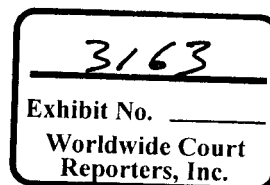




GUIDANCE FOR AUDITORS TO THE ISM CODE

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MTPNO342 Maritime Management Systems



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GUIDANCE FOR IACS AUDITORS TO THE ISM CODE

IMO Resolution A.741(18) as amended by MSC.104(73)
ANNEX

INTERNATIONAL MANAGEMENT CODE FOR THE SAFE OPERATION OF SHIPS AND FOR POLLUTION PREVENTION (INTERNATIONAL SAFETY MANAGEMENT (ISM) CODE)

PREAMBLE

1. The purpose of this Code is to provide an international standard for the safe management and operation of ships and for pollution prevention. 2. The Assembly adopted resolution A.443(XI) by which it invited all Governments to take the necessary steps to safeguard the shipmaster in the proper discharge of his responsibilities with regard to maritime safety and the protection of the marine environment.
2. The Assembly also adopted resolution A.680(17) by which it further recognized the need for appropriate organisation of management to enable it to respond to the need of those on board ships to achieve and maintain high standards of safety and environmental protection.
3. Recognizing that no two shipping companies or ship owners are the same, and that ships operate under a wide range of different conditions, the Code is based on general principles and objectives.
4. The Code is expressed in broad terms so that it can have a wide application. Clearly, different levels of management, whether shore-based or at sea, will require varying levels of knowledge and awareness of the items outlined.
5. The cornerstone of good safety management is commitment from the top. In matters of safety and pollution prevention it is the commitment, competence, attitudes and motivation of individuals at all levels that determines the end result.

INTRODUCTION

1. Scope and application

This guidance is intended for use by DNV Auditors when performing certification under the ISM Code, unless the relevant Administration has provided special instructions that indicate otherwise.

This document is also intended to promote audits' consistency and uniformity among IACS by providing examples, which, however, are not to be interpreted as prescriptive solutions or checklists.

Reference is made to the following Resolutions adopted by the International Maritime Organisation (IMO):

- a. the "International Management Code for the Safe Operation of Ships and for Pollution Prevention" (ISM Code), adopted by Resolution A.741(18) as amended by MSC.104(73) and made mandatory by Chapter IX "Management for the Safe Operation of Ships" of the SOLAS Convention;
- b. "Revised Guidelines on the Implementation of the ISM Code by Administrations", adopted by Resolution A.913(22) and referred in this document as the "IMO Guidelines", which are applicable to Recognized Organizations (RO) when acting at the request of Flag Administrations;



- c. "Guidelines for the Authorization of Organizations acting on behalf of the Administration", adopted by Resolution A.739(18) and made mandatory by Chapter XI "Special Measures to Enhance Maritime Safety" of the SOLAS Convention.

2. Application of the ISM Code by Companies

By design, the ISM Code supports and encourages the development of a safety culture in shipping. The content of a Safety Management System (SMS) will therefore be affected by Company commitment, values and beliefs, which cannot be enforced through the regulatory process. In developing and implementing their systems, Companies may have used industry guidelines, such as the ICS/ISF "Guidelines on the Application of the International Safety Management Code".

Assessing compliance with the ISM Code from detailed prescriptive management system solutions is not practical and would be inconsistent with the intent of the ISM Code, which allows a Company to develop solutions which best suit the Company and their particular operation and ship type(s), whilst ensuring basic internationally agreed standards of safety management.

3. Certification process

The verification of compliance with mandatory rules and regulations, required as part of the ISM Code, neither duplicates nor replaces the surveys required by the other statutory certificates. Compliance with the ISM Code does not relieve the Company, the Master or any other entity or person involved in the management or operation of the ship of their own responsibilities.

The verification process involves interviews of Company personnel and review of SMS documentation and records. Audit is a sampling process and is not exhaustive in nature. Issuance of certification is based upon verification that the sample is in compliance with the ISM Code. Where non-conformities have not been found and reported, it does not mean that none exist. Basic procedures for performing ISM Code verification are contained in the IACS "Procedural Requirements for ISM Code Certification", PR. 9, which reflect the IMO "Revised Guidelines for Administrations on the Implementation of the ISM Code", Resolution A. 913(22), as applicable.

4. Editorial principles

For convenience, this document incorporates the actual text of the ISM Code, followed by the relevant recommended guidance for IACS auditors. The document will be updated as necessary consistent with IACS Member Societies' experience in the audit process.

Guidance and recommendation given by DNV (not ISM-code nor IACS guidelines) are marked by italics.

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PART A – IMPLEMENTATION

MSC.104(73)

1. GENERAL

1.1 Definitions

The following definitions apply to parts A and B of this Code.

1.1.1 "International Safety Management (ISM) Code" means the International Management Code for the Safe Operation of Ships and for Pollution Prevention as adopted by the Assembly, as may be amended by the Organization.

1.1.2 "Company" means the Owner of the ship or any other organization or person such as the Manager, or the Bareboat Charterer, who has assumed the responsibility for operation of the ship from the Ship owner and who on assuming such responsibility has agreed to take over all the duties and responsibility imposed by the Code.

1.1.3 "Administration" means the Government of the State whose flag the ship is entitled to fly.

1.1.4 "Safety Management System" (SMS) means a structured and documented system enabling Company personnel to effectively implement the Company safety and environmental protection policy.

1.1.5 "Document of Compliance" means a document issued to a Company which complies with the requirements of this Code.

1.1.6 "Safety Management Certificate" means a document issued to a ship which signifies that the Company and its shipboard management operate in accordance with the approved safety management system.

1.1.7 "Objective evidence" means quantitative or qualitative information, records or statements of fact pertaining to safety or to the existence and implementation of a SMS element, which is based on observation, measurement or test and which can be verified.

1.1.8 "Observation" means a statement of fact made during a safety management audit and substantiated by objective evidence.

1.1.9 "Non-conformity" means an observed situation where objective evidence indicates the non-fulfilment of a specified requirement.

1.1.10 "Major non-conformity" means an identifiable deviation which poses a serious threat to the safety of personnel or the ship or a serious risk to the environment that requires immediate corrective action and includes the lack of effective and systematic implementation of a requirement of this Code.

1.1.11 "Anniversary date" means the day and month of each year that corresponds to the date of expiry of the relevant document or certificate.

1.1.12 "Convention" means the International Convention for the Safety of Life at Sea, 1974, as amended.

**1.2 Objectives**

1.2.1 The objectives of the Code are to ensure safety at sea, prevention of human injury or loss of life, and avoidance of damage to the environment, in particular, to the marine environment, and to property.

1.2.2 Safety management objectives of the Company should, inter alia:

- .1 provide for safe practices in ship operation and a safe working environment;
- .2 establish safeguards against all identified risks; and
- .3 continuously improve safety management skills of personnel ashore and aboard ships, including preparing for emergencies related both to safety and environmental protection.

1.2.3 The safety management system should ensure:

- .1 compliance with mandatory rules and regulations; and
- .2 that applicable codes, guidelines and standards recommended by the Organization, Administrations, classification societies and maritime industry organizations are taken into account.

1.3 Application

The requirements of this Code may be applied to all ships.

1.4 Functional requirements for a Safety Management System (SMS)

Every Company should develop, implement and maintain a Safety Management System (SMS) which includes the following functional requirements:

- .1 a safety and environmental protection policy;
- .2 instructions and procedures to ensure safe operations of ships and protection of the environment in compliance with relevant international and flag State legislation;
- .3 defined levels of authority and lines of communication between, and amongst, shore and shipboard personnel;
- .4 procedures for reporting accidents and non conformities with the provisions of this Code;
- .5 procedures to prepare for and respond to emergency situations; and
- .6 procedures for internal audits and management reviews.

ISM Code – item 1.1

Definitions in SOLAS Chapter IX (1996)

"Bulk carrier" as defined in Regulations IX / 1.6 of the SOLAS Convention means a ship which is exemplified in paragraphs 2.2, 2.3 and 2.4 of IACS Unified Requirement Z11 "Mandatory Ship Type and Enhanced Survey Programme (ESP) Notations".

Definitions from IACS PR 9

"Audit" means a systematic and independent examination to determine whether the SMS activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.



"Auditor" means a person performing verification of compliance with the requirements of the ISM Code and who fulfils the personnel qualification and other pertinent requirements contained in Section 1 of PR 10.

"Lead Auditor" means an auditor who is authorized to lead a team of two or more auditors as specified in Section 1.6.2 (ii) of PR 10.

"Branch Office" means an office that is part of the Company, under its control and covered by the same SMS.

"Safety Management Manual" is the documentation used to describe and implement the Safety Management System (SMS).

"Safety management audit" means a systematic and independent examination to determine whether the SMS activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives.

"Technical deficiency" means a defect in, or failure in the operation of, a part of the ship's structure or its machinery, equipment or fittings.

"Non-conformity" means an observed situation where objective evidence indicates the non-fulfillment of a specified requirement.

"Major non-conformity" means an identifiable deviation that poses a serious threat to the safety of personnel or the ship or a serious risk to the environment that requires immediate corrective action and includes the lack of effective and systematic implementation of a requirement of this Code. Any one of these situations may be considered a major non-conformity.

The following definition has some differences from the Code, as explained:

"Observation" – the definition from the Code was complemented, in the IACS PR 9, stating that: it may also be a statement made by the auditor referring to the SMS which, if not corrected, may lead to a non-conformity in the future.

DNV:

For a ship management company, a management agreement signed by the Company and the owner and stating that the ship management company has assumed responsibility for all duties and responsibilities imposed by the Code, should be available to the Auditor.

A Company may contract with third parties to manage specific activities e.g. manning, technical support and maintenance. It is the responsibility of the Company to identify in the SMS the role of each subcontractor performing elements covered by the ISM Code. With such a contracting arrangement, only one DOC can be issued to the Company.

**ISM Code - paragraph 1.2.2 (1996)**

1.2.2 Safety management objectives of the Company should, inter alia:

- .1 provide for safe practices in ship operation and a safe working environment;
- .2 establish safeguards against all identified risks; and
- .3 continuously improve safety management skills of personnel ashore and aboard ships, including preparing for emergencies related both to safety and environmental protection.

In accordance with the IMO Guidelines (Res. A.913(22)), the objectives of mandatory application of the ISM Code are to ensure:

1. compliance with mandatory rules and regulations related to the safe operation of ships and protection of the environment; and
2. the effective implementation and enforcement thereof by Administrations.

Effective enforcement by Administrations must include verification that the SMS complies with the requirements as stipulated in the ISM Code, as well as verification of compliance with mandatory rules and regulations.

The mandatory application of the ISM Code should ensure, support and encourage that applicable codes, guidelines and standards recommended by the IMO, Administrations, classification societies and maritime industry organisations are taken into account.

These objectives encompass the effective and on-going implementation of the SMS and, to a large extent, depend on reactive and proactive improvement of the SMS functions, as part of the ISM Code.

Although it is not often referred to as such, the development and implementation of a documented safety management system is an exercise in risk management. The drafting or amendment of written procedures involves looking at the company's activities and operations, identifying what could go wrong, and deciding what should be done to try to prevent it. The documented procedures are the means by which the controls are applied. To help all the companies in establishing safeguards against all identified risks the IACS had developed "A GUIDE TO RISK ASSESSMENT IN SHIP OPERATIONS".

DNV:

For the purpose of auditing it is important to recall that the objectives above do not empower the auditor to set requirements beyond those already stated in the Code. However, from a certification point of view, if the requirements of the Code are fully met, then the objectives above are achieved.

Example no 1: Safe Practices

From a certification point of view, safe practices have been established if the SMS ensures that the ship, operation and manning complies with the requirements in mandatory rules and regulations; and if the safe practices recommended by IMO, Administrations, Classification societies and other maritime industry organisations are taken into account.



Example no 2: Identified risks

Safeguards against all identified risks have, from a certification point of view, been established if they cover the risks considered by mandatory rules and regulations; and the ones addressed in the recommendations from IMO, Administrations and maritime industry organisation.

Example no 3): "Continuous improvements"

The Code includes requirements for safety management functions such as: non-conformity/accident/incident reporting and analysis; company audits; Masters' review of the SMS; management review etc., e.g. management functions and activities which should support continuous improvement of safety management skills of personnel.

From a certification point of view, the objective "continuous improvement" has been met if the Company has successfully implemented the management functions required by the Code.

ISM Code - paragraph 1.2.3.1

1.2.3 The safety management system should ensure:

- .1 compliance with mandatory rules and regulations; and

The effectiveness of the SMS in ensuring compliance with mandatory requirements should be one of the criteria used by the auditor when assessing whether the SMS established by the Company complies with the ISM Code.

The Company is responsible for obtaining and maintaining within the prescribed validity dates all the certificates (including any recommendation / condition of class that shall be complied with within their limit dates imposed by the classification society), and documents necessary to operate the ship, in accordance with relevant rules and regulations. Inadequate performance indicates that the SMS is either deficient or not functioning effectively.

All records having the potential to facilitate verification of compliance with the ISM Code should be open to scrutiny during an examination. For this purpose, the Company should provide the auditor with statutory and classification records relevant to the actions taken by the Company to ensure that compliance with mandatory rules and regulations is maintained. In this regard, the records may be examined to substantiate their authenticity and veracity.

It shall be considered that the initial statutory records issued by the classification societies may not be in the same format and not related to all statutory certificates issued for the vessel.

Examples of objective evidence found at the office may include:

- verification of how the Company controls the class and statutory documentation, including validity, recommendations endorsed, surveys, audits, etc;
- interview with the DPA(s) and some key personnel to verify familiarization with class and statutory requirements and rules;



- procedures and instructions defining the process which ensures compliance with mandatory international and national requirements.

Examples of objective evidence found onboard the vessel may include:

- verification of all class and statutory certificates, including, validation, periodical survey endorsements, recommendations issued, etc
- verification of the copy of the DOC (copy not necessarily authenticated or certified), including, validity, flag, vessel type, etc
- interview with the officers to verify familiarization with class and statutory requirements and rules
- procedures and instructions defining the process which ensures compliance with mandatory international and national requirements
- results from port State inspections

DNV:

The effectiveness of the SMS in ensuring compliance with mandatory requirements should be one of the main criteria used by the auditor when assessing whether the SMS established by the Company complies with the ISM Code. Ref. A,788(19), 2.3.1,

Quotation from A,788(19), Introduction: "Effective enforcement by Administrations must include verification that the SMS complies with the requirements of the Code, as well as verification of compliance with mandatory rules and regulations." Certain mandatory rules and regulations are today not subject to class and statutory surveys, such as operational requirements and maintaining the condition of ship and equipment in conformity with class and statutory requirements between surveys. Effective enforcement of the requirements of the ISM Code is then the only way to ensure effective enforcement. Auditor Guidance to ISM Coded Sections 7 and 10 show how this should be reflected in audits.

ISM Code - paragraph 1.2.3.2

.2 that applicable codes, guidelines and standards recommended by the Organization, Administrations, classification societies and maritime industry organizations are taken into account.

The ISM Code does not require mandatory compliance with these information sources. However, the auditor may encourage companies to apply relevant codes, guidelines and standards to their particular operation, by the use of observations or findings.

For example:

- IACS Recommendation 71 – "Guide for development of shipboard technical manuals"
- Resolution MSC.169(79), Standards for Owners' Inspection and Maintenance of Bulk Carrier Hatch Covers



- IMO MSC/Circ. 1093 (17/06/2003) – "Guidelines for periodic servicing and maintenance of lifeboats, launching appliances and on-load release gear"

Examples of objective evidence found at the office may include:

- Familiarization of the DPA(s) and key personnel with guides and guidelines and their systematic control
- Consideration of IMO, IACS, Flag, Classification Societies guides and guidelines in system reviews

Examples of objective evidence found onboard the vessel may include:

- Familiarization of the master and officers are familiar with guides and guidelines

DNV:

Together with 1.2.3.1 this objective defines the specific levels of safety that the SMS shall ensure in terms of:

- *the condition of the ship,*
- *operational standards, and*
- *qualification and competency of crew.*

Together with mandatory requirements, the recommended codes, guidelines and standards defines the industry's perception of safe practices in ship operation. Quotation from A.788(19), 2.3.6: "Within an SMS, implementation of codes, guidelines and standards recommended by IMO, Administrations, classification societies and other maritime industry organisations does not make these recommendations mandatory under the ISM Code. Nevertheless auditors should encourage companies to adopt these recommendations whenever applicable to the Company."

To meet the requirements of A.788(19) on this requires that DNV Auditors have thorough knowledge on codes, guidelines and standards recommended by IMO, Administrations, classification societies and other maritime industry organisations. (This was and is one of the reasons why ISM Code certification was left to organisations with profound maritime competency.)

The comments to Section 7 of the Code show the implication of this objective on Company and shipboard audits.

DNV Guidance to paragraph 1.2.3 (both .1 and .2)

The Auditor Guidance to 1.2.3.1 and 1.2.3.2 shows how the special character of the ISM Code audits and the purpose of ISM Code certification calls for auditing methodologies which are basically different from those used for audits to other management standards.



ISM Code - paragraph 1.3

1.3 Application

The requirements of this Code may be applied to all ships.

This Code is mandatory for all ships to which the SOLAS regulations apply and to any other ship, if required by the Flag Administration.

For vessels not required to comply with this Code, a "voluntary" certificate may be issued by the RO. Normally, this will be done only for vessels classed by an IACS member, but ROs may do so in special circumstances at their own discretion.

ISM Code - paragraph 1.4

1.4 Functional requirements for a Safety Management System (SMS)

Every Company should develop, implement and maintain a Safety Management System (SMS) which includes the following functional requirements:

- .1 a safety and environmental protection policy;
- .2 instructions and procedures to ensure safe operations of ships and protection of the environment in compliance with relevant international and flag State legislation;
- .3 defined levels of authority and lines of communication between, and amongst, shore and shipboard personnel;
- .4 procedures for reporting accidents and non conformities with the provisions of this Code;
- .5 procedures to prepare for and respond to emergency situations; and
- .6 procedures for internal audits and management reviews.

The functional requirements of the ISM Code are intended to ensure the implementation of safe practices in ship operations through written procedures and work instructions. These functional requirements summarise the detailed SMS requirements that are described in the remainder of the ISM Code.

MSC.104(73)

2. SAFETY AND ENVIRONMENTAL PROTECTION POLICY

- 2.1 The Company should establish a safety and environmental protection policy which describes how the objectives, given in paragraph 1.2, will be achieved.
- 2.2 The Company should ensure that the policy is implemented and maintained at all levels of the organization both ship based as well as shore based.



ISM Code - paragraph 2.1

2.1 The Company should establish a safety and environmental protection policy which describes how the objectives, given in paragraph 1.2, will be achieved.

It is the company's responsibility to define and document its safety and pollution prevention policy, which must describe how the objectives in paragraph 1.2 will be achieved.

This document is fundamental to, and forms an integral part of, the company's safety management system. The procedures and all lower-level objectives must act in support of the overall objectives established in the policy.

Where, in an effort to improve safety and pollution prevention, the company has chosen to incorporate and make mandatory some of the applicable codes, guidelines and standards mentioned in paragraph 1.2.3.2, this should be supported and encouraged by the auditor.

Examples of objective evidence that may be found both in the office and on board include:

- A copy of the policy document
- Established safety and pollution prevention objectives

DNV:

Note that the Company policy should describe how the objectives stated by the ISM Code are to be achieved. To this end, the Company management should not only provide a brief "safety and environment statement", but state their general and specific safety objectives and describe the measures adopted to achieve them. This makes the "ISM Code Safety Policy" different in character from the most common quality policy statements.

The safety management objectives of a Company may include more than the objectives required by the ISM Code. Such objectives, consistent with an intent to improve safety and pollution prevention, should be encouraged and supported by the auditor. Inadequate achievements of such objectives should not be used for the issue of non-conformity statements at audits. They may be reported as "Observations".

ISM Code - paragraph 2.2

2.2 The Company should ensure that the policy is implemented and maintained at all levels of the organization both ship based as well as shore based.



The Company is responsible for ensuring that all relevant personnel at all levels of the Company, including shipboard personnel and sub-contractors with responsibilities relevant to the SMS, are aware of and understand the policy.

Comprehensive and effective internal audits, management reviews, corrective and preventative action, and other management processes are essential in ensuring that the policy is implemented and maintained.

Examples of objective evidence that may be found both in the office and on board are:

- Interviews with relevant personnel to establish the level of awareness and understanding
- records of internal and external audits
- records of corrective and preventative actions and their evaluation
- maintenance plan and records of maintenance of the ship and equipment

MSC.104(73)

3. COMPANY RESPONSIBILITIES AND AUTHORITY

3.1 If the entity who is responsible for the operation of the ship is other than the owner, the owner must report the full name and details of such entity to the Administration.

3.2 The Company should define and document the responsibility, authority and interrelation of all personnel who manage, perform and verify work relating to and affecting safety and pollution prevention.

3.3 The Company is responsible for ensuring that adequate resources and shore-based support are provided to enable the designated person or persons to carry out their functions.

ISM Code - paragraph 3.1

3.1 If the entity who is responsible for the operation of the ship is other than the owner, the owner must report the full name and details of such entity to the Administration.

The "Company", as defined in 1.1.2 of ISM Code, other than the owner of the ship, is a synonym for the "entity" referred to in 3.1.

The Flag Administration is to have full details of the entity(ies) other than the owner who have assumed the responsibility for operation of the ship and who on assuming such responsibility has agreed to take over all the duties and responsibility imposed by the ISM Code. Examples of objective evidence found at the office may include:

- A copy of letter from owner to Flag Administration delegating the responsibility for operational and technical support to the ship manager/operator



Examples of objective evidence found onboard the vessel may include:

- The details of the owner/operator are given in the SMS and agree with the details contained in valid DOCs and SMCs.
- The auditor is to verify that the Company details given in DOC and SMC are identical to the information given in the CSR (Continuous Synopsis Record).

ISM Code - paragraph 3.2

3.2 The Company should define and document the responsibility, authority and interrelation of all personnel who manage, perform and verify work relating to and affecting safety and pollution prevention

The Company is to define and document the distribution and interrelation of authority within the SMS.

This should include the following:

- person(s) or position(s) with the highest authority in developing, implementing and maintaining the SMS;
- person(s) or position(s) with the overall operational responsibility, and authority relevant to safety and protection of the environment; and
- person(s) responsible for safety and protection of the environment on a routine basis.

The Company is to define responsibility in key job descriptions for shore-based and shipboard positions that have duties related to the SMS.

The job descriptions should contain details of the following:

- position (for instance, second engineer / superintendent / operations manager / Master, etc.)
- name and type of ship;
- communication lines for reporting including DPA;
- qualification required for the position;
- general responsibilities relating to safety and protection of the environment;
- specific duties;
- emergency duties;

and may include substitution of personnel in case of absence thereof. The Company is to define the level of knowledge required for the ship types that the Company is operating.



Examples of objective evidence found at the office may include:

- the Company has developed organization chart and defined job descriptions defining the responsibility and authority of the personnel involved in the SMS;
- how the Company exercises effective control of the responsibilities of its subcontractors involved in the SMS;
- verification that the subcontractor fully meets the requirements set out in the SMS;

Examples of objective evidence found onboard the vessel may include:

- job descriptions of the personnel onboard involved in the SMS;
- shipboard personnel are aware of who bears full responsibility and has authority relating to SMS, and how they relate to the SMS.

ISM Code - paragraph 3.3

3.3 The Company is responsible for ensuring that adequate resources and shore-based support are provided to enable the designated person or persons to carry out their functions.

The designated person(s) may formally require the top management to provide resources, when deemed necessary to carry out their functions. The top management is responsible for evaluating the proposal and decide accordingly.

The Company top management is to state that appropriate resources and shore-based support will be provided at all times, and adopt this as its policy.

The Company is to develop procedures for determining the resources needed for maintaining the operational safety of the fleet.

The resources may be defined as personnel, training, drills, supplying vessels with sufficient spare parts and stores, etc.

The Company is to carry out evaluations to ensure that shore-based support is provided onboard.

Examples of objective evidence found at the office may include:

- records of internal audits, management review, master's review, ship's condition and performance reports, etc. - how the Company deals with the requests for resources.

Examples of objective evidence found onboard the vessel may include:

- The ship's condition shows that necessary resources were allotted and relevant shore-based support was provided.



- records of training and drills
- records of spare parts and equipment supplied to the vessel
- Evidence that the Master's requests for shore-based support have been fulfilled

MSC.104(73)

4. DESIGNATED PERSON(S)

To ensure the safe operation of each ship and to provide a link between the Company and those on board, every Company, as appropriate, should designate a person or persons ashore having direct access to the highest level of management. The responsibility and authority of the designated person or persons should include monitoring the safety and pollution prevention aspects of the operation of each ship and to ensure that adequate resources and shore based support are applied, as required.

ISM Code – paragraph 4

Essential to the Designated Person's (DP's) ability to satisfy the requirements of this paragraph is the direct access he or she must have to the highest levels of the Company's management. The auditor must be satisfied not only that such access exists, but also that the DP is able to use it effectively in ensuring that adequate resources and shore-based support are applied.

The Code specifies neither the qualifications the DP should have nor the position he should occupy in the Company's organization. Nevertheless, in practice, if the DP is to exercise any influence in the Company's decision-making processes, then he must be given the authority to do so and must have the personal and professional qualities that give him the necessary weight in the competition for scarce resources.

Direct access to the Company's senior management may be formally established in organization charts, job descriptions or other documents in which authorities and responsibilities are defined. Evidence that the access is real and effective may be found in, for example, routine and ad hoc reports, assorted correspondence, minutes of management meetings in which the DP participates, and actions arising. This is especially important given the expectation that the courts will assume (in the event of an accident and based on the requirement for direct access) that the Company's management knew what the DP knew.

In order to be able to monitor the safety and pollution-prevention aspects of the operation of each ship, the DP must have knowledge and experience of shipboard operations, and must be thoroughly acquainted with the Company's system and its documentation. Evidence of qualifications, experience and training should be available to demonstrate the DP's competence.

The monitoring itself and the provision of a link between the ship and the shore-based organization may include activities such as ship visits, the review and analysis of reports of



accidents, hazardous occurrences and non-conformances, internal audit reports, inspection reports, the minutes of shipboard safety and management meetings, and reports of drills and exercises. All such information should be appropriately summarized and reported to those responsible for the areas concerned.

It is commonly believed that the DP must be made responsible for the entire administration of the management system documentation, for the planning and conduct of internal audits, and must act as the sole conduit for all contacts between the ships' staff and the organization ashore. This is not the case. It is better to think of the DP as the person responsible for ensuring that such processes are in place and operating as required, a role that is more likely to be effective when separated from the practical implementation.

The DP's role is often combined with others such as Technical Superintendent or Operations Manager, and the auditor should be aware of the possibility of a heavy workload and other responsibilities having a detrimental effect on the position's effectiveness. Conflicts of interest may also arise. For example, a DP who should be arguing for expenditure on safety-related items may also be the manager who controls the corresponding budget.

The wording of several of the Code's requirements is based on the assumption that, in the companies to which it applies, there will be a separation of roles and responsibilities that is impracticable in single-ship, owner-master operations. In particular, the DP is stated to be a shore-based position, and therefore distinct from that of the master.

In order properly to assess the management of owner-master companies, the auditor must understand that such separation will not always be possible. There are two approaches that such companies may adopt to ensure compliance with the Code's requirements:

- i) To assign two or more roles to the same person, or
- ii) To employ outside contractors to fulfill the role of designated person.

Whatever solutions the company may choose, the auditor must be concerned with ensuring that operational and administrative controls are effective, rather than with trying to identify the organizational structure implied by the wording of the Code. For example, are effective reviews of the management system carried out, and are its deficiencies identified, analysed and corrected, even though the entire process may be administered by the master?

The owner-master may act as the DP provided that he can demonstrate that the safety and pollution prevention aspects of the operation of his ship are being monitored effectively. As the owner, he is the highest level of management, he is responsible for the application of adequate resources, and may ensure adequate shore-based support by, for example, establishing communications and contingency arrangements with agents or other third parties.

Where the company has chosen to employ outside contractors, a number of additional factors need to be considered:

- i) The precise nature of the contractual relationship with the contractor, including any obligations imposed on the company.
- ii) The bases on which the choice of contractor was made.
- iii) The suitability of the contractor to undertake the assigned roles.
- iv) The timeliness, frequency, completeness and effectiveness of the communications



between the contractor and the company.

The company may not be the only client of the contractor, and the provision of such services may not be the contractor's only activity. It is, therefore, important to verify that the contractor is dedicating sufficient time and resources to fulfilling his commitments to the company, and that the company is able to contact the contractor when necessary.

In some cases, the ship will be the company's only "site", and provision will need to be made for the remote back-up of computer systems and files, and the retention ashore of copies of important paper documents.

- Examples of objective evidence found at the office may include:
- description of responsibilities, authorities and reporting lines
- interviews to establish awareness of DP's role and identity
- evidence of monitoring of the safety and pollution prevention aspects of the operation of the ship such as review of audit reports, accidents, hazardous occurrences and non-conformities, etc.

Examples of objective evidence found on board the ship may include:

- interviews to establish awareness of DP's role and identity
- contact details
- reporting requirements

DNV:

If the DP is the Company Safety and environment co-ordinator he may be considered to be taking care of his responsibilities for monitoring the safe operation of ships through his day to day involvement, internal audits included. If he is not the safety co-ordinator he should immediately receive all audit reports and be obligated to keep himself informed about the results of shipboard audits.



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5. MASTER'S RESPONSIBILITY AND AUTHORITY

5.1 The Company should clearly define and document the Master's responsibility with regard to:

- .1 implementing the safety and environmental protection policy of the Company;
- .2 motivating the crew in the observation of that policy;
- .3 issuing appropriate orders and instructions in a clear and simple manner;
- .4 verifying that specified requirements are observed; and
- .5 reviewing the SMS and reporting its deficiencies to the shore based management.

5.2 The Company should ensure that the SMS operating on board the ship contains a clear statement emphasizing the Master's authority. The Company should establish in the SMS that the Master has the overriding authority and the responsibility to make decisions with respect to safety and pollution prevention and to request the Company's assistance as may be necessary.

ISM Code - paragraph 5.1

5.1 The Company should clearly define and document the Master's responsibility with regard to:

The Company, taking into account its organisation, type of ships and service, should define and document the responsibilities and methods expected by the Master to carry out these functions.

The Master's responsibility in a broad sense may be found in any part of the documented system.

ISM Code - paragraph 5.1.1

5.1.1 Implementing the safety and environmental protection policy of the Company;

"Implementation of the safety and environmental protection policy" on board is under the responsibility of the Master. Effective implementation of this could be verified through satisfactory audit of various departments on board.

Examples of objective evidence found at office may include:

- Accident, near miss and non-conformity reports for injury / pollution and follow up by company.



- Evidence that Safety Committee Meetings, Emergency Drills, training on safety related matters are carried out effectively as per schedule

Examples of objective evidence found on board the ship may include:

- Display of the policy at common places
- Understanding of the policy by officers and crew during interview
- Accident and near miss reports for injury / pollution
- Evidence of safe working environment and safe practices

ISM Code - paragraph 5.1.2

5.1.2 motivating the crew in the observation of that policy;

"Motivation of the crew" may be achieved by the Master explaining to them how they can personally benefit from the implementation of the policy as well as encouraging their perception of ownership.

This could be achieved through meetings between the Master or a delegated Senior Officer (e.g. at embarkation, during training or safety drills) and crew members who are requested to participate in the fulfillment of the Company objectives and continuous improvement of the safety management system.

Motivation of the crew may be ascertained through interviews.

Examples of objective evidence found at office and on board ship may include:

- Evidence that Safety Committee Meetings, Emergency Drills, training on safety related matters, screening of safety films carried out effectively as per schedule
- Evidence that with an aim to promote motivation following are being carried out organising safety debates, lectures, competitions, presentation of safety awards etc.

ISM Code - paragraph 5.1.3

5.1.3 issuing appropriate orders and instructions in a clear and simple manner;

Examples of objective evidence on board ship may include Master's standing orders and bridge night order book.



ISM Code - paragraph 5.1.4

5.1.4 verifying that specified requirements are observed; and

The Master may delegate verification to Officers but retains responsibility to ensure that the methods defined and documented by the Company are used.

A checklist could be useful for the Master to verify that specific requirements are observed through actions/activities performed by crew members.

The auditor may verify how these activities are carried out on board through direct observation and/or by interviewing the crew.

Examples of objective evidence on board ship may include:

- a verification checklist used by the master
- verifying during master's audit that various requirements of the Safety Management System are complied with such as deck log book, stability calculations, oil record book, voyage plan, drill records.

ISM Code - paragraph 5.1.5

5.1.5 reviewing the SMS and reporting its deficiencies to the shore based management.

The Master, as responsible person onboard, should inform the Company whenever there are deficiencies in the SMS relevant to the ship's operation.

Information on SMS deficiencies should include proposals for corrective action and recommendations for improving the SMS, as far as possible.

The auditor should expect that the Company has defined when and how the Master carries out the SMS reviews aboard ship.

Examples of objective evidence found at office may include:

- Evidence that Master's Review of SMS have been received from ships at defined interval (not more than a year).
- Evidence that that findings of the Master's Review received from ships have been studied, analyzed and necessary follow up action taken if necessary.



- That all agenda items of the Master's Review have been reported.
- That the Master's Review gives a clear picture of the status of implementation of SMS on board and that necessary suggestions/modifications to SMS have been reflected in the review.

Examples of objective evidence found on board the ship may include:

- Evidence that Master's Review of SMS have been forwarded to company office at defined interval (not more than a year).
- That all agenda items of the Master's Review have been reported.
- That the Master's Review gives a clear picture of the status of implementation of SMS on board and that necessary suggestions/modifications to SMS have been reflected in the review.
- Timely follow up and response by the Company to issues raised in the Master's review

DNV:

In order to perform a complete review of all aspects of the SMS the Master needs to communicate with officers who are responsible for the management of operations and activities. Minutes from meetings are safety records and may be used as objective evidence by the auditor.

Master's reports should also include proposals for improving the SMS. Reports in which the Master only has signed that the review has been performed, but without any recommendation for improvement, indicate that the methods, procedures and guidance provided by the Company do not ensure that the intent of this requirement effectively is met, or that they are not used by the Master.

ISM Code - paragraph 5.2

5.2 The Company should ensure that the SMS operating on board the ship contains a clear statement emphasizing the Master's authority. The Company should establish in the SMS that the Master has the overriding authority and the responsibility to make decisions with respect to safety and pollution prevention and to request the Company's assistance as may be necessary.

The SMS should state the Master's overriding authority and discretion to take whatever action is considered necessary in the best interest of crew, passengers, the ship and environment.

The overriding authority of the Master applies to all circumstances.

The auditor should verify that the Company has definitively documented that the Master has an over-riding responsibility and authority on shipboard operations as prescribed in Resolution



A.443(XI) "Decision of the Shipmaster with regard to Maritime Safety and Marine Environment Protection".

Examples of objective evidence found at office may include:

- Evidence that masters have exercised the "overriding authority" under SMS (if any)

Examples of objective evidence found on board the ship may include:

- Evidence that master has exercised the "overriding authority" under SMS (if any).
- Verify during audit of master that the master of the vessel understands the meaning of "overriding authority" as per SMS and that he has the authority to make decisions with respect to safety and pollution prevention and to request for company assistance if necessary.
- Interview with Master confirm practical understanding of his overriding authority in matters such as requesting tug assistance, use of Lloyd's open form for salvage assistance, deviation from procedures if the situation so dictate.

DNV:

It is a common misperception that the overriding authority of the Master applies to emergencies only. Hence, the statement should make it clear that the overriding authority of the Master is not limited to emergency situations. It applies to all circumstances affecting safety and prevention of pollution.

Auditors should know that this requirement is the practical implementation into the shipboard SMS of IMO Resolution A.443(XI) "Decision of the Shipmaster with regard to Maritime Safety and Marine Environment Protection".



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6. RESOURCES AND PERSONNEL

6.1 The Company should ensure that the Master is:

- .1 properly qualified for command;
- .2 fully conversant with the Company's SMS; and
- .3 given the necessary support so that the Master's duties can be safely performed.

6.2 The Company should ensure that each ship is manned with qualified, certificated and medically fit seafarers in accordance with national and international requirements.

6.3 The Company should establish procedures to ensure that new personnel and personnel transferred to new assignments related to safety and protection of the environment are given proper familiarization with their duties. Instructions which are essential to be provided prior to sailing should be identified, documented and given.

6.4 The Company should ensure that all personnel involved in the Company's SMS have an adequate understanding of relevant rules, regulations, codes and guidelines.

6.5 The Company should establish and maintain procedures for identifying any training which may be required in support of the SMS and ensure that such training is provided for all personnel concerned.

6.6 The Company should establish procedures by which the ship's personnel receive relevant information on the SMS in a working language or languages understood by them.

6.7 The Company should ensure that the ship's personnel are able to communicate effectively in the execution of their duties related to the SMS.

ISM Code - paragraph 6.1.1

6.1.1 properly qualified for command;

The Master's qualification for command to be verified by the Company before assignment to a ship may be determined with reference to the following:

- i) certificate of competency, including validity and authenticity, complies with relevant Flag State and STCW requirements;
- ii) previous seagoing experience on the same type of ship;
- iii) performance reports, including those from previous employers, if available;
- iv) additional specific company requirements.

Examples of objective evidence found at the office may include:



- Master's Certificate of Competence copy appropriately endorsed according to STCW requirements
- Master's CV stating previous experience on the same type of ship
- Company's written minimum requirements for the Master's qualification and experience

Examples of objective evidence found on board the ship may include:

- Master's Certificate of Competence appropriately endorsed according to STCW requirements
- Standing orders and night orders

ISM Code - paragraph 6.1.2

6.1.2 fully conversant with the Company's SMS; and
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The Company should ensure that the Master is “**fully conversant**” with all requirements relating to the Company's safety and environmental protection policies.

The auditor should expect the Master to demonstrate familiarity with the SMS during onboard interviews. To assist this purpose, the auditor may find records of participation in regular meetings with the Company's management, attendance at seminars or training sessions on the SMS.

Examples of objective evidence found at the office may include:

- Master's appraisal records and evidence of their monitoring and evaluation by the Company
- Records of regular briefings on the SMS in the Company with the Masters
- The Master's periodical SMS review for the Company

Examples of objective evidence found on board the ship may include:

- Knowledge, assessed by means of interviews, of the Company's SMS related procedures safety and safety management system meetings as applicable

DNV:

Most Companies have provided for training arrangements to ensure that their Masters and Senior officers are familiar with and fully understands the SMS, ref. also 6.5. Verifying that these training arrangements are effectively implemented is part of the ISM Code audit. If the Master is not conversant with the Company SMS this should qualify for the issue of a non-conformity statement or an “Observation” against this requirement and 6.5.



ISM - paragraph 6.1.3

6.1.3 given the necessary support so that the Master's duties can be safely performed.

Through the interview process, auditor ensures the Master is given full support to fulfill his duties in maintaining the Company's safety and environmental policies. Evidence of this support would be how the Company responds to requests made by the Master.

Examples of objective evidence found at the office and on board the ship may include:

- written review and feedback from the Company of the safety meetings
- Company timely feedback to the Master's requests for technical support, spare parts, elimination of deficiencies, additional training of personnel, response to emergencies, etc.
- deficiencies identified in Master's handover forms have been taken care of by the Company

ISM Code - paragraph 6.2

6.2 The Company should ensure that each ship is manned with qualified, certificated and medically fit seafarers in accordance with national and international requirements.

"Manning requirements" are described in Flag Administration's regulations and may be exceeded as required by the Company. The standards for certification and training of specific shipboard assignments for licensed and unlicensed personnel are described in the STCW Convention, as amended. The Company has to be familiar with such requirements consistent with ship type(s) and operation.

"Qualification of personnel" may be ensured by adopting a policy for recruitment (e.g. evaluation of personal CV, information from other Companies, interviews), selection of personnel (e.g. by an appraisal system) and, as far as possible, embarkation of personnel already known by the Company.

The Company should have a system in place for selecting personnel, especially if obtained through a manning agent. A procedure may then be expected to detail how the selection process is carried out to comply with the STCW Convention, as amended.

When recruitment or manning is obtained through a manning agent, the Company should adopt a procedure for checking that its policy is followed by the agent. A procedure may be expected providing details on how the recruitment and selection process is carried out.



"Medical fitness", as required in the amended STCW Convention, should include that a reasonable policy exists and it has been implemented. Evidence of such a policy includes certificates or endorsements in seaman books and that crew members have undergone medical examination within the intervals established by the Flag Administration.

Some companies have their own medical department providing pre-employment and existing employees medical examinations. Such a policy, while beneficial, does not always detect medical problems which can exist when a crew member joins the ship.

Some Companies have established a formal drug and alcohol policy and process of screening crew. Such policy is a method by which a Company may help ensure that ship personnel remain medically fit for duty on a day to day basis. Should this exist, the auditor may include these activities in the audit.

Examples of objective evidence found at the office may include:

- written recruiting procedures and minimum requirements for the Officers' qualification
- the Officers' CVs satisfying such minimum requirements
- the Company's established and documented procedures for monitoring expiring Certificates, when applicable

Examples of objective evidence found on board the ship may include:

- the vessels are manned accordingly to the minimum safe manning required by the flag
- the watchkeeping Officers' Certificates of Competence appropriately endorsed by the flag as applicable
- valid certificates according to specific ship types as required by STCW convention - valid medical fitness certificates and medical examination reports as required

ISM Code - paragraph 6.3

6.3 The Company should establish procedures to ensure that new personnel and personnel transferred to new assignments related to safety and protection of the environment are given proper familiarization with their duties. Instructions which are essential to be provided prior to sailing should be identified, documented and given.

The Company shall provide, in accordance with STCW, written instructions to the Master of each ship to which the Convention applies, setting forth the policies and procedures to be followed to ensure that all seafarers who are newly employed onboard are given a reasonable opportunity to become familiar with the shipboard equipment, operating procedures and other arrangements needed for the proper performance of their duties, before being assigned to those duties.

"New assignments" related to ship personnel may include another ship, a different job or promotion.



"Essential instructions" are those that clearly define the crew members role within the ship's organisation and ensure that they are prepared prior to taking up their duties on board. These instructions may include crew member's responsibility, authority and interrelationships with others involved in the SMS.

"Instructions prior to sailing" may include lifeboat station and responsibilities, fire station responsibilities and making available specific additional reference material associated with safety requirements from the SOLAS training manual.

"Familiarisation" is the process that allows a person embarking for the first time on a ship or transferred to new assignments to become familiar with that ship, its machinery, systems, equipment and operations. Familiarisation may be accomplished for instance by:

- i) embarking as supernumerary,
- ii) receiving essential information in a language the seafarer understands,
- iii) shore side seminars sponsored by industry or Company,
- iv) observing onboard overlap while vessel in port,
- v) visual aids such as videos, manuals and operating instructions.

The choice and level of detail to assist familiarization will depend on individual experience and the job responsibilities. Should individuals require essential familiarization with an assignment prior to sailing, then the Company should identify such requirements and develop an appropriate plan. Examples may be familiarization with the equipment on the bridge or in the engine room.

A system of familiarization should also be applied to new or transferred shore staff where their responsibilities include safety and pollution prevention. This could include superintendents who are not familiar with a type of vessel being operated by the Company.

Examples of objective evidence found at the office may include:

- a documented training program for crew members
- records of seminars and training courses
- evidence of evaluation by the Company of appraisal

Examples of objective evidence found on board the ship may include:

- evidence, obtained by means of interviews and observation of behavior, when possible, that crewmembers have appropriate knowledge of SMS onboard procedures (ex working permits, bunkering checklists, etc)
- correct performance of drills as required by SOLAS regulations, the SMS manual, the SOPEP Plan, etc.
- familiarization checklists duly signed by trainer and trainee

**ISM Code - paragraph 6.4**

6.4 The Company should ensure that all personnel involved in the Company's SMS have an adequate understanding of relevant rules, regulations, codes and guidelines.

The Company should have a plan on how to provide all personnel involved in safety and pollution prevention with information on mandatory requirements of the relevant Administration(s) and applicable codes and guidelines.

Such information may be communicated by:

- i) written instructions,
- ii) description of job responsibilities,
- iii) formal discussions with Company representatives.

Examples of objective evidence found at the office may include:

- company library complete, controlled and updated
- control and updating procedure for the company library

Examples of objective evidence found on board the ship may include:

- shipboard library complete, controlled and updated
- control and updating procedure for the shipboard library
- crewmember's knowledge, assessed by means of interviews, of rules, regulations, codes and guidelines

ISM Code - paragraph 6.5

6.5 The Company should establish and maintain procedures for identifying any training which may be required in support of the SMS and ensure that such training is provided for all personnel concerned.

The Company should identify the individual(s), ashore and onboard, having responsibility to define training needs appropriate for specific tasks, taking into account factors such as:

- i) previous training and experience,



- ii) required proficiency in operation of equipment,
- iii) familiarity with new equipment,
- iv) familiarity with equipment when transferred to different type vessel,
- v) drills for emergencies,
- vi) results of internal auditing.

Training may be supplemented by using visual aids, such as videos, manuals and operating instructions, or direct supervision by a superior.

Examples of objective evidence found at the office may include:

- Company and shipboard training plan
- Records of shore-side drills and training

Examples of objective evidence found on board the ship may include:

- records of drills and training
- internal audit reports

ISM Code - paragraph 6.6

6.6 The Company should establish procedures by which the ship's personnel receive relevant information on the SMS in a working language or languages understood by them.

The Company should establish the working language(s) onboard and the requested level of knowledge of foreign languages for the crew members.

The details and the amount of documentation should be determined by what is necessary to ensure all appropriate shipboard personnel can understand their respective roles.

In absence of documentation translated into the working language of the crew members, the auditor would expect to find objective evidence that proper familiarisation with the safety management system, as far as applicable, had taken place. Records of respective training sessions should be maintained.

Examples of objective evidence found at the office may include:

- internal audit reports, technical reports, circulars, etc.

Examples of objective evidence found on board the ship may include:

- standing orders, night orders, work orders, emergency stations, etc.

**DNV:**

Objective evidence on the non-fulfilment of this requirement may also indicate that there are reasons to question 5.1.1.

ISM Code - paragraph 6.7

6.7 The Company should ensure that the ship's personnel are able to communicate effectively in the execution of their duties related to the SMS.

Sufficient instructions in a suitable language need to be verified, as well as ensuring an understanding of them by the crew. This could be verified by witnessing an exercise. Verification that the ship's personnel are able to communicate may be accomplished by verifying the execution of orders given by Officers as requested by the auditor.

The auditor should verify if procedures exist that ensure effective communication on board. Documented evidence must be available, e.g. from manning agencies at the recruitment stage and during crew appraisals. Those responsible for the care of passengers during shipboard emergencies should be able to communicate with them effectively.

Examples of objective evidence found at the office may include:

- what is the established working language of SMS
- Company's minimum requirements in relation to language knowledge of crew members
- Sample of crew list

Examples of objective evidence found on board the ship may include:

- capability, assessed by means of observation of behavior, of crewmembers to understand each other during simulation of emergencies and during shipboard procedures
- crewmembers' understanding, assessed by means of interviews, of emergency and operative signs onboard and safety guidelines.

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7. DEVELOPMENT OF PLANS FOR SHIPBOARD OPERATIONS

The Company should establish procedures for the preparation of plans and instructions, including checklists as appropriate, for key shipboard operations concerning the safety of the ship and the prevention of pollution. The various tasks involved should be defined and assigned to qualified personnel.



"Key shipboard operations" in the safety and pollution prevention context mean:

- i) all those operations for which mandatory rules and regulations prescribe performance requirements or specific requirements for plans, procedures, instructions, records and checklists;
- ii) those connected to the particular ship's type and which may affect safety and pollution prevention, to the extent established by the Company;
- iii) those for which safe practices in ship operations and a safe working environment (ref. 1.2.1) have been recommended by the IMO, Administrations, classification societies and other industry bodies (ref. 1.2.3.2)
- iv) those which the Company considers may create hazardous situations if not controlled by plans and instructions.

The ISM Code does not specify any particular approach to establish plans, instructions and checklists and it is for the company to choose methods appropriate to its organizational structure, its ships and its trades.

The methods may be more or less formal, but they must be systematic if assessment and response are to be complete and effective. Methods of Company identification of key shipboard operations may include the following:

- i) Company experience on those operations which may create hazardous situations if not controlled by plans and instructions;
- ii) feedback provided from the SMS elements such as the Master's review of the SMS (ref. 5.1.5), internal audits, reports and analysis of non-conformities, accidents and hazardous occurrences;
- iii) formalized systematic methods which the Company may decide to use as a tool for hazard identification. Further details on risk assessment methodology is given in IACS' "A GUIDE TO RISK ASSESSMENT IN SHIP OPERATIONS"

Non-conformities should not be raised against the adequacy, but on the implementation of such methods decided by the Company to identify key shipboard operations.

"Plans and instructions" include plans, procedures, instructions and checklists which are meant to govern or support shipboard activities related to the safety of the ship and the prevention of pollution. These should also deal with new ship types when relevant.

Examples are those routine activities which if not correctly handled could lead to hazardous situations, e.g. watch keeping, loading, discharging, gas freeing, tank cleaning, sailing (confined waters), passage planning, pollution prevention, etc.

"Procedures for the preparation of plans and instructions" should have safety and pollution prevention as a primary objective and should include, inter alia, measures to prevent identified risks as referenced in 1.2.2.2 and 1.4.2 of the ISM Code.

The development of procedures should take into account relevant international and national mandatory rules and regulations and applicable codes, guidelines and standards for the type(s) of ship covered by the SMS. This information should be kept updated by the Company to take into account its operational experience.



The development process shall ensure that ship and trade specific issues are adequately dealt with.

If having the same shipboard procedures for multiple ship types, care must be taken to clearly identify the procedures that are relevant for each ship.

The Company should be involved to confirm that the list is consistent with the Company's particular operational experience and procedures.

Non-conformities may be raised against the adequacy of methods decided by the Company to identify key shipboard operations and when there is evidence that such plans, procedures and instructions are inadequate.

The approval of the performance of operations for which plans, procedures and instructions are required by mandatory rules and regulations, such as damage control plans, are dealt with separately and independently of ISM Code audits.

"Qualified personnel" means those who are qualified to identify key shipboard operations and carry out actions requested by plans, procedures and instructions.

When developing plans and instructions for key shipboard operations, the focus is on prevention, which requires the use of personnel who have adequate technical and/or operational knowledge relevant to the Company's operations.

The auditor should not prescribe particular requirements for qualified Company personnel to perform the review process.

Identification of tasks assigned to appropriately qualified personnel is an important consideration. Checklists may be used to facilitate the process. The auditor should expect the Company to have identified risks associated with a particular type of vessel and trade. Such identification should be documented in some form. Identified risks may simply be indicated in tables of contents.

Examples of objective evidence found at the Office may include:

- Documented procedures for the preparation of plans and instructions for key shipboard operations concerning the safety of the ship and the prevention of pollution
- Documented evidence of the decision making process and outcome thereof

The effectiveness of the process should be evaluated based on the following evidence:

- i) evidence that a systematic review of mandatory rules and regulations applicable to each ship type included in the DOC is carried out by the Company (ref. 1.2.3.1 and 6.4) for the purpose of identification of the plans, procedures and instructions that are required by mandatory rules and regulations for the type(s) of ships operated by the Company. This evidence may include the existence of an appropriate library of applicable rules and regulations;
- ii) evidence of a systematic review of recommendations given in form of codes, guidelines and standards by the IMO, Administrations, classification societies or other industry bodies, which the Company has decided that are applicable to their operation. This evidence may include verification that
 - there is a list of these references,



- these recommendations are made available for those responsible for developing the plans and instructions for key operations;
testing the completeness of the review by choosing a random sample of the operations for which there are requirements for plans, procedures or instructions in mandatory rules and regulations;
- iii) verifying that the Company has established their own qualification requirements for those who are to be responsible for the development of plans, procedures and instructions for key operations; and
- iv) that this has been used as a basis for a systematic identification of the plans, procedures and instructions that are required by mandatory rules and regulations for the type(s) of ships operated by the Company;

The shipboard audit should include:

- v) verification that key operations are under control by random sampling of those operations. This would involve the need to witness operations and confirm that the operation is conducted in accordance with procedures and instructions and will include discussion with crew members on their specific responsibilities associated with the key operation. The random sampling would depend on the type of ship, the ship operator, time available and availability of ship's personnel.
- vi) verification that an appropriate library of applicable rules and regulations, guidelines, codes and standards exists.

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8 EMERGENCY PREPAREDNESS

- 8.1 The Company should establish procedures to identify, describe and respond to potential emergency shipboard situations.
- 8.2 The Company should establish programmes for drills and exercises to prepare for emergency actions.
- 8.3 The safety management system should provide for measures ensuring that the Company's organization can respond at any time to hazards, accidents and emergency situations involving its ships.

**ISM Code – paragraph 8.1**

8.1 The Company should establish procedures to identify, describe and respond to potential emergency shipboard situations.

Usually the following scenarios should be addressed by emergency plans as required by the specific ship types:

- structural failure / heavy weather damage
- failure of main propulsion
- steering gear failure
- electrical power failure
- collision
- grounding / stranding
- shifting of cargo
- cargo / oil spillage / jettison *
- flooding
- fire / explosion
- abandoning ship
- man over board
- search and rescue operations
- serious injury
- piracy / terrorism *
- helicopter rescue operations

* Remark: references should be made to other separate emergency plans like SOPEP, SMPEP, SSP.

Depending on vessel's type and trade, some of emergency scenarios may be omitted (e.g. shifting of cargo on passenger vessels, piracy in certain trades). However, the list is not exhaustive and the Company shall identify all possible situations where shipboard contingency planning would be required relative to the ship's type, equipment and trade.

Examples of objective evidence found at the Office may include:



- records of drills
- records of training ashore
- emergency response plans

Examples of objective evidence found onboard the ship may include:

- SOPEP manuals
- records of drills
- emergency response plans

DNV:

Possible examples of emergency shipboard situations may include:

- **"Shore terminal related"**, e.g. overloading, fire, explosion;
- **"Ship related"**, e.g. heavy weather damage, collision, grounding, fire, explosion, cargo shifting, pollution involving cargo or bunkers, flooding;
- **"Personnel related"**, e.g. abandon ship, man overboard, serious injury, enclosed space rescue, terrorism, piracy.

International Conventions contains requirements for emergency plans. There are also additional national requirements. Some governments have made their requirements applicable to foreign flag ships, as a condition for calling at their ports.

Most of these plans are subject to approval by the (flag State) Administration or by the maritime administration of the country which imposes its national requirements on foreign flag ships. In such cases assessing the adequacy of emergency/contingency plans falls outside the scope of the audit.

The auditor shall, however, verify that the planned arrangements are implemented, onboard and ashore when relevant. This has mainly to be based on interviewing personnel to verify their familiarity with the planned arrangements to the extent they will be involved when the plan is activated.

Consistent lack of familiarity may bear evidence to inadequate arrangements for the implementation (familiarisation with the plans and arrangements) and may be subject to the issue of a non-conformity to this end. Isolated examples should be subject to the issue of an observation.

Governments may require that Company procedures for identification of emergency situations include the use of formal methodologies to be used for the identification of hazards. Companies may also choose to do this voluntarily. Auditors may not require formal hazard identification methods except when this is mandated by flag State or Coast State in which waters the ship is to trade. Assessment of the adequacy of formal hazard analyses is beyond the scope of ISM Code Audits.

**ISM Code – paragraph 8.2**

8.2 The Company should establish programmes for drills and exercises to prepare for emergency actions.

For all emergency scenarios identified by the Company (see 8.1) a drill schedule should be prescribed by the Company; for this drill schedule no certain format is required, however, following information should be provided:

- Frequency of the particular drills.
- Extend of the particular drills (e.g. table top drill only, or practical drill followed by debriefing and watching of a certain safety video).
- The Company might lay down who on board is responsible for the detailed planning of a drill scenario. Furthermore it appears to be prudent that a Company will instruct the vessels to perform practical drills under conditions with reduced personnel due to simulated casualties, i.e. back up / deputy staff should be involved in leadership and all tasks of a certain drill.
- In addition it may be beneficial for audit purposes to witness a shipboard safety drill or other practical demonstration (e.g. starting of life boat engine, donning of fire suit, first measures in case of detecting a cabin fire, etc).

Examples of objective evidence found at the Office may include:

- drill schedule for ships, shore-side and joint exercises
- records of drills and training
- analysis or evaluation of drills and exercises

Examples of objective evidence found onboard the ship may include:

- drill schedule for ships, shore-side and joint exercises
- records of drills and training
- analysis or evaluation of drills and exercises

DNV:

Log books will normally contain sufficient objective evidence of drills being performed as required.

The effectiveness of drills may be assessed through interviews of personnel testing their familiarity with their duties in this respect and that they have gained the knowledge needed for safe and efficient performance of their duties.



The company may decide to include drills in addition to the ones stated in mandatory rules and regulations. Auditors should verify that these are effectively implemented. Lack of or ineffective implementation of such Company requirements shall not lead to nonconformities.

ISM Code – paragraph 8.3

8.3 The safety management system should provide for measures ensuring that the Company's organization can respond at any time to hazards, accidents and emergency situations involving its ships.

It is important that Company shore and shipboard contingency planning is consistent and appropriately integrated.

Shore based emergency plans should include:

- Procedures for the mobilisation of an appropriate Company emergency response team (incl. back up arrangements in the event of a prolonged emergency)
- The composition and duties of the persons acting within the contingency plan - Procedures / checklists, etc. appropriate to the type of emergency which may assist in the
- systematic questioning of the ship during the response- The availability of vessel's contact
- numbers, ship particulars, plans, stability and cargo information, and safety and
- environmental protection equipment carried on board
- Details and contact numbers of all relevant parties including subcontractors, administrations, port states, Class emergency services, etc. who may need to be notified and consulted
- Procedures for notifying and liaising with the next of kin of shipboard personnel
- Procedures for issuing information bulletins to and answering queries from the media might also be included.

Examples of objective evidence found at the Office may include:

- emergency response plans
- contact points for all relevant parties (ERT, owners, charterers, insurance, etc.) - 24 hr contact number between the ship and the Company
- back-up arrangement



- specific drawings for ship types

Examples of objective evidence found onboard the ship may include:

- emergency response plans
- contact points for all relevant parties (ERT, owners, charterers, insurance, etc.) - 24 hr contact number between the ship and the Company
- specific drawings for ship type
- status and location of emergency equipment and oil spill response gear

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9. REPORTS AND ANALYSIS OF NON-CONFORMITIES, ACCIDENTS AND HAZARDOUS OCCURRENCES

9.1 The SMS should include procedures ensuring that non-conformities, accidents and hazardous situations are reported to the Company, investigated and analysed with the objective of improving safety and pollution prevention.

9.2 The Company should establish procedures for the implementation of corrective action.

ISM Code - paragraph 9.1

9.1 The SMS should include procedures ensuring that non-conformities, accidents and hazardous situations are reported to the Company, investigated and analysed with the objective of improving safety and pollution prevention.

Records of non-conformities, accidents, hazardous situations and relevant investigations produced by shipboard personnel and/or by the Company from operations or internal audits, should be provided to the auditor during audits to demonstrate effective functioning of the SMS.

Non-conformity means an observed situation where objective evidence indicates the non-fulfillment of a specified requirement. Non-conformities may be identified as result of such activities as internal and external audits, class surveys, flag or port state inspections. The NCs may include non-fulfillment of technical as well as operational requirements.

Accidents are events that lead to unintended harm or damage such as deaths or injuries, pollution or property damage. Hazardous situations include near misses/near accidents and are often defined events that under slightly different circumstances may lead to an accident.



The auditor should be aware that terminology in reporting such events vary from company to company.

The auditor would also expect to see the effective implementation of a documented procedure dealing with the review and analysis of the events stated above. Analyses should aim to determine basic causes, not only symptoms. This should include the objective for improvement.

Corrective action should include both the "repair" to deal with the immediate situation as well as measures taken to prevent or reduce likelihood of recurrence.

DNV:

In this context, conditions of class (CC) and conditions of authorities (CA) are to be considered as non-conformities and subject to investigation and analysis as required by 9.1. (This follows from what the Code, 1.2.3 state to be the objective of the SMS.)

Reports from investigations of accidents and near misses should place emphasis on the description of the conditions and circumstances at the time of the event, in order to allow for the best possible analysis. Analyses should determine basic causes, not symptoms. Auditors should have sufficient knowledge to support Companies in establishing practices that contribute to SMS improvements.

The auditor should examine reports of non-conformities, and from investigation of accidents and near misses and the records from analyses performed to determine their causes. Complete lack of Reports and records indicate beyond reasonable doubt that the Company has not succeeded in their implementation of this requirement.

There are still perceptions within the industry that incident reporting may expose a Company to liabilities. These attitudes can only be conquered if the Companies understand the ideas behind these requirements and the benefits that may be achieved by its effective implementation. This is why inadequate fulfilment of these requirements today should not be the basis for the issue of a major non-conformity and why Auditors should limit their statements to nonconformities or observations.

ISM Code - paragraph 9.2

9.2 The Company should establish procedures for the implementation of corrective action.

The Company should have procedures for carrying out the corrective actions suggested by analysis relevant to non-conformities, accidents and hazardous situations identified from internal audits and during operations.

Auditors should focus on the effectiveness of the procedure(s) for implementing corrective actions. Failure to comply with these issues in a timely manner should qualify for a non-



conformity. Consistent, grave inability to comply in time should result in the issue of a major non-conformity.

Examples of objective evidence found at the Office and onboard the ship may include:

- Personnel aware of procedure procedures ensuring that non-conformities, accidents and hazardous situations are reported, investigated, analyzed and followed up
- Records of non-conformities, accidents and hazardous situations reported (check against documents such as class, flag and port state reports, medical logs and interviews)
- Records of accident investigation and analysis
- Evidence of corrective action including actions to prevent recurrence
- Evidence of effective and timely implementation of corrective action

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10. MAINTENANCE OF THE SHIP AND EQUIPMENT

10.1 The Company should establish procedures to ensure that the ship is maintained in conformity with the provisions of the relevant rules and regulations and with any additional requirements which may be established by the Company.

10.2 In meeting these requirements the Company should ensure that:

- .1 inspections are held at appropriate intervals;
- .2 any non-conformity is reported with its possible cause, if known;
- .3 appropriate corrective action is taken; and
- .4 records of these activities are maintained.

10.3 The Company should establish procedures in SMS to identify equipment and technical systems the sudden operational failure of which may result in hazardous situations. The SMS should provide for specific measures aimed at promoting the reliability of such equipment or system. These measures should include the regular testing of stand-by arrangements and equipment or technical systems that are not in continuous use.

10.4 The inspections mentioned in 10.2 as well as the measures referred to 10.3 should be integrated in the ship's operational maintenance routine.



ISM Code - paragraph 10.1

10.1 The Company should establish procedures to ensure that the ship is maintained in conformity with the provisions of the relevant rules and regulations and with any additional requirements which may be established by the Company.

The maintenance of the ship and equipment should be in accordance with the procedures established by the Company. These procedures should take into account international conventions, Flag and Port State regulations, classification rules, requirements from manufacturers, feedback information from failures, damages, defects and malfunctions.

There are a number of acceptable systems associated with maintenance of equipment. The choice depends on ship design and Company philosophy. The auditor should expect to find maintenance process documentation and records indicating compliance with maintenance program requirements.

Objective evidence is necessary to confirm conformance with established maintenance requirements

Examples of objective evidence found at the Office and onboard the ship may include:

- documented procedures and instructions for the onboard work routine;
- verification of their implementation in the day-to-day operation of the ship by the appropriate personnel.

ISM Code - paragraph 10.2.1

10.2 In meeting these requirements the Company should ensure that:

- .1 inspections are held at appropriate intervals;

The Company should define the appropriate intervals and may be expected to justify their selection.

As part of shipboard responsibilities, there should be formal routine inspections of machinery, systems, equipment and structural integrity of the ship.

Examples of objective evidence found at the Office may include:

- shipboard inspection reports from ship staffs and/or company superintendents at intervals as required by the maintenance plan;



- definition of inspection criteria such as manufacturer's recommendations; and
- monitoring of maintenance status.

Examples of objective evidence found onboard the ship may include:

- shipboard inspection reports;
- condition of ship; and
- results from other surveys and inspections.

DNV:

The inspections should cover all items subject to class and statutory surveys (and additional Company requirements). Inspections may be part of the maintenance procedures, or operational procedures/ instructions/routines, or taken care of by dedicated inspection systems, some of which even have specific class or statutory requirements, e.g. safety equipment weekly/monthly inspections. Inspections may also be performed by Company personnel visiting the ship.

ISM Code - paragraph 10.2.2

10.2.2 any non-conformity is reported with its possible cause, if known;

This section of the Code refers to damage, defects, malfunctioning, deficiencies concerning ship and equipment, etc.. Therefore, the term "non-conformity" in this context refers to a technical defect and/or ineffectiveness of maintenance system, not the definition of non-conformity against the ISM Code used in the audit process.

Shipboard personnel, as part of the day-to-day operation of the ship, should have procedures which ensure that defects are reported promptly and rectified within a specified period of time.

A system should be in place to notify appropriate personnel both ashore and on board of defects and appropriate corrective actions.

Examples of objective evidence found at the Office may include:

- receipt of defect reports (damage, inspection reports, etc.) from the ship
- analysis of defect and identification of causes;
- root cause analysis, if necessary

Examples of objective evidence found onboard the ship may include:



- reporting of defects;
- analysis of defect and identification of causes;
- root cause analysis

ISM Code - paragraph 10.2.3

10.2.3 any non-conformity is reported with its possible cause, if known; and
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The Company should have documented procedures for corrective action of defects which cannot be promptly corrected by the shipboard personnel.

Corrective action should involve solutions which may reduce or prevent re-occurrence of defects.

Defects which, for any reason, cannot be promptly dealt with by the ship personnel (e.g. due to lack of resources or material) or whose repair may be postponed (e.g. to the next dry dock or long stay) and which do not affect the ship's safety and environmental protection, should be included in a continuously updated list, to be available onboard and ashore.

The SMS should include instructions when ship's personnel are unable to correct a defect affecting the ship's safety or protection of the environment with available resources and material, in order to inform the appropriate person in the Company of the nature of the problem, whenever possible with proposals for corrective and preventive resolution.

Examples of objective evidence found at the Office may include:

- list of maintenance and repair carried out onboard;
- control, monitoring and supply of spare parts;
- evidence of preventive actions taken;
- evidence of timely follow-up and effectiveness of corrective action;

Examples of objective evidence found onboard the ship may include:

- list of maintenance and repair carried out onboard;
- control, monitoring and receipt of spare parts;
- evidence of preventive actions taken;
- evidence of timely follow-up and effectiveness of corrective action

**DNV:**

Appropriate corrective action in this context includes both the immediate rectification of non-conformities and corrective actions related to the SMS (ref. 9, 5.1.5, 12.2 and 1.4.6) in order to prevent re-occurrence.

Appropriate corrective action also includes the responsibilities of the Company for reporting damages to the classification society as stated in the Rules. Auditors should verify that the Master and senior officers are aware of their responsibilities in this respect.

Inadequate fulfilment of this requirement, particular as to rectification of non-conformities revealed through inspections may indicate that the superintendent/Company does not effectively respond to requests from the ship, the effectiveness of the Designated Person in ensuring that adequate resources and shore based support are applied or that there are other management systems flaws or non-conformities, which are the basic cause for inadequate compliance.

ISM Code - paragraph 10.2.4

10.2.4 records of these activities are maintained.

Records of inspections, maintenance, damages, defects and relevant corrective actions should be kept as objective evidence of the effective functioning of the SMS. The records may be maintained in electronic format.

Examples of objective evidence found at the Office and onboard the ship may include:

- evidence of all records addressed above.

ISM Code - paragraph 10.3

10.3 The Company should establish procedures in SMS to identify equipment and technical systems the sudden operational failure of which may result in hazardous situations. The SMS should provide for specific measures aimed at promoting the reliability of such equipment or system. These measures should include the regular testing of stand-by arrangements and equipment or technical systems that are not in continuous use.



The testing and maintenance of stand-by equipment and infrequently used systems should be part of the company maintenance procedures. Once identified, appropriate tests and other procedures should be developed to ensure reliability.

Examples of such equipment and systems may be:

- i) alarms and emergency shutdowns,
- ii) fuel oil system integrity,
- iii) cargo system integrity,
- iv) emergency equipment (EPIRB, portable VHF, etc.),
- v) safety equipment (portable gas and CO2 detectors, etc.),
- vi) pre-arrival and pre-departure tests (of emergency steering gear, generators, emergency fire pumps, telegraphs, etc.)

Examples of objective evidence found at the Office may include:

- evidence of identification of such equipment;
- records of inspection and testing;

Examples of objective evidence found onboard the ship may include:

- records of inspection and testing;
- evidence of ability to test, operate and maintain such equipment to promote their reliability;
- condition of relevant equipment;

ISM Code - paragraph 10.4

10.4 The inspections mentioned in 10.2 as well as the measures referred to 10.3 should be integrated in the ship's operational maintenance routine.



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11 DOCUMENTATION

11.1 The Company should establish and maintain procedures to control all documents and data which are relevant to the SMS.

11.2 The Company should ensure that:

- .1 valid documents are available at all relevant locations;
- .2 changes to documents are reviewed and approved by authorised personnel; and
- .3 obsolete documents are promptly removed.

11.3 The documents used to describe and implement the SMS may be referred to as the "Safety Management Manual". Documentation should be kept in a form that the Company considers most effective. Each ship should carry on board all documentation relevant to that ship.

Well-designed and well-managed documentation is vital to the health and integrity of the system. It is essential in clarifying and communicating the company's requirements, establishing and maintaining lines of communication, defining and clarifying responsibilities and authorities, and in developing a safety culture.

It is important to remember that the issue of a certificate means that the system complies with the requirements of the ISM Code. It is not a guarantee that it does so in the most efficient way possible. Some very inefficient systems have received ISM certificates! The management system should not create a large and unacceptable bureaucratic burden, but if it does, then the documentation has been badly designed and should be reviewed.

Although the Code does not specifically require the auditor to address the efficiency of the system, serious inefficiencies can reduce its effectiveness, and should not be ignored. The auditor can do much to contribute to the system's improvement by identifying duplication, repetition, ambiguity and redundancy.

The more concise a document, the more likely people are to read it, and the easier it will be to understand. Flow charts and well-designed forms and checklists can do much to reduce the number and size of the procedures, and keeping cross-references to a minimum makes amendment much easier.

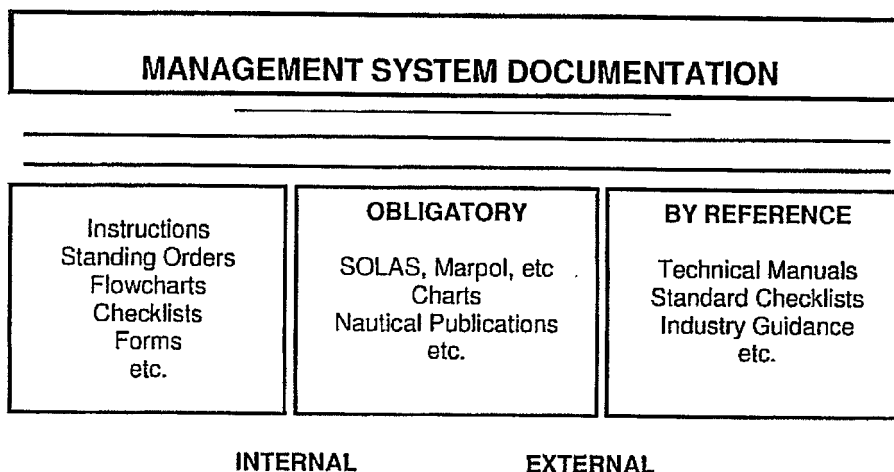
A straightforward review and approval process is essential. To concentrate document authorization in one very senior position, for example, is likely to result in delay. It may be better to approve documents at lower levels more directly associated with the activities concerned, and with the flexibility of one or two alternative signatories. This has the added advantage of increasing the sense of ownership of those responsible for implementing the procedures.

Both internally and externally generated documents must be controlled where necessary. Where the Company has chosen to incorporate external documents into its management



system documentation by reference, then those documents must be available where needed, and must be of the appropriate revision.

It may be helpful to visualize the general structure of management system documentation as portrayed in the diagram below, bearing in mind that detailed arrangements will vary considerably from one company to another. Controls may be applied at the level of individual procedures (which may be re-issued as changes arise) or whole manuals (for which minor amendments are accumulated to be included in regular revisions).



There is a balance to be struck between insisting on the control of every piece of paper in every area and excessive reliance on uncontrolled documents. The auditor should adopt a reasonable and practical approach, taking into account the nature of the document, the frequency with which it is likely to change, and the impact of the activity on safety and pollution prevention.

The same control principles apply to electronic documentation: only the means of application are different. There are also some additional considerations such as security of access, back-up, virus protection and the reliability of power supplies

Examples of objective evidence found at the Office and onboard the vessel may include:

- Availability of documents & amendments where needed
- Removal & destruction or storage of obsolete documents
- Proper review & approval of documents & amendments
- Accurate identification of documents & revision status
- The establishment of rules governing the availability & use of uncontrolled documents



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12. COMPANY VERIFICATION, REVIEW and EVALUATION

12.1 The Company should carry out internal audits to verify whether safety and pollution prevention activities comply with the SMS.

12.2 The Company should periodically evaluate the efficiency and when needed review the SMS in accordance with procedures established by the Company

12.3 The audits and possible corrective actions should be carried out in accordance with documented procedures.

12.4 Personnel carrying out audits should be independent of the areas being audited unless this is impracticable due to the size and the nature of the Company.

12.5 The results of the audits and reviews should be brought to the attention of all personnel having responsibility in the area involved.

12.6 The management personnel responsible for the area involved should take timely corrective action on deficiencies found.

ISM Code – paragraph 12.1

12.1 The Company should carry out internal audits to verify whether safety and pollution prevention activities comply with the SMS.

Internal audits are important to demonstrate the effective functioning and continuous implementation of the SMS, both ashore and onboard.

The Company is required to conduct these internal audits of their shore-side offices and each of their vessels to all elements of the ISM Code and of their own respective procedures at least once every 12 months.

The Company should specify competence requirements for their internal auditors. Refer to ISM Code, Section 6.5.

Although Company audits are also based on sampling of procedures, records, corrective action implemented and verified and interviews of personnel ashore and onboard, it would be reasonable to expect the internal audit to be more comprehensive than the audit performed during external ISM Code certification.

Objective evidence is necessary to confirm conformance with the Company's internal audit procedures, to demonstrate the efficiency of the SMS implementation, continuous improvement of the management system and managements commitment to the SMS.

Examples of objective evidence found at the office and onboard the vessel may include:

- documented procedures for internal audits and reviews, including specification of



- competence for internal auditors
- verification that internal auditor meets competence requirements
- copies of internal audit reports and master's and management reviews
- schedule of planned internal audits, ashore and onboard vessels
- sampling of corrective action taken and verification of effectiveness

DNV:

During the review of the Companies' Internal Audit reports (for company and ships), the auditor should also refer to conditions reported in external audit and inspection reports carried out onboard the ships. Physical defects (and CCs and CAs) may indicate a lack of implementation of the SMS and should when applicable, been reported in the Internal Audit reports.

Also: Inadequate implementation of the SMS onboard may prove that the Company policies/procedures for the Master's implementation are not effective, and this should be stated in a non-conformity. The DNV auditor onboard the ship or at the Company may also consider that this should have been detected at Company audits and issue a Non-conformity or an "Observation" related to ineffective Internal Audits.

Although Company audits are also based on samples it would be reasonable to expect the internal audits to include more comprehensive samples than may be performed during external audits for ISM Code certification.

ISM Code – paragraph 12.2

12.2 The Company should periodically evaluate the efficiency and when needed review the SMS in accordance with procedures established by the Company

Internal audits and reviews should be able to demonstrate the Company's dedication to ensuring that procedures they have established are implemented, effective and resulting in meeting the Company's established goals and objectives.

At minimum these internal audits and reviews should occur in the office/s and onboard each vessel once every 12 months. This period could be less if internal audits or reviews indicate necessary.

Examples of objective evidence found at the office may include:

- established procedures for internal audits, management review of the SMS and Master's review of the SMS
- copies of management review meeting, Master's review and internal audit reports



Examples of objective evidence found onboard the vessel may include:

- Internal audit performed onboard the vessel
- Master's review of the SMS
- sampling of corrective action of deficiencies identified and verification of effectiveness of the corrective action taken

DNV:

The management review should also include the results of external audits, reports and analysis/investigation of non-conformities (CC's and CA's included), accidents, possible new rules and regulations, present and future changes in the fleet, customers, flag states, etc..

ISM Code – paragraph 12.3

12.3 The audits and possible corrective actions should be carried out in accordance with documented procedures.

The Company shall ensure that established procedures are documented and maintained to effectively demonstrate their ability to conduct thorough internal audits and to identify deficiencies during these audits.

These procedures demonstrate the Company's commitment to their SMS and goals and objective established. Internal audits and handling of corrective action also illustrate the Company's commitment for continuous improvement of the SMS implemented onboard and ashore.

Examples of objective evidence found at the office may include:

- documented and maintained procedures for conducting internal audits and handling of corrective action
- sampling of audit reports and corrective action to ensure Company procedures are being adhered to
- internal audit reports reflect the real situation and is confirmed by external audits/inspection such as class, port state, vetting

Example of objective evidence found onboard the vessel may include:

- maintenance of the established procedures regarding internal audits and corrective action
- sampling of corrective action or deficiencies identified and disposition thereof



- Internal audit reports reflect the real situation as observed by the external auditor and various external audits/inspection such as class, port state, vetting

ISM Code – paragraph 12.4

12.4 Personnel carrying out audits should be independent of the areas being audited unless this is impracticable due to the size and the nature of the Company.

As a general rule “independent” means not auditing areas or activities for which you are responsible. This is also seen to be a conflict of interest.

For example, the Designated Person should not be allowed to audit himself or his department.

Likewise, on board a vessel the ship's crew should not be allowed to audit themselves on board. It is felt that this type of audit would not be effective as they are responsible for the vessel and its operation and could be protective of their position.

For example, the Master should not be auditing the Engine Department nor the Chief Engineer auditing the deck Department.

Examples of objective evidence found in the office and onboard may include:

- procedures detailing audit process and the assignment of independent auditors

ISM Code – paragraph 12.5

12.5 The results of the audits and reviews should be brought to the attention of all personnel having responsibility in the area involved.

Internal and external audit results should be the topic of a management meeting. This meeting should include the top management personnel. By reviewing the results from the audits management should be able to determine the effectiveness of the SMS and is it meeting the objectives and goals management have established.

Also, results from audits should be discussed within the department and onboard the vessel audited. This allows the department and vessel realize where continual improvement is required and where specific activities are meeting their objectives.



Examples of objective evidence found in the office may include:

- documented procedure on the management review meeting
- copies of the internal and external audit reports
- disposition of non-conformances identified
- action taken to management review

Examples of objective evidence found onboard the vessel may include:

- copies of the internal and external audit report conducted
- status of non-conformances identified
- copies of the Master's review of the SMS
- relevant information from management review (it is not required to copy the management review to the vessel)

ISM Code – paragraph 12.6

12.6 The management personnel responsible for the area involved should take timely corrective action on deficiencies found.

Corrective action should be initiated as soon as possible for any deficiencies identified during either Master's review, Management Reviews, internal and external audits.

Timely corrective action allows personnel time to evaluate the action applied to a deficiency and to determine its effectiveness. Not taking timely corrective action allows a deficiency to exist longer than necessary and could lead to a breakdown of the SMS, its effectiveness and possibly unsafe conditions.

Corrective action should be completed within time frames established. Verification of the corrective action to an identified deficiency is to ensure that the corrective action taken was and is indeed effective.

Examples of objective evidence found in the office may include:

- documented procedure for how the Company is to deal with deficiencies identified
- assignment of corrective action and status of the corrective action applied
- follow up to corrective action to ensure effectiveness



Examples of objective evidence found onboard the vessel may include:

- status and disposition of non-conformances identified from previous internal, external audits and Master's review
- method for verification of corrective action on board and it's effectiveness



Part B

ISM Code PART B

For certification and verification, further reference should be made to the Part B of ISM Code, Revised Guidelines on the Implementation of the ISM Code by Administrations (IMO Resolution A. 913(22)) and "Procedural Requirements for ISM Code Certification (IACS PR 9)

