(80) Guidelines for the control and management of biofouling to minimize the transfer of aquatic invasive species, dated July 7, 2023.
- MEPC.1/circ.918 Guidance on in-water cleaning of ship's biofouling, dated April 29, 2025.
- ISO 20679:2025 tests of in-water hull cleaning systems.
- Maritime Circular N° A-52/007, "Establishes the conditions to authorize the underwater cleaning of live ships, in the ports and coastal areas of the republic, tending to avoid the introduction of exotic invasive species into the marine environment", dated April 04, 2025.

ASSOCIATED GOVERNANCE STATE:
Flag State, Coastal State and Port State.

LINK TO THE III CODE:
Not applicable

WORKSHOP ON IMPLEMENTATION OF MITIGATION MEASURES FOR MARINE LITTER

GENERAL CONTENT:

1. Marine litter and microplastics.
2. International Guidelines (UNESCO, FAO, IMO, Plastic Treaty).
3. National experience in beach cleaning and its utility (environmental education and care of the aquatic environment).
4. Governance Models at the national, regional, and linkage with marine protected areas.
5. Port reception facilities.

TOTAL HOURS:

14.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To provide tools that allow for the development of capabilities for a better implementation of mitigation and governance measures, confront contamination by marine litter, and microplastics in maritime and fishing transport.

TARGET GROUP: Personnel from the Maritime Administration involved in environmental management and the protection of the marine and fishing environment.

INTERNATIONAL INSTRUMENT:

- International Convention for the Prevention of Pollution from Ships (MARPOL).
- United Nations Educational, Scientific and Cultural Organization (UNESCO).
- Food and Agriculture Organization of the United Nations (FAO).
- Asia Pacific Economic Cooperation (APEC) Forum.
- National Regulations.

ASSOCIATED GOVERNANCE STATE:
Coastal State, Port State and Flag State.

LINK TO THE III CODE:
Not applicable.

HYDROGRAPHY AND OCEANOGRAPHY



COURSE ON NAUTICAL CHART PRODUCTION (PAPER AND ELECTRONIC) USING CARIS HPD

GENERAL CONTENT:

1. Fundamentals of nautical cartography.
2. Introduction to CARIS HPD.
3. Geospatial data management.
4. Paper chart production.
5. Electronic Navigational Charts (ENC) production.
6. Maintenance and updating.

TOTAL HOURS:

80.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

*** Participants are required to have workstations (laptops) with specialized software and licenses for practical lessons, including bathymetric data processing, undersea feature review, and nautical chart production.**

OBJECTIVE: To train participants in the production of nautical charts (paper and electronic) using the CARIS HPD suite. The course emphasizes the management of a single unified database to generate multi-format products, ensuring quality control, data consistency, and compliance with international standards for safety of navigation.

TARGET GROUP: Personnel from Hydrographic Services, Naval Officers, Geomatics Engineers, Cartographers, maritime consulting firms, and professionals engaged in marine geospatial data management.

INTERNATIONAL INSTRUMENT:

- International Hydrographic Organization (IHO) publications.
- S-57 (Digital data transfer).
- S-52 (Display specifications).
- S-4 (Paper chart specifications).
- S-100 for the future of digital navigation.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Part 3.

WORKSHOP ON INTEGRATED COORDINATION FOR THE OPERATION OF THE NATIONAL TSUNAMI WARNING SYSTEM (SNAM) IN CHILE

GENERAL CONTENT:

1. National regulations and standards.
2. Geophysical fundamentals.
3. Tsunami monitoring network.
4. SNAM evaluation and dissemination.
5. Personnel training and capacity building.
6. Infrastructure, equipment, and connectivity.

TOTAL HOURS:

16.

MODE:

In-person

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To strengthen the technical, operational, and coordination capacities of emergency management systems through the integration of technologies, scientific developments, standardized workflows, and critical analysis of real events, to ensure a coordinated, timely, and effective response to tsunami-generating phenomena.

TARGET GROUP: Personnel from Hydrographic Services, risk management agencies, coastal municipalities, and professionals engaged in emergency and natural hazard management.

INTERNATIONAL INSTRUMENT:

- Not applicable; however, the International Tsunami Information Center (ITIC) is the primary training body supporting SNAM and other warning centers.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Part 3.

WORKSHOP ON BATHYMETRIC DATA ANALYSIS FOR THE IDENTIFICATION AND PROPOSAL OF UNDERSEA FEATURE NAMES

GENERAL CONTENT:

1. General aspects of multibeam echosounder systems and hydrographic surveying.
2. Bathymetric data analysis and processing.
3. Identification and characterization of undersea features.
4. Regulatory aspects and methodology for proposal preparation.
5. Generation of products related to undersea feature naming.

TOTAL HOURS:

30.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

*** Participants are required to have workstations (laptops) with specialized software and licenses for practical lessons, including bathymetric data processing, undersea feature review, and nautical chart production.**

OBJECTIVE: To provide general knowledge in bathymetric data analysis for the identification and delineation of undersea features, enabling the preparation of naming proposals to be submitted to the Subcommittee on Undersea Feature Names (SCUFN), based on field-acquired bathymetric data, processed and validated in accordance with the standards of the International Hydrographic Organization (IHO).

TARGET GROUP: Personnel in the hydrography field with basic knowledge of bathymetric data processing and editing, as well as the use Geographic Information Systems (GIS) for the generation of geospatial data products.

INTERNATIONAL INSTRUMENT:

- IHO Publication B-6: Standardization of Undersea Feature Names - Guidelines, Proposal Form, Terminology.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Part 3.

WORKSHOP ON BATHYMETRIC DATA PROCESSING, FROM ACQUISITION TO GEOSPATIAL PRODUCT GENERATION

GENERAL CONTENT:

1. General aspects of multibeam echosounder systems.
2. Hydrographic surveying - bathymetric data acquisition.
3. Bathymetric data processing.
4. Generation of geospatial products.

TOTAL HOURS:

30.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

*** Participants are required to have workstations (laptops) with specialized software and licenses for practical lessons, including bathymetric data processing, undersea feature review, and nautical chart production.**

OBJECTIVE: To provide knowledge on the generation of geospatial product based on field-acquired, bathymetric data, processed and validated in accordance with the standards of the International Hydrographic Organization (IHO).

TARGET GROUP: Personnel in the hydrography field with basic knowledge of bathymetric data processing and editing.

INTERNATIONAL INSTRUMENT:

- IHO Publication S-44, Standards for Hydrographic Surveys.
- IHO Publication S-57, Transfer Standard for Digital Hydrographic Data.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Part 3.

WORKSHOP ON MARITIME SAFETY INFORMATION (MSI)

GENERAL CONTENT:

1. World-Wide Navigational Warning Service (WWNWS).
2. Maritime Safety Information (MSI).
3. International Enhanced Group Call (EGC) Service.
4. Navigational Telex (NAVTEX).
5. WWNWS guidance documentation.
6. NAVAREA National Coordinator.
7. Nautical charts corrections.

TOTAL HOURS:

20.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To enhance the quality and accuracy of the Maritime Safety Information service in the region through strengthened collaboration and information exchange among NAVAREA Coordinators.

TARGET GROUP: NAVAREA Coordinators.

INTERNATIONAL INSTRUMENT:

- IMO Resolutions A.705(17) and A.706(17).
- Joint IMO/WHO/WMO Manual on Maritime Safety Information (IHO Publication S-53).
- International NAVTEX Manual.
- International SafetyNET Manual.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Part 3.

INTRODUCTORY WORKSHOP ON S-101 ELECTRONIC NAVIGATIONAL CHART PRODUCTION USING CARIS HPD

GENERAL CONTENT:

1. Fundamentals of nautical cartography.
2. Introduction to CARIS HPD.
3. Geospatial data management.
4. Production of Electronic Navigational Charts (ENC).
5. Maintenance and updating.

TOTAL HOURS:

45.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

*** Participants are required to have workstations (laptops) with specialized software and licenses for practical lessons, including bathymetric data processing, undersea feature review, and nautical chart production.**

OBJECTIVE: To introduce the fundamentals of the S-101 standard within the framework of the International Hydrographic Organization (IHO) S-100 Universal Hydrographic Data Mode, and to enable participants to understand the transition to the new generation of electronic charts, highlighting interoperability with other products, such as S-102, S-104, and S-111. Emphasis will be placed on how the enhanced data structure and layer-based filtering of S-101 support more precise and consistent display, optimizing decision-making and enhancing safety of navigation.

TARGET GROUP: Personnel from Hydrographic Services, Naval Officers, Geomatics Engineers, Cartographers, maritime consulting firms, and professionals engaged in marine geospatial data management.

INTERNATIONAL INSTRUMENT:

- IHO S-100 and S-101.
- S-57 and S-63.

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Part 3.

WORKSHOP ON THE INTRODUCTION TO THE REGULATORY FRAMEWORK GOVERNING MARINE SCIENTIFIC AND TECHNOLOGICAL RESEARCH UNDER CHILEAN JURISDICTION

GENERAL CONTENT:

1. Regulatory framework.
2. Aspects of marine scientific and technological research involving national and foreign entities and/or vessels.
3. Control, traceability, and compliance in information reporting.
4. Related activities.

TOTAL HOURS:

20.

MODE:

In-person / Online.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To present an introduction to the current Chilean legal framework governing the conduct of marine scientific and technological research in national waters and maritime areas, with the aim of providing the tools for appropriate advisory support and informing the administrative procedures required to obtain the corresponding authorization.

TARGET GROUP: Personnel from Hydrographic Services, Naval Officers, Geomatics Engineers, Cartographers, maritime consulting firms, and professionals engaged in marine scientific and technological research activities in waters under national jurisdiction.

INTERNATIONAL INSTRUMENT:

- United Nations Convention on the Law of the Sea (UNCLOS).

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Parts 1 and 3.

COURSE ON THE DEVELOPMENT OF TSUNAMI INUNDATION MAPS (CITSU)

GENERAL CONTENT:

1. National regulations and standards.
2. Tsunami fundamentals.
3. Numerical modeling of tsunamis.
4. Geospatial data management.
5. Development of Tsunami Inundation Maps.

TOTAL HOURS:

30.

MODE:

In-person.

LANGUAGE:

Spanish, with simultaneous interpretation into English.

OBJECTIVE: To train professionals in the development of Tsunami Inundation Maps to deliver standardized products required for territorial planning and coastal risk management.

TARGET GROUP: Personnel from Hydrographic Services, risk management agencies, coastal municipalities, and professionals engaged in emergency and natural hazard management.

INTERNATIONAL INSTRUMENT:

- Not applicable; however, Chile operates under the SENAPRED Law (National Disaster Prevention and Response Service).

ASSOCIATED GOVERNANCE STATE:
Coastal State.

LINK TO THE III CODE:
Part 3.

Maritime
Chile



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