



The ISM Code

3. Part A: Implementation

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First part

Part A - Implementation	Part B - Certification and Verification
<ol style="list-style-type: none">1. General2. Safety and Environmental Protection Policy3. Company Responsibilities and Authority4. Designated Person(s)5. Master`s Responsibility and Authority6. Resources and Personnel7. Shipboard Operations8. Emergency Preparedness9. Reports and Analysis of10. Maintenance of the Ship and Equipment11. Documentation12. Company Verification, Review and Evaluation	<ol style="list-style-type: none">13. Certification and Periodical Verification14. Interim Certification15. Verification16. Forms of Certificates

Element 1: General / definitions

- “Company” (owner, manager, bareboat charterer) who has assumed the responsibility for operation of the ship. The DoC holder !!!!
- “Administration” (flag State) means the Government of the State whose flag the ship is entitled to fly.
- “Observation” means a statement of fact made during a safety management audit and substantiated by objective evidence.
- “Non-conformity” means an observed situation where objective evidence indicates the non-fulfilment of a specified requirement
- Etc.....

Element 1: General / objectives

Objectives of the Code are to ensure:

- Safety at sea, prevention of human injury or loss of life, avoidance of damage to the marine environment, avoidance of damage to property

Objectives of the Company are to ensure: **1**

- Safe practices in ship operation, safe working environment;
- Assessment of all identified risks to its ship, personnel and the environment and to establish appropriate safeguards;
- Continuous improvement of skills of personnel on board and ashore, and Preparing for emergencies

Element 1: General / objectives

The objectives of safety management system should ensure:

- Compliance with mandatory international and national rules and regulations **2**
- Observance of applicable codes, guidelines, recommendations.....
are taken into account (MSC.1/Circ.1371)



IACS
International Association
of Classification Societies

Element 1: General / Application

See SOLAS IX/2 and may be applied to all ships (different from EU dir)

Every shipping company should develop, implement and maintain a SMS which includes the following functional requirements:

- A safety and environmental-protection policy.
- Instructions and procedures to ensure safe operation of ships and protection of the environment in compliance with relevant international and flag State legislation.
- Defined levels of authority and lines of communication between, and amongst, shore and shipboard personnel;

Element 1: General / Functional requirements

- Procedures for reporting accidents and non-conformities with the provisions of this Code;
- Procedures to prepare for and respond to emergency situations;
- Procedures for internal audits and management reviews.

.....more procedure in all sections of the Code

.....more procedures in all sections of the Code

- 6.3 new personnel and personnel transferred to new assignments
- 6.5 identifying any training
- 6.6 receive relevant information on the SMS in working language
- 7 preparation of plans & instructions, including checklists
- 8.1 potential emergency shipboard
- 9.1 to respond to NC, accidents and hazards
- 9.2 for the implementation of corrective & prevent action
- 10.1 maintained in conformity with relevant rules and regulations
- 11.1 control all documents and data
- 12.3 evaluate the effectiveness of SMS
- 12.4 audits and possible corrective actions

What about the procedures that stay unchanged ?

Element 2: Policy

To achieve its objectives a Company needs a strategy or policy that is:

- Documented
- Commitment of top management to the policy
- Relevance of safety and environmental protection
- Objectives
- Methods to achieve objectives
- Implemented and maintained
- Familiar to all employees at all levels ship and shore

Element 3: Company Responsibility and Authority¹³

MSC-MEPC.7/Circ.8 - Guidelines for the operational implementation of the (ISM) Code by Companies.

Define responsibilities for the operation of vessel (Owners must report the full name and details to the Administration)

- Define and document responsibilities authorities and interrelation of all personnel
- Provide adequate resources and shore based support to enable the DP to carry out his function

Element 3: Company Responsibility and Authority

- Responsibility of ship owner / operator
which also applies to subcontractors (manning agencies, etc...)
- Shall have sufficient control e.g:
 - ISO 9001 Certification
 - Visits, Meetings
 - Audits, Questionnaire
 - Evaluation / Audit reports

To note: MSC-MEPC.7/Circ.8 at par.9 The company's responsibilities

3 Element 4: Designated Person¹⁴

MSC-MEPC.7/Circ.6 - Guidance on the qualifications, training and experience necessary for undertaking the role of the Designation Person under the provisions of the ISM Code.

- Ensure the safe operation of each ship and to prove a link between those on board and office
(contact person for safety matters and the Master)
- Direct access to the highest level of management
(independent and easy to reach)
- Monitoring safety and pollution prevention aspects and ensuring availability of resources and shore support

Element 4: Designated Person

- Key role in the effective implementation of the SMS
- Sufficient responsibility and authority to support in establishing and implementation of a safety culture within the company
- Verification and monitoring of all safety and pollution prevention activities
 - Communication and implementation of the policy
 - Evaluation and review of the effectiveness of the SMS
 - Reporting and analysis non-conformities, observations, accidents
 - Organizing, monitoring internal audits
 - Adequate resources applied as required
 - Revisions to the SMS

Element 5: The Master's responsibility & Authority

- Responsibilities **4**
 - Implementing and Maintaining the Safety Policy on his ship
 - Motivating the crew to observe the policy
 - Issuing orders and instructions
 - Verification and monitoring
 - Periodically reviewing the SMS
 - Reporting deficiencies to shore-based management
- Authority
 - Requesting shore assistance whenever required
 - Overriding authority

The Master's periodical review

- Fundamental reassessment of the structure and effectiveness of the SMS from the Master's view
- Reporting of system deficiencies to shore based management
- Overall purpose:
Information to the company on the degree of implementation of the safety management system and its effectiveness

A documentation of the safety performance !!!!!

What does a Master's Review consists?

- Results of internal and external safety audits
- Port state control and flag State inspection
- Own inspection and classification reports
- Accidents, hazardous situations, operational risks, near misses
- Deficiencies, weak points
- Qualification of the crew, experience, language skills, training needs, motivation
- Training & familiarization results
- Condition of ship and equipment
- Support of and communication with the office
- Suggestions for improvement

Element 6: Resources and Personnel

The Company should ensure that the Master :

- Proper qualification
- Conversant with the company SMS
- Given necessary support by ship and shore

Element 6: Resources and Personnel

The Company should ensure that the Crew has:

- Adequate understanding of rules, regulations, codes and guidelines **5**
- Ship sufficiently manned according to safe manning certificate
Qualified, certificated and medically fit
- On board familiarization with their duties and Safety and environmental protection policy
- Identifying any training and ensure that such training is provided for all personnel concerned
- Working language Information understood
- Are able to communicate effectively

Element 6: Resources and Personnel

Amendments to the ISM Code MSC.353 (92)

The following new paragraph 6.2.2 is inserted after existing par. 6.2.1

6.2.2 Appropriately manned in order to encompass all aspects of maintaining safe operations on board ¹⁵.

Resolution A.1047(27) - Principles of minimum safe manning

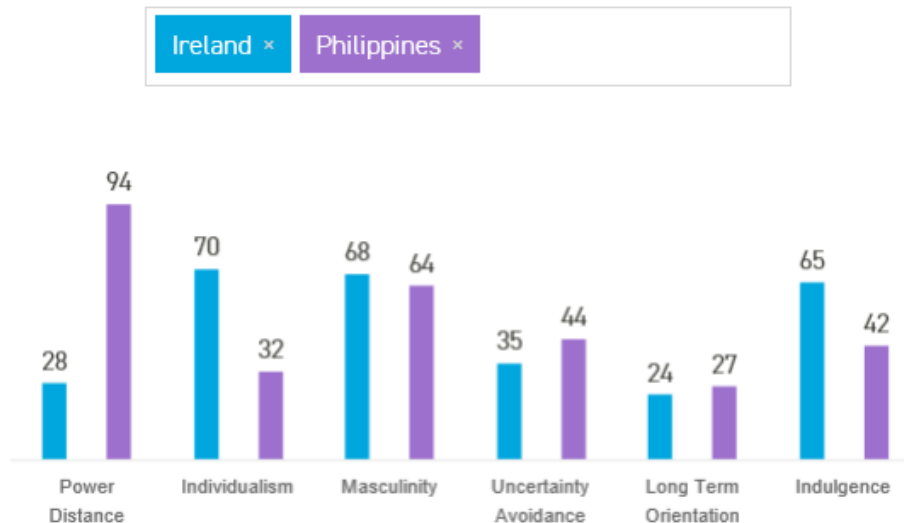
Modern fleets

- Modern ship sail with a skeleton crew composed of several nationalities and mixed genders.
- Take full advantage of a minimum crew, which doesn't permit crewmembers to socialize much.
- 80% of the world merchant fleet is manned by Multi-cultural and multi-lingual crews

What are the strong points of multi-cultural crews?

Modern fleets

- The cultural features can be either an enabler or a barrier for implementation of the SMS.
- Communication based on poor language skills and different cultural assumptions may hamper efficiency and safe operations of the ship



Element 7: Shipboard Operations

- Documented: plans, procedures, instructions, records and checklists
- Assessment of operational risks
- Prevention of failures and accidents by application of adequate work methods and risk control measures

The checklists should balance the need to remind crewmembers what to do and instruct them step-by-step on how to do it.

Element 7: Shipboard Operations

The shipping company must identify key shipboard operations which are relevant to safety and pollution prevention

- Mandatory rules and regulations or specific requirements
- Appropriate to the Company & ship's operation, type, cargo, trading area
- Operational experience
- Recommendations by IMO, Administrations, Class, Industry
- Hazardous situations to be controlled

Element 8: Emergency Preparedness¹⁶

Resolution A.852(20) - Guidelines for the structure of an integrated system of Contingency planning for shipboard emergencies.

- Identify potential emergency shipboard situations
- Establish procedures to respond to them
- Programs for emergency drills (Abandon ship, fire-fighting, emergency steering) **8**
- Company's organization must be able to respond to emergency situations at any time

What about the Media ?

Element 9: Report and Analysis of Non-Conformities Accidents, Hazardous Occurrences¹⁷

MSC-MEPC.7/Circ.7 Guidance on near-miss reporting

Documentation of:

- Accidents
- Hazardous occurrences
- Non-Conformities

*There should be no minimum target set for the number of near miss reports.
The focus should be on learning from genuine near misses and non-conformities!*

Element 9: Report and Analysis of Non-Conformities Accidents, Hazardous Occurrences

Procedures:

- Reporting
- Investigation and analysis of causes
- Elimination of deficiencies
- Measures to prevent recurrence

Creating only paperwork for these incidents is of little value.

The lessons learnt shall be built into training programs and new safety projects.

Element 10: Maintenance of the Ship and Equipment

The Company should establish procedures to ensure that the ship Maintenance procedures/plans in compliance with rules and regulations

- Inspections at appropriate intervals
- Reporting of Non-Conformities and possible cause
- Corrective Actions to be taken
- Records to be maintained

6

Engine, Hull, Systems, Critical systems and equipment

Identification of Critical Equipment

Which may cause a safety risk in case of sudden operational failure e.g:

- Propulsion, including auxiliaries
- Steering gear
- Electrical plant
- Ship's position lights, radar
- Crane, cargo handling gear



Regular testing of stand-by arrangements

- LSA
- Alarms and recording

Element 11: Documentation

The System Documentation contains:

- Safety Management Manual
- Functions and job descriptions
- Ship documentation and Certificates
- Handbooks, plans, drawings
- Sea charts, Rules and Regulations
- As-built drawings SOLAS Reg.II 1/3-5 and MSC/Circ.1135
- etc....



SMS documentation should also be unique to the ship!

Crewmembers should know exactly where the documentation is and how they can quickly find the procedures and checklists they need.

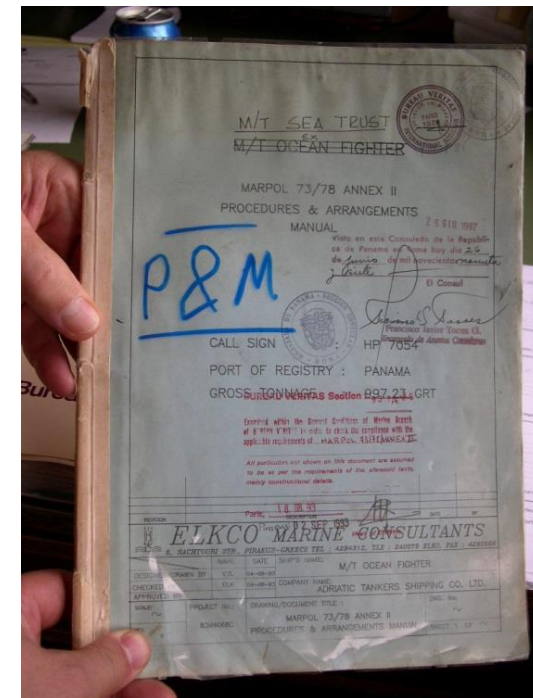
Element 11: Documentation

Procedure for document control

- Validity of documents
- Changes to documents
- Obsolete documents removed

To be kept in a form that the Company considers most effective (digital)

Relevant documents to that ship



What about the documentations on old ships ?

Element 12: Company verification, review and evaluation

Internal safety audits are to verify:

- Documented procedures
- Intervals not exceeding 12 months
- Ship and shore
- Verify compliance

External safety audits

- Those entities undertaking delegated ISM-related tasks (Manning)
- In conformity with the SMS (task)
- Regular intervals

Element 12: Company verification, review and evaluation

Review of the safety management system:

- Master's review
- Results of internal audits
- Results of accident investigations
- Inspection results (e.g. port State)

Masters are encouraged to discuss the SMS reviews with crewmembers as they are the key users of the documentation and should have the biggest input into any proposed changes.



Questions?