MONALISA 2.0 – Activity 4

Report on procedures for the application of existing reference documents

Document No: MONALISA 2.0_D 4.4.2

Co-financed by the European Union
Trans-European Transport Network (TEN-T)
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# Monalisa 2.0

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INTRODUCTION
This task aims to facilitate the Member States the identification of the legal provisions such as United Nations and IMO Conventions and Resolutions, and European Guidelines and Standards that could be applied in scenarios where accidents may occur.

A rapid and easy query of these Standards could initially help to guide the course of action of the State Member in order to demand accountability to the ship-owners and the crew or the loader, as applicable, for the possible loss of lives, the damage the accident may cause to the health of people on board and coastal population, the damage it may cause to the territorial sea and the exclusive economic zone of the Member State, and the possible pollution of the marine, terrestrial or atmospheric environment.

Based on the previous, this task is orientated to identify the tools that International Standards offer to the State Member, which complement those (to be) included in Task 4.4.4. “Procedures after the accident”, in order to help identifying and delimiting the liability of the casualty.

This document contains general information about the obligations concerning the crew and the state of the vessel, giving in some occasion illustrative examples of casualties in which these obligations were not fulfilled with heavily negative consequences.

In addition, lists of the relevant directives, standards, regulations, conventions, etcetera, have been included regarding different aspects of them, such as inspection and survey, type of vessel, marine equipment, obligations of the parties, pollution and others.

Finally, an Annex is attached to this report, where the main Conventions and Agreements contained in this compilation are developed in terms of what is contemplated in these pages.

INTERNATIONAL REGULATIONS AFFECTING THE STUDY PURPOSES
1. OBLIGATIONS OF THE CREW.

1.1. OBLIGATIONS INCLUDED IN SOLAS AND MARPOL CONVENTIONS

In this section, the fulfilment of the obligations that the SOLAS Convention, Chapter III part B, rule 19 requires the crew will be analysed.

Regardless the following paragraphs, the checking of the existence of training manuals and auxiliary means for the on board training (according to Rule 35) would be obligatory, as well as the existence of instructions for the on board maintenance of rescue devices (Rules 36 and 37).

1.1.1. Regarding training, periodical exercises for emergency and maintenance of lifesaving devices.

• Training

It is necessary to check that each member of the crew to whom any duties in case of emergency has been assigned is familiar with them before starting the trip.

Training will be given to all new employees on board as soon as possible, no more than two weeks after joining the ship, on the use of lifesaving appliances, included the equipment of survival vessels and fire extinguishing devices. However, if the crew member is assigned to the vessel according to a regular shifts program, he will receive training no more than two weeks after the date of the first incorporation in the ship. Instructions for the use of fire-fighting devices and devices for salvage of the vessel and for survival in the sea will be at the same intervals that the exercises. The instruction can be given separately on different parts of rescuing and extinction of fire devices, but trainers must encompass all within a period of two months.

It shall be verified that all crew members have been instructed, at least on:

- The handling and the use of the inflatable survival crafts of the ship;
- The problems caused by hypothermia, first aid indicated in case of hypothermia, and other cases where it is appropriate to give first aid;
- The use of the life-saving appliances the ship carries in case of bad weather and bad sea;
- The handling and use of fire extinguishing devices.

At regular intervals, not exceeding four months, training shall be provided on the use of lifeboat davit rafts on board of any ship equipped with such devices. Whenever possible, this would include the inflation and launching of a lifeboat. This may be a special survival craft intended only
to provide training and not to be part of the equipment of salvage of the vessel; in such case this should be clearly marked.

- Exercises

✓ Checking the existence of a list of obligations onboard.

✓ Checking that all crew members have taken part in exercises of abandonment of the ship and fire emergencies each month, according to A.690 (17) Resolution - Periodical inspection of abandon ship and fire drills on passenger ships.

  o Regarding the abandon of the ship drill

Checking that passengers and crew have been instructed on the proper apparel; the correct placement of the lifejacket and that passengers understand the call to the meeting points.

Checking that the crew have participated in at least one abandon of the ship drill and one fire drill per month; at least once loosened one of the lifeboats after the necessary preparation for setting it afloat; made the lifeboat engine work; activated the davits used to set the lifeboats afloat; carried out the training exercises for search and rescue of the passengers trapped in their cabins, and if necessary, given instructions about the utilization of the radio life-saving appliances.

Although when it comes to elaborate this report, the causes of the loss of lives at the accident of the South Korean vessel Seawol are unknown, it is indeed known that passengers did not take the lifeboats and did not attend the meeting points. In an accident like this, it would be necessary to check the protocols previously mentioned.

Checking that each of the lifeboats has been put afloat and maneuvered in the water by the crew assigned for handling at least once every three months during an abandon ship exercise.

Checking that all lifeboats, at least once every three months, have been loosened, and at least once per year launched and maneuvered in the water.

Checking the emergency lighting at the meeting points of the passengers and the abandonment of the ship on each abandon ship exercise.

  o On fire-fighting exercises

It shall be verified that fire-fighting exercises are planned considering the standard practices for different emergency cases that may take place depending on the type of ship and cargo.

Checking that the following actions in each practice of firefighting have been considered:
- Go to the positions and get ready for the tasks required to each member of the crew.
- Start a fire pump using at least the two jets of water required, in order to verify that the system works properly;
- Checking the fireman’s equipment and other individual rescue equipment;
- Checking the relevant communications equipment;
- Checking the operation of the watertight doors, fire doors, fire protection butterfly valves and the inlet and outlet keyholes of the ventilation systems;
- Checking the necessary provisions for the subsequent abandonment of the ship.

Equipment used in the exercises shall immediately be back in conditions of operation and any faults or defects discovered during the period shall be solved as soon as possible.

• Cargo

It shall be checked whether it has complied with the provisions of the SOLAS Convention. Chapter VI, part A; rules 2 and 5. In case of dangerous goods, application standards are arranged in Chapter VII of the SOLAS Convention part A for dangerous goods in packages and part A-1 for solid dangerous goods in bulk.

Check if the shipper provided appropriate information about the load so that you can take the necessary precautions for its proper stowage and transport without risk.

Checking if the shipper provided appropriate information about the load so the relevant precautions for its proper stowage and risk free transport can be taken would be necessary.

It must be checked if loading units and transport units carried on deck or under deck were stowed and fastened in accordance with the Resolution A.714 (17) amended.

It will be verified that the loading, unloading and stowage of bulk cargoes have followed the code of safe practice in accordance with the Resolution A. 862 (20), amended by MSC 238 (82).

Checking would be necessary, in case of transport of grain, that the provisions of the International Code for the Transport of Grain have been followed and that the ship has the authorization document required by the code.

• Annotations

The entries in the log book about the details of the exercises of abandonment of the ship and fight against fires, the exercises with other devices for rescuing and training on board shall be checked. If at the prearranged time it is not performed in its entirety a meeting, an exercise or a
training session, this shall be recorded in the ship’s log, indicating the circumstances that came together and the scope of the meeting, the exercise or the training session that took place.

1.1.2. With respect to the maintenance and inspection of the life-saving appliances. SOLAS Part B, Rule 20.

It shall be checked that instructions for on-board maintenance have come from the life-saving appliances referred to rule 36 of this SOLAS chapter and peacekeeping operations will be carried out in accordance with them. Yet the log book will be analyzed to verify that the inspections listed below have been registered in the mentioned ship’s logbook.

In general the existence of technical manuals of operations and maintenance on board must be checked.

- Maintenance of strips

It shall be verified that the strips used in launching devices have been inspected regularly, paying particular attention to the areas which pass through pulleys, and that they have been renewed when it has been necessary due to its deterioration or at intervals not exceeding five years, if this period is shorter. The existence of spare parts and repairing equipment for the life-saving appliances and components of these subject to intensive wear or deterioration shall be checked and have to be replaced periodically.

- Weekly inspection

It shall be verified that each week the tests and following inspections are carried out and the report on the inspection shall be included in the log book:

All survival crafts, rescue boats and launching devices have been subjected to a visual inspection in order to verify that they are ready to be used. This inspection will analyze the State of hooks, attachment to the lifeboats and the release with charging mechanism being properly and completely tight.

That each engine of the lifeboats and rescue boats have been put on during a total period of at least three minutes (or the time prescribed by the manual of the manufacturer), provided that the temperature is above the required minimum temperature for starting the engine. At the same time the transmission and the gear train engaging have to be checked.

Lifeboats, except free-fall ones, of cargo ships will be moved away from the stowage position, with no one aboard, as far as necessary to demonstrate the satisfactory operation of the launching devices, whenever the weather conditions and the sea state allow this; and the general emergency alarm system shall be tested.
• Monthly inspections
  ▪ That all lifeboats, except free-fall ones, have been moved away from the stowage positions, with no one aboard, at the expense to the weather and the sea conditions.
  ▪ That every month an inspection of the life-saving appliances has been carried out, including lifeguards and boats equipment in order to verify that they are complete and in good condition. The report of inspection shall be included in the log book.

• Other inspections

It shall be checked that the service maintenance of inflatable survival crafts, inflatable lifejackets and marine evacuation systems, and maintenance and repair of the inflated rescue boats has been performed.

The maritime Safety Committee considered at its eighty-third session period (3 to 12 October 2007) a recommendation about the need pointing out to all stakeholders, the importance of the crews of the vessels having access to technical manuals of operations and maintenance of onboard updated, accurate and easy to use, in particular regarding maritime equipment essential for safety.

In addition, the Committee took note of the recommendation No. 71 of the IACS (in September 2000), entitled Guide for the Development of Shipboard Technical Manuals (Guide for the preparation of technical manuals on board), and agreed that this guide is a useful reference for the people responsible for drawing up such manuals.

It is recommended that the technical manuals of operations and maintenance on board are available in the working language of the ship and, if this language is not Spanish, French or English, it should include a translation into one of these languages; and to encourage designers and builders of ships provide diagrams and drawings in which the functioning of the integrated systems of vessels are explained, as well as the operation of such systems in case of emergency, taking into account that it is possible that the ships systems are composed of different equipment, and to point out the above to the attention of ship-owners, captains, shipyards, recognized organizations and, in particular, maritime safety-critical equipment manufacturers.

1.1.3. Synthesis obligations under the SOLAS Convention

The reality of the vessel must correspond with the conformity of materials, equipment, installations and machinery covering the certificates issued by the Administration. Indeed, the issuance of a certificate corresponds to the location of the ship at the time it is extended. The consistence of the condition of the ship with the actual validity of these certificates should be supervised by the crew.
The ship and its equipment condition being maintained so as to conform to the provisions of these rules must be checked, in order to ensure that the ship remains, in every sense, able to sea without danger for itself or for the people on board.

It shall be verified that as the surveys of the ship pursuant to rules 7, 8, 9 or 10 take place, no changes in the structural layout, machines, equipment and other components that were the subject of survey, without prior authorization of the management, have been carried out.

It shall be checked if the stowage of the load was adequate and whether the consignor, in his case, gave the information necessary for its proper stowage and transport without risk.

There should be emergency planning on board in case of contamination by hydrocarbons and harmful substances liquids.

The industry standard that shall be applied to a vessel in emergency includes the compliance with the relevant provisions of the International Convention of Safety of Life At Sea (SOLAS) and the Emergency Plan aboard the MARPOL Convention for cases of contamination by oil and noxious liquid substances. These plans must be used by the staff in land of the owner and must be understood by the captain and crew of the vessel through practices and training aimed to verify the functionality of the plan.

For example, in the oral hearing of the Prestige case the following defaults to the pollution emergency Plan by hydrocarbons were demonstrated:

- Communications did not comply with the method of report or the scope of the information. The Prestige communications with the Spanish authorities were unsatisfactory:
  - The type of load/condition of the ship - probing/transfer capacity was not reported in an appropriate or accurate way.
  - The stability of the vessel or the non-damaged side tanks ballast was not reported in an appropriate or accurate way.
  - The state of the spaces for load and ballast (tank by tank) and state of the fuel tanks were not defined.

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1 Rule 7, surveys of passenger ships; rule 8, survey of rescue devices and other equipment of cargo ships; rule 9 survey of radio facilities in cargo ships; rule 10, survey of the structure, machines and equipment for cargo ships (when the ship is in a port ruled by another Contracting Government, the master or owner shall also immediately report to the port State authority, and the inspector appointed or the recognized organization to check if that report has been well performed)

2 Chapter I, Rule 11: maintenance of condition checked in the survey. Whenever the ship suffers an accident or that a defect is discovered and one or the other affect its safety or efficiency or integrity of its salvage or other equipment devices, the master or the owner of the ship must inform as soon as possible the Administration, the Inspector appointed or the organization recognized responsible for issuing the relevant certificate, who will make that the research aimed to determine following actions begin.
o The status of the main machine and auxiliary machinery, including steam boilers in the machinery deck were not identified. The non-working of the emergency towing and the lack of throwing devices were not reported.

o Neither a complete description nor the condition of the crew was provided.

o No advice to the authorities on contracts for response/support was provided.

o No load specifications were communicated to help contain pollution by coastal State plan.

In addition, the Captain did not gather his response team for the Ship Oil Pollution Emergency Plan (SOPEP) and opted to evacuate it. This deprived the ship of the staff necessary on board to respond appropriately to the pollution incident and to collaborate with immediate rescue efforts, leaving the ship approaching dangerously to the coast.

These actions or omissions by the shipowner settled Spain, the coastal State, at a clear disadvantageous place regarding the information relating to the State and the ship condition.

The communications and actions taken at the beginning of the Prestige incident, show that the shipowner did not follow the guidelines of the Ship Oil Pollution Emergency Plan (SOPEP). As a result, Spain, as the coastal State affected, faced a severely compromised vessel and without means to have access to critical information and control of the situation.

1.1.4. Obligations under MARPOL synthesis.

Regulation 6.4.3 of the Annex I: Regulations for the Prevention of Pollution by Oil:

“Whenever an accident occurs to a ship or a defect is discovered which substantially affects the integrity of the ship or the efficiency or completeness of its equipment covered by this Annex the master or owner of the ship shall report at the earliest opportunity to the Administration, the recognized organization or the nominated surveyor responsible for issuing the relevant Certificate, who shall cause investigations to be initiated to determine whether a survey as required by paragraph 1 of this regulation is necessary. If the ship is in a port of another Party, the master or owner shall also report immediately to the appropriate authorities of the port State and the nominated surveyor or recognized organization shall ascertain that such report has been made.”

1.2. OBLIGATIONS CONTAINED IN THE AGREEMENT OF TRAINING AND WATCHKEEPING (STCW AGREEMENT)

Verify that the following functions are carried out by the staff on board:
• The officer in charge of the deck watch shall:

  o  make rounds to inspect the ship at appropriate intervals;

  o  pay particular attention to:

      ▪  the condition and securing of the gangway, anchor chain and moorings, especially at the turn of the tide and in berths with a large rise and fall, if necessary, taking measures to ensure that they are in normal working condition;

      ▪  the draught, under-keel clearance and the general state of the ship, to avoid dangerous listing or trim during cargo handling or ballasting;

      ▪  the weather and the sea state

      ▪  the observance of all regulations concerning safety and fire protection; the level of water in the bilges and tanks,

      ▪  the water level in bilges and tanks;

      ▪  all persons on board and their location, especially those in remote or enclosed spaces; and

      ▪  the exhibition and sounding, where appropriate, of lights and signals;

  o  in bad weather, or on receiving a storm warning, take the necessary measures to protect the ship, persons on board and cargo;

  o  take every precaution to prevent pollution of the environment by the ship;

  o  in an emergency threatening the safety of the ship, raise the alarm, inform the master, take all possible measures to prevent any damage to the ship, its cargo and persons on board, and, if necessary, request assistance from the shore authorities or neighboring ships;

  o  be aware of the ship's stability condition so that, in the event of fire, the shore firefighting authority may be advised of the approximate quantity of water that can be pumped on board without endangering the ship;

  o  Offer assistance to ships or persons in distress;

  o  take necessary precautions to prevent accidents or damage when propellers are to be turned; and

  o  Enter, in the appropriate log-book, all important events affecting the ship.

• Officers in charge of the engineering watch shall:
In emergencies, give the alarm when, in his view, the situation so requires and take all possible measures to avoid damage to the ship, people that are on board and the load:

- in emergencies, raise the alarm when, in their opinion, the situation so demands, and take all possible measures to prevent damage to the ship, persons on board and cargo;

- be aware of the deck officer’s needs relating to the equipment required in the loading or unloading of the cargo and the additional requirements of the ballast and other ship stability control systems;

- make frequent rounds of inspection to determine possible equipment malfunction or failure, and take immediate remedial action to ensure the safety of the ship, of cargo operations, of the port and the environment;

- ensure that the necessary precautions are taken, within their area of responsibility, to prevent accidents or damage to the various electrical, electronic, hydraulic, pneumatic and mechanical systems of the ship; and

- Ensure that all important events affecting the operation, adjustment or repair of the ship’s machinery are satisfactorily recorded.
2. ANALYSIS OF THE STATE OF THE VESSEL

This section aims to make a quick draw of the rules that the ship should meet to facilitate the work of the officials of the Member State when it comes to analyzing the physical situation of the ship in accident and compare it with which it should have according to the rules in which is statutorily subjected.

It shall be checked that the vessel complies with the rules of the Resolution A 1053 (27) and with the modifications approved by the IMO, which are consequence of the International Conference on the Harmonized System on Survey and Certification (HSSC), 2011 held in London in the months of October and November 1988. So the vessel will be subjected to:


• Approval, by Resolution MEPC.39 (29), amendments to introduce the HSSC in the International Convention for the Prevention of Pollution from Ships, 1973 MARPOL, amended by the Protocol of 1978 (MARPOL 73/78)

• Adoption, by Resolution MEPC.132 (53), amendments to introduce the Harmonized System on Survey and Certification in Annex VI of the MARPOL Convention; and

• Approval by the amendments of Resolutions mentioned below aim to introduce, the HSSC in the following Codes:
  o International code for the construction and equipment of vessels carrying dangerous chemicals in bulk (code CIQ), (Resolutions MEPC.40 (29) and MSC.16 (58));
  o International code for the construction and equipment of ships carrying liquefied gases in bulk (IGC Code) (Resolution MSC.17 (58));
  o Code for the construction and equipment of ships carrying dangerous chemicals in bulk (code CGrQ) (Resolutions MEPC.41 (29) and MSC.18 (58).

2.1. GENERAL INFORMATION ON INSPECTION AND SURVEY OF THE SHIP

It shall be verified that the inspection of the ship have been made by designed Administration officials or recognized organizations approved by it. The specific commands assigned to inspectors appointed or recognized organizations and the conditions in which the authority has delegated the surveys.
Based on the above, it must be checked, if it is the case, that the repairs required by the inspectors of the Administration or recognized organizations have been conducted.

It must be checked if the boat has gone sailing after an inspection in which it was ruled that the ship could not go to sea without danger to the ship or persons on board unless the ship went to repair to a shipyard without danger to the ship or persons who are on board.

It must be checked that surveys of rescue devices and other equipment of cargo ships have been carried out.

It will be verified that radio facilities and radar surveys have been conducted on cargo ships.

It must be checked that the inspection of the hull, machines and the equipment for cargo ships have been carried out.

It will be verified that the proper maintenance of the state of the ship after the inspection has taken place in a way:

- To be sure that the condition of the ship and his team ensure that the ship remains, in every sense, unable to sea without danger for itself or for people who may be on board.

- To be sure that no change in the structural arrangement, machines, equipment and other components that were the subject of survey, without prior authorization from the Administration is made.

It must be checked that, if the ship has suffered a previous accident or if from this accident it is deducted that the captain knew any defects that could affect their safety, efficiency or integrity of its salvage or other equipment devices, the master or the owner of the ship reports to Administration (inspector or recognized organization).

2.2. GUIDELINES FOR THE INSPECTION AND SURVEY OF THE SHIP

Check that surveys were conducted following the guidelines approved as follows:

2.2.1. GUIDELINES TO CARRY OUT THE SURVEY UNDER THE CONVENTION SOLAS

- Guidelines under the SOLAS 1974 Convention, amended by the Protocol of 1988

- Guidelines to carry out the examinations required for the equipment for the cargo ship safety certificate
• Guidelines to carry out surveys required for the construction cargo ship safety certificate
• Guidelines for inspection of the outside of the hull of cargo ships
• Guidelines to carry out the examinations required for the cargo ship radio safety certificate
• Guidelines for surveys for the passenger ship safety certificate.

2.2.2. GUIDELINES TO MAKE UNDER THE 1966 LOAD LINES CONVENTION, AMENDED BY THE PROTOCOL OF 1988.

• Guidelines on surveys required for the International Load Line Certificate or International Load Line Exemption Certificate.

2.2.3. GUIDELINES TO MAKE UNDER THE MARPOL 73/78 CONVENTION

• Guidelines to carry out the examinations required for the international oil pollution prevention certificate.
• Guidelines to carry out the examinations required for the international certificate in pollution prevention for the carriage of noxious liquid bulk substances.
• Guidelines to carry out the surveys required in the international certificate of prevention of pollution by sewage.
• Guidelines to carry out the examinations required for international air pollution prevention certificate and the compliance with the code about the NOx.

2.2.4. GUIDELINES TO MAKE UNDER MANDATORY CODES

• Guidelines to carry out the examinations required for the international certificate of transportation of liquefied gases in bulk.
• Guidelines to carry out the examinations required for the international certificate of aptitude for the carriage of hazardous bulk chemicals and the certificate of aptitude for the carriage of dangerous chemicals in bulk.
• International code on the enhanced program of inspections during surveys of bulk carriers and oil tankers, 2011.

2.2.5. SURVEYS WITH GUIDELINES THAT ARE NOT PART OF THE HSSC

• Ships that transported INF load
• high speed craft Code
• Surveys referents to the control and management of ballast water and sediments from the ships.

3. DIRECTIVES COMPETENCE OF THE MEMBER STATE AND THE COMMISSION

3.1. CREW


3.2. INSPECTION AND SURVEY OF THE SHIP


3.3. MEMORANDUM OF UNDERSTANDING (MoU)


prevention and shipboard living and working conditions (port State control) (Text with EEA relevance).


3.4. MONITORING OF VESSELS AND TRAFFIC TRACKING. REFUGE FOR SHIPS IN NEED OF ASSISTANCE


3.5. REQUEST FOR VESSELS IN AND OUT COMMUNITY PORTS


3.6. MARINE EQUIPMENT


3.7. MARINE FUELS


3.8. SECURITY ON PASSENGER SHIPS


3.9. TANKER VESSELS


3.10. BULK SHIPS


3.11. OBLIGATIONS OF THE FLAG STATE


3.12. MARITIME ACCIDENTS. RESEARCH

### 3.13. PENALTIES FOR POLLUTION


### 3.14. SEVERAL ITEMS


4. REGULATIONS COMPETENCE OF THE MEMBER STATE AND THE COMMISSION


5. DECISIONS OF THE COMMISSION

The first decision considered regarding the field studied is on the cooperation in terms of accidental marine pollution, Decision No. 2850/2000/CE of the European Parliament and the Council of the 20 December 2000 in which a Community framework for cooperation in terms of accidental or deliberated marine pollution is established.

This decision is complemented with the communication of the 22 December 2006 of the European Communities commission, to the Council and the European Parliament, the European social-economic committee and the Regional Committee, about the provisions relative to the cooperation in terms of accidental or deliberated marine pollution after 2007.

We have considered these other three decisions in view of the importance which the first two have in the pollution produced in the biodiversity of the Mediterranean Sea and the last one in atmospheric pollution produced by hydrocarbons of the ships` fuel.

6. UNITED NATIONS CONVENTION ON THE LAW OF THE SEA UNCLOS CONVENTION

This Convention was approved after the United Nations Conference on the Rights of the Sea, where States recognized the desirability of establishing through this Convention, with the respect of the sovereignty of all States, a legal order for the seas and oceans which would facilitate international communication and promote the uses for peaceful purposes of the seas and oceans, equitable and efficient utilization of their resources, the study, protection and preservation of the marine environment and the conservation of their living resources, so from the objectives of this study we have partially selected the following concepts included in the articles of the Convention which are specified below.

- Protection of human life, article 146 and 155.
- Duties of the State over its flag vessels, article 94.
- Commitments made by the flag State on the rights of innocent passage of ships through their territorial sea: articles 17 et seq., 24.44, 45, 52 and 53.
- The rights of transit passage, article 38 et seq.
- On the conservation of the living resources; articles 61 and 117 et seq.
- On the use of living resources article 62;
- On the measures taken to prevent, reduce and control pollution of the marine environment, articles 194, 208, 210, 211, 212, 214, 216, 217, 218, 219, 220.
- On measures to take to prevent pollution resulting from shipping accidents, article 221.
- On measures concerning pollution from the atmosphere or through it, article 222.
7. IMO CONVENTIONS

In 1945, representatives of 50 countries met in San Francisco at the United Nations Conference on International Organization to draw up the United Nations Charter and the United Nations officially came into existence on 24 October 1945. The founders of the United Nations envisaged it as comprising not just one but a series of international organizations, each dealing with a different subject, some humanitarian, some technical. As a result, a number of specialized agencies were established and agencies which already existed were brought within the framework of the United Nations. In 1944 the International Civil Aviation Organization was founded. The Food and Agriculture Organization (FAO) and the United Nations Educational, Scientific and Cultural Organization (UNESCO) were created in 1945, followed by the World Health Organization (WHO) in 1947.

A conference in Geneva was convened in 1948 to consider the establishment of a new Organization to deal with international shipping, especially shipping safety. The conference ended with the adoption of the Convention for the Establishment of an Inter-Governmental Maritime Consultative Organization.

7.1. CONVENTIONS CONCERNING ENVIRONMENT

- INTERVENTION PROT 1973 - Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances other than Oil, 1973, as amended.
7.2. CONVENTIOS CONCERNING SAFETY AND SECURITY


- COLREG 1972 - International Regulations for Preventing Collisions at Sea, 1960.
- SOLAS AGR 1996 - Agreement concerning specific stability requirements for ro-ro passenger ships.

### 7.3. CONVENTIONS CONCERNING TO LIABILITY

- PAL PROT 2002 - Protocol of 2002 to the Athens Convention relating to the Carriage of Passengers and their Luggage.

7.4. OTHERS

8. IMO ASSEMBLY RESOLUTIONS.

For the purposes of this study, within more than 1000 decisions of the IMO Assembly, those that directly affect the security and the inspections of the different types of ships have been selected, on the prevention of pollution, the transported substances that allow the direct intervention of the State to prevent the pollution of the sea, on the knowledge and skills of the crew to solve emergency episodes paying special attention to the ships of passage and products included by MARPOL, the correct stowage of the load and responsibilities required. Resolutions that modified conventions, especially SOLAS and MARPOL conventions, and which were included in its texts have not been reflected in this list as they are already included in the respective Chapter 6 of the modified agreements.

8.1. INSPECTIONS, RESEARCH, SURVEYS AND MANAGEMENT

- A.1053 (27) Survey guidelines under the harmonized system of survey and certification (HSSC), 2011.
- A.883 (21) Global and uniform implementation of the harmonized system of survey and certification (HSSC).
- A.1049 (27) International code on the enhanced program of inspections during surveys of bulk carriers and oil tankers, 2011.
- A.1022 (26) Guidelines on the implementation of the international safety management (ISM) code by administrations.
- A.913 (22) Revised guidelines on the implementation of the International Safety Management (ISM) Code by administrations.
- A.797 (19) Safety of ships carrying solid bulk cargoes.
- A.794 (19) Surveys and inspections of ro-ro passenger ships.
- A.560 (14) Guidelines on surveys required by the 1978 SOLAS Protocol, the International Bulk Chemical Code and the International Gas Carrier Code. Amended by MSC.84 (70).
8.2. CREW AND OPERATIONAL

- A.956 (23) Amendments to the guidelines for the onboard operational use of shipborne Automatic Identification Systems (AIS) (Resolution A.917 (22)).
- A.917 (22) Guidelines for the onboard operational use of shipborne automatic identification systems (AIS).
- A.1024 (26) Guidelines for ships operating in polar waters. Applicable for ships constructed on or after 1 January 2011.
- A.865 (20) Minimum training requirements for personnel nominated to assist passengers in emergency situations on passenger ships.
- A.854 (20) Guidelines for developing shipboard emergency plans for ships carrying materials subject to the INF Code.
- A.852 (20) Guidelines for a structure of an integrated system of contingency planning for shipboard emergencies.
- A.851 (20) General principles for ship reporting systems and ship reporting requirements, including guidelines for reporting incidents involving dangerous goods, harmful substances and/or marine pollutants.
- A.792 (19) Safety culture in and around passenger ships.
- A.772 (18) Fatigue factors in manning and safety.
- A.771 (18) Training requirements for crews of fast rescue boats.
- A.690 (17) Periodical inspections of abandon ship and fire drills on passenger ships.
- A.533 (13) Elements to be taken into account when considering the safe stowage and securing of cargo units and vehicles in ships.
- A.950 (23) Maritime Assistance Services (MAS).
- A.949 (23) Guidelines on places of refuge for ships in need of assistance.

8.3. DIRECT SHIPOWNER RESPONSIBILITIES

- A.931 (22) Guidelines on ship owners' responsibilities in respect of contractual claims for personal injury to or death of seafarers
- A.898 (21) Guidelines on ship owners' responsibilities in respect of maritime claims

8.4. OTHER

- A.916 (22)-Guidelines for the recording of events related to navigation
- A.861 (20) Performance standards for shipborne voyage data recorders (VDRs) Amended by MSC.214 (81)
- A.798 (19) Guidelines for the selection, application and maintenance of corrosion prevention systems of dedicated seawater ballast tanks
- A.749 (18) Code on Intact Stability for All Types of Ships Covered by IMO Instruments Amended by MSC.75 (69) supersedes A.167 (ES.IV), A.168 (ES.IV), A.206 (VII), A.562 (14)
9. RESOLUTIONS MEPC IMO COMMITTEE

9.1. INTERVENTION CONVENTION. LIST OF SUBSTANCES.

- MEPC.1 (II) Establishment of the list of substances to be annexed to the Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances Other Than Oil
- MEPC.49 (31) Revision of the list of substances to be annexed to the Protocol relating to the Intervention on the High Seas in Cases of Marine Pollution by Substances Other Than Oil. Revised by MEPC.72 (38)
- MEPC.72 (38) Revision of the list of substances to be annexed to the Protocol relating to Intervention on the High Seas in Cases of Marine Pollution by Substances other than Oil. Revised by MEPC.100 (48)
- MEPC.100 (48) Revision of the list of substances annexed to the Protocol relating to Intervention on the High Seas in Cases of Pollution by Substances Other Than Oil, 1973
- MEPC.165 (56) Amendments to the list of substances annexed to the protocol relating to intervention on the high seas in cases of pollution by substances other than oil, 1973
- MEPC.41 (29) Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) (Harmonized system of survey and certification)
- MEPC.40 (29) Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) (Harmonized system of survey and certification)
- MEPC.128 (53)-Amendments to the revised survey guidelines under the harmonized system of survey and certification for the purpose of MARPOL ANNEX VI

9.2. NOXIOUS LIQUID SUBSTANCES

- MEPC.18 (22) Standards for procedures and arrangements for the discharge of noxious liquid substances Supersedes A.544 (13) Amended by MEPC.62 (35)

9.3. INCIDENTS AND REPORTING

- MEPC.22 (22)-Guidelines for reporting incidents involving harmful substances and the text of the guidelines annexed
- thereto supersedes A.447 (XI).
- Guidelines for reporting incidents involving harmful substances
  Superseded by A.648 (16)
- MEPC.138 (53)-Amendments to the general principles for ship reporting systems and ship reporting requirements, including guidelines for reporting incidents involving dangerous goods, harmful substances and/or marine pollutants (Resolution A.851 (20))
- MEPC.232 (65) 2013 Interim guidelines for determining minimum propulsion power to maintain the maneuverability of ships in adverse conditions

**9.4. CODES**

- MEPC.33 (27)-Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code)
- MEPC.70 (38)-Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code)
- MEPC.69 (38)-Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
- MEPC.73 (39)-Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code, vague expressions)
- MEPC.79(43)-Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code)
- MEPC.80(43) (43)-Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code)
- MEPC.90 (45)-Amendments to the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) Amends MEPC.19 (22)
- MEPC.91 (45)-Amendments to the Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) Amends MEPC.20 (22)
- MEPC.119 (52) 2004 Amendments to the international code for the construction and equipment of ships carrying dangerous chemicals in bulk (IBC Code)
- MONALISA 2.0
- REPORT ON PROCEDURES FOR THE APPLICATION OF EXISTING REFERENCE DOCUMENTS

- MEPC.145 (54) Early and effective application of the 2006 amendments to the code for the construction and equipment of ships carrying dangerous chemicals in bulk (BCH Code)

- MEPC.166 (56) 2007 Amendments to the international code for the construction and equipment of ships carrying dangerous chemicals in bulk (IBC CODE)

- MEPC.225 (64) 2012 Amendments to the international code for the construction and equipment of ships carrying dangerous chemicals in bulk (IBC Code).

9.5. EMERGENCY PLANS

- MEPC.54 (32) Guidelines for the development of shipboard oil pollution emergency plans.

- MEPC.85 (44) Guidelines for the development of shipboard marine pollution emergency plans for oil and/or noxious liquid substances

- MEPC.86 (44) Amendments to the Guidelines for the development of shipboard oil pollution emergency plans Amends MEPC.54 (32)

- MEPC.137 (53) Amendments to the guidelines for the development of shipboard marine pollution emergency plans for oil and/or noxious liquid substances (Resolution MEPC.85 (44)).

9.6. CONDITION ASSESSMENT SCHEME (CAS)

- MEPC.94 (46) Condition assessment scheme Amended by MEPC.99 (48), MEPC.155 (55)

- MEPC.236 (65) Amendments to the condition assessment scheme under MARPOL Annex I.

9.7. SEVERAL

- MEPC.158 (55) Amendments to the guidelines for the transport and handling of limited amounts of hazardous and noxious liquid substances in bulk on offshore support vessels (Resolution A.673 (16))

- MEPC.177 (58) Amendments to the technical code on control of emission of nitrogen oxides from marine diesel engines (NOx Technical Code 2008)
- MEPC.182 (59) 2009 Guidelines for the sampling of fuel oil for determination of compliance with the revised MARPOL Annex VI
- MEPC.183 (59) 2009 Guidelines for monitoring the worldwide average sulphur content of residual fuel oils supplied for use on board ships
- MEPC.188 (60) Installation of ballast water management systems on new ships in accordance with the application dates contained in the ballast water management convention (BWM Convention)
- MEPC.228 (65)-Information reporting on type approved ballast water management systems
- MEPC.195 (61) 2010 Guidelines for survey and certification of anti-fouling systems on ships
- MEPC.208 (62) 2011 Guidelines for inspection of anti-fouling systems on ships Revokes MEPC.105 (49)
- MEPC.207 (62) 2011 Guidelines for the control and management of ships’ biofouling to minimize the transfer of invasive aquatic species
10. RESOLUTIONS COMMITTEE MSC IMO

Among the set of Resolutions of the MSC, those that not being amendments from conventions, refer to codes to be complied with and aspects referent to guidelines for inspections, towing, light, protective coating, practice for loading, etc., have been selected.

- MSC.336 (90) Adoption of measures aimed at enhancing the safety of passenger ships
- Safety for High Speed Craft (HSC Code) MSC 36 (63), amended by MSC.119 (74), MSC 174 (59), MSC 175 (59) MSC.221 (82), MSC.259 (84), MSC 260 (84) 351 MSC (92)
- MSC.4 (48) Adoption of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) Supersedes A.212 (VII), Amended by MSC.10 (54), MSC.14 (57), MSC.16 (58), MSC.28 (61), MSC.50 (66), MSC.58 (67), MSC.102 (73), MSC.219 (82), MEPC.19 (22)
- MSC.5 (48) Adoption of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code) Amended by MSC.17 (58), MSC.30 (61), MSC.59 (67), MSC.103 (73), MSC.220 (82), Supersedes A.328 (IX)
- MSC.9 (53) Adoption of the revised Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (BCH Code) Supersedes A.212 (VII), Amends A.212 (7). Amended by MSC 15 (57), MSC 29 (61), MSC 51 (66), MSC 107 (73)
- MSC.88 (71) International Code for the Safe Carriage of Packaged Irradiated Nuclear Fuel, Plutonium and high-level Radioactive Wastes on Board Ships (INF Code) Amended by MSC.118 (74), MSC.135 (76), MSC.241 (83)
- MSC.23 (59) Adoption of the International Code for the Safe Carriage of Grain in Bulk (ICGB)
- MSC.296 (87) Adoption of the guidelines for verification of conformity with Goal-Based Ship Construction Standards for bulk carriers and oil tankers.
- MSC.287 (87) Adoption of the International goal-based Ship Construction Standards for bulk carriers and oil tankers
- MSC.266 (84) Code of safety for special purpose ships, 2008
- MSC.75 (69) Amendments to the Code on Intact Stability for All Types of Ships Covered by IMO Instruments (Resolution A.749 (18)) Amends A.749 (18)
- MSC.253 (83) Adoption of the performance standards for navigation lights, navigation controllers and associated equipment light
- MSC.132 (75) Amendments to the guidelines for emergency towing arrangements on tankers (Resolution MSC.35 (63)) Amends MSC.35 (63)
- MSC 35 (63) Guidelines for emergency towing arrangements on tankers.
- MSC 49 (66), MSC 105 (73), MSC.125 (75), MSC 144 (77), MSC 197 (80), MSC 261 (84), Amendments to the Guidelines on the enhanced program of inspections during surveys of bulk carriers and oil tankers (Amends A.744 (18)).
- MSC.84 (70) Amendments to the guidelines on surveys required by the 1978 SOLAS Protocol, the International Bulk Chemical Code (IBC) and the International Gas Carrier Code (Resolution A.560 (14)) Amends A.560 (14)
- MSC.285 (86) Interim guidelines on safety for natural gas-fuelled engine installations in ships
- MSC.238 (82) Adoption of amendments to the code of safe practice for the safe loading and unloading of bulk carriers. Amends A.862 (20)
- MSC.289 (87) Performance standard for alternative means of corrosion protection for cargo oil tanks of crude oil tankers
- MSC.288 (87) Performance standard for protective coatings for cargo oil tanks of crude oil tankers Amended by MSC.342 (91)
- MSC.244 (83) Adoption of performance standard for protective coatings for void spaces on bulk carriers and oil tankers
- MSC.341 (91) Adoption of amendments to the Performance Standard for Protective Coatings for Dedicated Seawater Ballast Tanks in all types of ships and double-side skin spaces of bulk carriers (Resolution MSC.215 (82)).
- MSC.215 (82) Performance standard for protective coatings for dedicated seawater ballast tanks in all types of ships and double-side skin spaces of bulk carriers Amended by MSC.341 (91)
11. INTERNATIONAL LABOUR ORGANIZATION (ILO)
CONVENTIONS CONCERNING MARITIME AFFAIRS

The human factor is sometimes the cause of accidents. The fatigue, the duration of working hours, conditions of hygiene, feeding, accommodations, medical services may be the origin of accidents occurring. In this context, we want to indicate in this study the demands imposed by ILO to ship-owners and officers. In case of accident, it is important to verify the degree of compliance with ILO standards approved through the conventions listed below.

- Seafarers' Identity Documents Convention (Revised), 2003 C185 Seafarers
- Maritime Labor Convention, 2006 MLC, that amend the below listed Conventions:
  - Minimum Age (Sea) Convention, 1920 (No. 7)
  - Unemployment Indemnity (Shipwreck) Convention, 1920 (No. 8)
  - Placing of Seamen Convention, 1920 (No. 9)
  - Medical Examination of Young Persons (Sea) Convention, 1921 (No. 16)
  - Seamen's Articles of Agreement Convention, 1926 (No. 22)
  - Repatriation of Seamen Convention, 1926 (No. 23)
  - Officers' Competency Certificates Convention, 1936 (No. 53)
  - Holidays with Pay (Sea) Convention, 1936 (No. 54)
  - Ship-owners' Liability (Sick and Injured Seamen) Convention, 1936 (No. 55)
  - Sickness Insurance (Sea) Convention, 1936 (No. 56)
  - Working hours and Manning (Sea) Convention, 1936 (No. 57)
  - Minimum Age (Sea) Convention (Revised), 1936 (No. 58)
  - Food and Catering (Ships' Crews) Convention, 1946 (No. 68)
  - Certification of Ships' Cooks Convention, 1946 (No. 69)
  - Social Security (Seafarers) Convention, 1946 (No. 70)
  - Paid Vacations (Seafarers) Convention, 1946 (No. 72)
  - Medical Examination (Seafarers) Convention, 1946 (No. 73)
  - Certification of Able Seaman Convention, 1946 (No. 74)
- Accommodation of Crews Convention, 1946 (No. 75)
- Wages, Hours of Work and Manning (Sea) Convention, 1946 (No. 76)
- Paid Vacations (Seafarers) Convention (Revised), 1949 (No. 91)
- Accommodation of Crews Convention (Revised), 1949 (No. 92)
- Wages, Hours of Work and Manning (Sea) Convention (Revised), 1949 (No. 93)
- Wages, Hours of Work and Manning (Sea) Convention (Revised), 1958 (No. 109)
- Accommodation of Crews (Supplementary Provisions) Convention, 1970 (No. 133)
- Prevention of Accidents (Seafarers) Convention, 1970 (No. 134)
- Continuity of Employment (Seafarers) Convention, 1976 (No. 145)
- Seafarers' Annual Leave with Pay Convention, 1976 (No. 146)
- Merchant Shipping (Minimum Standards) Convention, 1976 (No. 147)
- Protocol of 1996 to the Merchant Shipping (Minimum Standards) Convention, 1976 (No. 147)
- Seafarers' Welfare Convention, 1987 (No. 163)
- Health Protection and Medical Care (Seafarers) Convention, 1987 (No. 164)
- Social Security (Seafarers) Convention (Revised), 1987 (No. 165)
- Repatriation of Seafarers Convention (Revised), 1987 (No. 166)
- Labour Inspection (Seafarers) Convention, 1996 (No. 178)
- Recruitment and Placement of Seafarers Convention, 1996 (No. 179)
- Seafarers' Hours of Work and the Manning of Ships Convention, 1996 (No. 180).

**ANNEX**

Attached to this document there is an annex that includes the following:

- Links to the regulation mentioned in this present document
- IMO Conventions
• Resolutions of the IMO Assembly, resolutions of the Marine Environment Protection Committee
• Resolutions of the Maritime Safety Committee and International Labour Organization (ILO) Conventions Concerning Maritime Affairs.
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