

PREAMBLE

The Code for Recognized Organizations (RO Code) was adopted by the Organization by resolutions MSC.349(92) and MEPC.237(65).

This Code:

.1 provides flag States with a standard that will assist in achieving harmonized and consistent global implementation of requirements established by the instrument of the International Maritime Organization (IMO) for the assessment and authorization of recognized organizations (ROs);

.2 provides flag States with harmonized, transparent and independent mechanisms, which can assist in the consistent oversight of ROs in an efficient and effective manner; and

.3 clarifies the responsibilities of organizations authorized as ROs for a flag State and overall scope of authorization.

PART 1 GENERAL

1 PURPOSE

The Code serves as the international standard and consolidated instrument containing minimum criteria against which organizations are assessed towards recognition and authorization and the guidelines for the oversight by flag States.

2 SCOPE

2.1 The Code applies to:

.1 all organizations being considered for recognition or that are recognized by a flag State to perform, on its behalf, statutory certification and services under mandatory IMO instruments and national legislation; and

.2 all flag States that intend to recognize an organization to perform, on their behalf, statutory certification and services under mandatory IMO instruments.

2.2 The Code establishes:

.1 the mandatory requirements that an organization shall fulfil to be recognized by a flag State (part 1);

.2 the mandatory requirements that an RO shall fulfil when performing statutory certification and services on behalf of its authorizing flag States (part 2);

.3 the mandatory requirements that flag States shall adhere to when authorizing an RO (part 2); and

.4 guidelines for flag State oversight of ROs (part 3).

2.3 The Code defines the functional, organizational and control requirements that apply to ROs conducting statutory certification and services performed under mandatory IMO instruments, such as, but not limited to, SOLAS, MARPOL and the Load Lines Conventions.

2.4 All requirements of the Code are generic and applicable to all ROs, regardless of their type and size and the statutory certification and services provided.

2.5 ROs subject to this Code need not offer all types of statutory certification and services and may have a limited scope of recognition, provided that the requirements of this Code are applied in a manner that is compatible with the limited scope of recognition. Where any requirement of this Code cannot be applied due to the scope of services delivered by an RO, this shall be clearly identified by the flag State and recorded in the RO's quality management system.

3 CONTENTS

The Code consists of three parts. Part 1 contains general provisions. Part 2 contains mandatory provisions for the flag State and RO as already contained in relevant IMO instruments and applicable international standards. Part 3 contains guidelines for the oversight of ROs by flag States.

4 DELEGATION OF AUTHORITY

4.1 A flag State may delegate authority to an organization recognized as complying with the provisions of this Code to perform, on its behalf, statutory certification and services under mandatory IMO instruments and its national legislation.

4.2 The flag State shall not authorize functions beyond RO's capabilities. In this respect, the flag State shall take into consideration appendix 2 of this Code for authorization.

4.3 Flag States should cooperate with each other with the objective of ensuring that ROs to whom they delegate authority adhere to the provisions of this Code.

5 COMMUNICATION OF INFORMATION

The flag State shall communicate to, and deposit with, the Secretary-General of IMO a list of ROs for circulation to the interested parties for information of their officers, and a notification of the specific responsibilities and conditions of the authority delegated to ROs.

6 REFERENCES

The Code is based on the following referenced documents:

- .1 mandatory IMO instruments and IMO Guidelines and recommendations (i.e. Codes, guidelines and standards recommended by the Organization);
- .2 ISO 9000:2005, Quality Management Systems – Fundamentals and vocabulary;
- .3 ISO 9001:2008, Quality Management Systems – Requirements;
- .4 ISO/IEC 17020:1998, General criteria for the operation of various types of bodies performing inspection;
- .5 ISO 19011:2002, Guidelines for quality and/or environmental management systems auditing;
- .6 International Association of Classification Societies (IACS) Quality Management System Requirements (QMSR); and
- .7 national legislation.

PART 2 RECOGNITION AND AUTHORIZATION REQUIREMENTS FOR ORGANIZATIONS

1 TERMS AND DEFINITIONS

1.1 Recognized organization (RO) means an organization that has been assessed by a flag State, and found to comply with this part of the RO Code.

1.2 Authorization means the delegation of authority to an RO to perform statutory certification and services on behalf of a flag State as detailed in an agreement or equivalent legal arrangement taking into account the " Elements to be included in an Agreement" as set out in appendix 3 of this Code.

1.3 Statutory certification and services means certificates issued, and services provided, on the authority of laws, rules and regulations set down by the Government of a sovereign State. This includes plan review, survey, and/or audit leading to the

issuance of, or in support of the issuance of, a certificate by or on behalf of a flag State as evidence of compliance with requirements contained in an international convention or national legislation. This includes certificates issued by an organization recognized by the flag State in accordance with the provisions of SOLAS regulation XI-1/1, and which may incorporate demonstrated compliance with the structural, mechanical and electrical requirements of the RO under the terms of its agreement of recognition with the flag State.

1.4 Assessment means any activity to determine that the assessed entity fulfils the requirements of the relevant rules and regulations.

1.5 Interested parties means any person or legal entity who can demonstrate a justified interest in the survey and certification process and includes, inter alia, clients of the RO, shipowners, ship operators, shipbuilders, equipment manufacturers, shipping industry interests or associations, marine insurance interests or associations, trade associations, governmental regulatory bodies or other governmental services and non-governmental organizations.

1.6 Location is a place from which surveys are carried out and managed, or where plan approval is carried out, or from which processes are managed.

1.7 Site is the place at which a surveyor is based to cover a specific contract or a series of contracts including; but not limited to, a port, shipyard, firm, and company. All statutory certification and services at sites are to be controlled by a location.

1.8 A Vertical Contract Audit (VCA) is a contract/order specific audit of production processes, including witnessing work during attendance at a survey, audit or plan approval in progress and, as applicable, including relevant sub-processes. A VCA is carried out at a location or a site (Survey Station/Approval Office/Site) to verify the correct application of relevant requirements in service realization for the specific work in that contract/order, and their interactions (relevant sub-processes include e.g. previous part surveys or UTM processes connected to the survey). Plan approval VCA may be carried out for completed tasks.

2 GENERAL REQUIREMENTS FOR RECOGNIZED ORGANIZATIONS

2.1 General

Delegation of authority by a flag State to an organization shall be subject to the confirmation of the capability of that organization to demonstrate that it has the capacity to deliver high standards of service and its compliance with the requirements of this Code and applicable national legislation.

2.2 Rules and regulations

The RO shall establish, publish and systematically maintain its rules or regulations, a version of which shall be provided in the English language, for the design, construction and certification of ships and their associated essential engineering systems as well as provide for adequate research capability to ensure appropriate updating of the published criteria.

2.3 Independence

The RO and its staff shall not engage in any activities that may conflict with their independence of judgement and integrity in relation to their statutory certification and services. The RO and its staff responsible for carrying out the statutory certification and services shall not be the designer, manufacturer, supplier, installer, purchaser, owner, user or maintainer of the item subject to the statutory certification and services, nor the authorized representative of any of these parties. The RO shall not be substantially dependent on a single commercial enterprise for its revenue.

2.4 Impartiality

2.4.1 The personnel of ROs shall be free from any pressures, which might affect their judgement in performing statutory certification and services. Procedures shall be implemented to prevent persons or organizations external to the organization from influencing the results of services carried out.

2.4.2 All potential customers shall have access to statutory certification and services provided by the RO without undue financial or other conditions. The procedures under which the RO operates shall be administered in a non-discriminatory manner.

2.5 Integrity

The RO shall be governed by the principles of ethical behaviour, which shall be contained in a Code of Ethics. The Code of Ethics shall recognize the inherent responsibility associated with a delegation of authority to include assurance of adequate performance of services.

2.6 Competence

The RO shall perform statutory certification and services by the use of competent surveyors and auditors who are duly qualified, trained and authorized to execute all duties and activities incumbent upon their employer, within their level of work responsibility.

2.7 Responsibility

The RO shall define and document the responsibilities, authorities, qualifications and interrelation of personnel whose work affects the quality of its services.

2.8 Transparency

2.8.1 Transparency reflects the principle of access to, or disclosure of, all information related to the statutory certification and services carried out by the RO on behalf of a flag State.

2.8.2 The ROs shall communicate information to the flag State as described in the section on communication/cooperation with the flag State.

2.8.3 Information concerning the status of ships certified by ROs shall be made available to the public.

3 MANAGEMENT AND ORGANIZATION

3.1 General

The RO shall, based on the provisions of this Code, develop and implement a quality management system and shall continually improve its effectiveness.

3.2 Quality, safety and pollution prevention policy

The RO shall define and document its policy and objectives for, and commitment to, quality, safety and pollution prevention. In particular, the RO's management shall:

- .1 ensure that the policy and objectives are established;

.2 ensure the policy and objectives are appropriate for the purpose of the organization;

.3 communicate the policy and objectives; including provisions applicable to the statutory certification and services, to the organization and ensure that it is understood within the organization;

.4 ensure sufficient availability of resources;

.5 include a commitment to comply with all applicable requirements and continually improve the effectiveness of the quality management system;

.6 conduct management reviews; which includes a framework for reviewing quality objectives; and

.7 review the quality policy, objectives and the quality management system for continuing suitability.

3.3 Documentation requirements

3.3.1 The quality management system shall include the following documentation:

.1 quality policy and quality objectives;

.2 quality manual (refer to section 3.4);

.3 procedures and records required by this Code and the national legislation of the recognizing flag State;

.4 procedures to ensure the effective planning, operation, and control of the RO's processes;

.5 rules and regulations as applicable to the RO's areas of authorization;

.6 list of ships for which statutory certification and services are provided;

.7 other documented process procedures that are considered necessary (these include any circulars or letters, which provide the surveyors and administrative staff with up-to-date information on classification, statutory and related matters);

.8 specifications and diagrams defining or amplifying service processes; and

.9 pro-forma reports, checklists and certificates appropriate to the activities covered by this certification.

3.3.2 The quality management system shall also include external documents, such as:

- .1 national and international standards necessary for the activities governed by this instrument;
- .2 IMO Conventions and resolutions;
- .3 national shipping regulations and standards appropriate to the authorization of the RO;
- .4 documents and data submitted to the RO for verification and/or approval; and
- .5 specified correspondence defined by the RO to be of an important nature.

3.4 Quality manual

The RO shall establish and maintain a quality manual that includes:

- .1 scope of the quality management system, including details of, and justification for any exclusions;
- .2 management statement on its policy and objectives for, and commitment to, quality;
- .3 description of the RO's areas of activity and competence;
- .4 general information about the organization and its head office (name, address, phone number, etc., and legal status);
- .5 information on the RO's relationship to its parent or associated organizations (where applicable);
- .6 charts describing the organization's structure;
- .7 management statement assigning a person designated who is responsible for the organization's quality management system;
- .8 relevant job descriptions;
- .9 policy statement on qualification and training of personnel;
- .10 documented procedures established for the quality management system, or reference to them;
- .11 description of the interaction between processes of the quality management system; and
- .12 description of all other documents required by the quality management system.

3.5 Control of documents

3.5.1 Documents required by the quality management system shall be controlled. The provision of document control shall apply to any type of document, including but not limited to; electronic media and IT applications where said electronic media may affect the reliability of the service or of the recorded data.

3.5.2 A documented procedure shall be established to define the controls needed to:

- .1 approve documents for adequacy prior to issue;
- .2 review and update as necessary and re-approve documents;
- .3 ensure that changes and the current revision status of documents are identified;
- .4 ensure that relevant versions of applicable documents are available at points of use;
- .5 ensure that documents remain legible and readily identifiable;
- .6 ensure that documents of external origin determined by the RO to be necessary for the planning and operation of the quality management system are identified and their distribution is controlled; and
- .7 prevent the unintended use of obsolete documents, and to apply suitable identification if they are retained for any purpose.

3.6 Control of records

3.6.1 Records shall be established to provide evidence of conformity to requirements of this Code and of the effective operation of the quality management system. The records shall be controlled.

3.6.2 The RO shall establish a documented procedure to define the controls needed for the identification, storage, protection, retrieval, retention, and disposition of records. Records shall remain legible, readily identifiable and retrievable.

3.6.3 The RO shall ensure that records are maintained, demonstrating achievement of the required standards in the terms covered by the statutory certification and services performed as well as the effective operation of the quality management system. Records, other than those set out in 3.6.4.2, shall be retained at least for the period for which statutory certification and services are

provided by the RO. Records specified in 3.6.4.2 for a ship shall be retained for a minimum period of three years beyond the period for which statutory certification and services are provided by the RO to that ship, or a longer period if specified in the agreement between the flag State and the RO.

3.6.4 Records shall include at least those relevant to:

- .1 rules and regulations development and associated research;
- .2 the application of the rules and regulations and statutory requirements through:
 - .1 verification and/or approval of documents and/or drawings relevant to the design;
 - .2 approval and survey of materials and equipment;
 - .3 survey during construction and installation;
 - .4 survey during service; and
 - .5 issuance of certificates;
- .3 the list of ships; and
- .4 all other records required by this quality management system and any additional requirements established by the recognizing flag State.

3.7 Planning

3.7.1 The RO shall ensure that quality objectives, including those needed to meet the requirements for statutory certification and services are established at relevant functions and levels within the organization.

3.7.2 The quality objectives shall be measurable and consistent with the quality policy.

3.7.3 The RO shall in its planning consider the elements identified below, and use the result to evaluate the effectiveness of its standards and procedures and their impact on safety of life and property and the marine environment:

- .1 that the planning of the quality management system is carried out in order to meet the requirements of the mandatory IMO Instruments, including but not limited to this Code, its quality management system and the authorizing flag State's national legislation;
- .2 that the integrity of the quality management system is maintained when changes to the quality management system are planned and implemented;

.3 that the needs and expectations of the customers and other interested parties are taken into account, e.g. feedback from IMO, flag States and industry associations;

.4 the effectiveness of services based on statistics from port State control, casualties, loss trends and feedback obtained from internal and external users;

.5 the performance of the quality management system processes based on feedback from internal audits, non-conformities and internal comments;

.6 lessons learned from previous experience and deriving from an examination of survey reports, casualty investigations or external sources; and

.7 other sources of information which identifies opportunities for improvement.

3.7.4 The RO shall identify and plan the processes required for the quality management system, and determine the sequence and interaction of these processes.

3.7.5 The RO shall determine the requirements to be complied with and the criteria to ensure both the operation and control of these processes, including the criteria for acceptance, and evaluate the resources needed.

3.7.6 The RO shall plan and develop the processes required for statutory certification and services. Planning of the delivery of statutory certification and services shall be consistent with the requirements of other processes of the quality management system.

3.7.7 In planning the delivery of statutory certification and services, the RO shall determine the following as appropriate:

.1 quality objectives and requirements for statutory certification and services;

.2 the need to establish processes and documents, and to provide resources specific to the activity;

.3 required verification, validation, monitoring, measurement, inspection and test activities and the criteria for acceptance; and

.4 records needed to provide evidence that statutory certification and services meet the quality management system requirements; the requirements set out in the Code and the national legislation of the recognizing flag State.

3.7.8 The output of this planning shall be in a form suitable for the RO's structure and method of operations. The output of the planning should consider:

.1 responsibility and authority for developing improvement plans;

.2 skills and knowledge needed;

.3 improvement approaches, methodology and tools;

- .4 resource requirements;
- .5 alternative planning needs;
- .6 indicators for performance achievements; and
- .7 the need for documentation and records.

3.8 Organization

3.8.1 The relative size, structure, experience, and capability of the RO shall be commensurate with the type and degree of the statutory certification and services authorized by the flag State.

3.8.2 The RO shall demonstrate that it has the technical, administrative, and managerial competence and capacity to ensure the provision of quality services in a timely manner.

3.8.3 The RO shall appoint a member of its management who, irrespective of other responsibilities, shall have responsibility and authority that includes:

- .1 ensuring that processes needed for the quality management system are established, implemented, and maintained;
- .2 ensuring that processes required for the effective delivery of statutory certification and services are established, implemented and maintained;
- .3 reporting to top management on the performance of the quality management system; the delivery of statutory certification and services and any need for improvement; and
- .4 ensuring the promotion of awareness of all requirements throughout the RO.

3.8.4 The RO shall ensure that the responsibilities and authorities are defined and communicated within the RO.

3.9 Communication

3.9.1 Internal communication

The RO shall ensure that appropriate communication processes are established within the RO and that communication takes place regarding the effectiveness of the quality management system and statutory certification and services provided.

3.9.2 Communication/cooperation with flag State

3.9.2.1 The RO shall establish appropriate communication processes with the authorizing flag State that, inter alia, address the following:

- .1 information specified by the flag State in terms of authorization;
- .2 classification of ships (assignments of class, changes and withdrawals), as applicable;
- .3 cases where a ship did not in all respects remain fit to proceed to sea without danger to the ship or persons on board or presenting unreasonable threat of harm to the marine environment;
- .4 information on all overdue surveys, overdue recommendations or overdue conditions of class, operating conditions or operating restrictions issued against their classed ships that shall be made available upon request by the authorizing flag State; and
- .5 other information as so specified by the authorizing flag State.

3.9.2.2 The RO shall allow participation in the development of its rules and/or regulations by the flag State.

3.9.2.3 The RO shall determine, propose and, if agreed by the flag State, implement effective arrangements for communicating with a flag State in relation to:

- .1 enquiries, contracts or other handling, including amendments; and
- .2 flag State feedback, including conformity issues pertaining to statutory certification and services.

3.9.3 Cooperation between ROs

3.9.3.1 Under the framework established by the flag State, the ROs shall cooperate and share relevant experience with other ROs with the view to standardizing processes concerning statutory certification and services for the flag State, as appropriate.

3.9.3.2 Under the framework established by a flag State or a group of flag States, the organizations recognized by this State or these States shall establish and maintain appropriate technical and safety-related cooperation processes regarding statutory certification and services of ships, which may affect the validity of certificates issued by other ROs either in whole or in part

on behalf of the said flag State(s). Flag States shall seek to mutually cooperate in order to ensure, as far as practicable, the compatibility of their respective frameworks.

3.9.3.3 No flag State shall mandate its ROs to apply to ships, other than those entitled to fly its flag, any requirement pertaining to their classification rules, requirements, procedures or performance of other statutory certification processes, beyond convention requirements and the mandatory instruments of the IMO.

3.9.3.4 In cases of transfer of the certification of the ship from one RO to another, the losing organization shall, without undue delay, provide the gaining organization access to the history file of the ship including:

- .1 any overdue surveys;
- .2 any overdue recommendations and overdue conditions of class;
- .3 operating conditions issued against the ship;
- .4 operating restrictions issued against the ship; and
- .5 technical information, drawings, plans and documents taking into account the relevant guidelines developed by the Organization¹.

¹ MSC-MEPC.5/Circ.2 – Guidelines for Administrations to ensure the adequacy of transfer of class-related matters between recognized organizations (ROs).

3.9.3.5 New certificates for the ship can be issued by the gaining organization only after all overdue surveys have been satisfactorily completed and all overdue recommendations or overdue conditions of class previously issued in respect of the ship have been completed as specified by the losing organization.

3.9.3.6 Within one month from the issuance of the certificates, the gaining organization shall advise the losing organization of the date of issue of the certificates and confirm the date, place and action taken to satisfy each overdue survey, overdue recommendation and overdue condition of class.

3.9.3.7 ROs shall establish and implement appropriate common requirements concerning cases of transfer of the certification of a ship where special precautions are necessary. Those cases shall, as a minimum, include the certification of ships of 15 years of age or over and the transfer of a ship from an organization not recognized by the flag State of the ship.

3.10 Management review

3.10.1 General

The management of an RO shall review its quality management system; including a review of the RO's performance of statutory certification and services, at

planned intervals, which shall not exceed 13 months, to ensure its continuing suitability, adequacy, and effectiveness. This review shall include assessing opportunities for improvement and the need for changes to the quality management system, including the quality policy and quality objectives.

3.10.2 Review input

The input to management review shall include the following information:

- .1 results of audits;
- .2 feedback from interested parties;
- .3 process performance and consistency of compliance with statutory requirements;
- .4 status of preventive and corrective actions;
- .5 follow-up actions from previous management reviews;
- .6 changes that could affect the quality management system; and
- .7 recommendations for improvement.

Any output of management reviews containing information relevant to quality objectives, customer complaints and activity monitoring, throughout the RO, shall be used as input to the top management review.

3.10.3 Review output

3.10.3.1 The output from management review shall include any decisions and actions related to:

- .1 improvement of the effectiveness of the quality management system and its processes;
- .2 improvement of services related to the requirements established in the authorization agreement; and
- .3 resource requirements.

3.10.3.2 Top management shall ensure that the results of the top management review of the quality management system, including the derived quality objectives, are documented and communicated throughout the organization, as appropriate.

3.10.3.3 Records from management reviews shall be maintained.

4 RESOURCES

4.1 General

4.1.1 The RO shall determine and provide the adequate resources in terms of technical, managerial and survey capabilities to accomplish the tasks being assigned and resources needed to implement the quality management system and to continually improve its effectiveness; and to enhance its performance in the delivery of statutory certification and services.

4.1.2 The RO shall be able to document extensive experience in assessing the design, construction and equipment of ships and the capability to effectively perform statutory certification and services on behalf of a flag State.

4.1.3 The RO shall have the capacity to:

.1 provide for the publication and systematic maintenance of rules and/or regulations for the design, construction and certification of ships and their associated essential engineering systems as well as the provision of an adequate research capability to ensure appropriate updating of the published criteria. The RO is required to maintain an up-to-date version of this publication in the English language; and

.2 allow participation in the development of its rules and/or regulations by representatives of the flag State and other interested parties.

4.2 Personnel

4.2.1 The RO shall be equipped, at all times, with significant managerial, technical, support and research staff commensurate with the size of the fleet in its class, its composition and the organization's involvement in the construction, repair and conversion of ships. The RO shall be capable of assigning to every place of work, when and as needed, the means and staff commensurate with the tasks to be carried out in accordance with the requirements of this Code and those of the flag State.

4.2.2 The management of an RO shall have the competence, capability and capacity to organize, manage and control the performance of statutory certification and services in order to verify compliance with requirements relevant to the tasks delegated and shall, inter alia:

.1 possess an adequate number of competent supervisory, technical appraisal and survey personnel;

.2 develop and maintain appropriate procedures and instructions;

.3 maintain up-to-date documentation on interpretation of the relevant instruments;

.4 give technical and administrative support to field staff; and

.5 review survey reports and plan approval letters for accuracy, compliance with requirements and to provide experience feedback for continual improvement.

4.2.3 The RO shall be established with a qualified staff to provide the required service representing an adequate geographical coverage and local representation as required.

4.2.4 The RO shall perform statutory certification and services by the use of only exclusive surveyors and auditors, being persons solely employed by the RO, duly qualified, trained and authorized to execute all duties and activities incumbent upon their employer, within their level of work responsibility. While still remaining responsible for the certification on behalf of the flag State, the RO may subcontract radio surveys to non-exclusive surveyors in accordance with section 5.9 of part 2 of this Code.

4.2.5 The RO's personnel performing and responsible for statutory certification and services shall have, as a minimum, the following formal education:

.1 qualifications from a tertiary institution within a relevant field of engineering or physical science (minimum two-year programme); or

.2 qualifications from a marine or nautical institution and relevant seagoing experience as a certificated ship officer, and

.3 proficiency in the English language commensurate with the scope of statutory certification and services.

4.2.6 Other personnel assisting in the performance of statutory work shall have education, training and supervision commensurate with the tasks they are authorized to perform.

4.2.7 The RO shall have a documented system to track the qualifications of personnel; including continuous updating of their knowledge as appropriate to the tasks they are authorized to undertake. This system shall comprise appropriate training courses, including, inter alia, international instruments and appropriate procedures related to the delivery of statutory certification and services, as well as practical tutored training; it shall provide documented evidence of satisfactory completion of the training. As a minimum, the provisions in appendices 1 and 2 shall be met.

4.3 Infrastructure

4.3.1 The RO shall determine, provide, and maintain the infrastructure required to perform statutory certification and services in accordance with the requirements of the mandatory IMO instruments. Infrastructure includes, as applicable:

.1 building, workspaces and associated utilities;

.2 process equipment (both hardware and software); and

.3 supporting services, including but not limited to transport, communication, training and information systems.

4.3.2 Systems (hardware and software) provided to the surveyor shall be identified and relevant training on their use shall be carried out and documented. Special consideration should be given to the situation where a surveyor is working out of a home-based office.

4.4 Work environment

4.4.1 The RO shall be satisfied that the work environment is safe and effective to perform statutory certification and services. While it is understood that such environmental conditions are not provided by the RO, the environmental conditions under which the survey will be permitted to take place shall be made clear to the customer prior to survey commencing.

4.4.2 The RO shall determine the necessary working procedures required to perform statutory certification and services safely and effectively. Training of staff on personal safety shall be carried out and documented.

4.4.3 Requirements for personal protective equipment to be used while performing statutory certification and services and procedures for personal safety of surveyors at work shall be established and documented.

5 STATUTORY CERTIFICATION AND SERVICES PROCESSES

5.1 General

It should be recognized that statutory certification and services are service delivery development processes for flag State and RO compliance verification activities rather than the design process for a ship or its equipment.

5.2 Design and development

5.2.1 The RO shall plan and control the design and development of statutory certification and services processes. During the design and development planning, the organization shall determine:

- .1 the design and development stages;
- .2 the review, verification and validation that are appropriate to each service design and development stage; and
- .3 the responsibilities and authorities for design and development.

5.2.2 The RO shall allow participation in the development and review of its rules, procedures and/or regulations, specifically in the review process prior to finalization, by representatives of the flag State and interested parties.

5.2.3 The RO shall include in its rules and/or procedures:

.1 requirements specified and communicated to ROs by the flag State, specifically for statutory certification and services²;

² Refer to the Code for the implementation of mandatory IMO instruments, 2011, adopted by resolution A.1054(27), as may be amended.

.2 requirements not stated by the flag State but necessary for specified or intended use, as determined by the RO.

5.2.4 Implementation of requirements may be in the form of adoption into the RO's internal requirements or by use of the original documents from IMO or the flag State.

5.2.5 The RO shall not issue statutory certificates to a ship, irrespective of its flag, which has been declassified or is changing class for safety reasons, before giving the opportunity to the competent Administration of the flag State to give its opinion within a reasonable time as to whether a full inspection is necessary.

5.3 Design and development inputs

5.3.1 Inputs relating to service requirements shall be determined and records maintained.

These inputs shall include:

.1 applicable statutory and regulatory requirements;

.2 where applicable, information derived from previous similar designs;

.3 other requirements essential for design and development, such as functional and performance requirements; and

.4 in-service experience with ships and mobile offshore drilling units obtained from within the RO itself and external sources.

5.3.2 The inputs shall be reviewed for adequacy. Requirements shall be complete, unambiguous and not in conflict with each other.

5.4 Design and development outputs

At suitable stages, systematic reviews of design and development of rules and standards shall be performed in accordance with planned arrangements to evaluate the ability of the results to meet requirements; and to identify any problems and propose necessary actions.

5.5 Design and development verification

Verification shall be performed in accordance with planned arrangements to ensure that the design and development outputs have met the design and development input requirements. Records of the results of the verification and any necessary actions shall be maintained.

5.6 Control of design and development changes

Design and development changes shall be identified and records maintained. The changes shall be reviewed, verified and validated, as appropriate, and approved before implementation. The review of the design and development changes shall include evaluation of the effect of the changes on the constituent parts and product already delivered. Records of the results of the review of changes and any necessary actions shall be maintained.

5.7 Control of production and service provisions

5.7.1 The RO shall ensure that all statutory certification and services are carried out under controlled conditions.

5.7.2 Controlled conditions shall include, as applicable:

- .1 the availability of information that describes the status and condition of ships surveyed and certified;
- .2 the availability of rules, regulations, work instructions, and other applicable standards, as necessary;
- .3 the use of suitable equipment;
- .4 the availability and use of monitoring and measuring equipment;
- .5 the implementation of monitoring and measurement;
- .6 the implementation of controls to ensure the accuracy of survey reports and certificates both before and after issuance; and
- .7 a safe work environment.

5.7.3 An RO shall conduct the statutory certification and services of the ship in conformity with all relevant international requirements and the requirements of this Code. When accepting a ship on behalf of the flag State that was constructed originally without a known flag State the RO shall verify that the ship complies with national requirements of that flag State prior to certification.

5.8 Property of clients

The RO shall identify, verify, protect and safeguard property provided by the clients for performance of statutory certification and services. If property is lost, damaged or otherwise found to be unsuitable for use, the RO shall report this to the property owner and maintain relevant records.

5.9 Subcontracting and service suppliers

5.9.1 Where an RO chooses to outsource any service that affects conformity to requirements or accepts work of a third party approved by the RO, the RO shall ensure that it fully controls the performance of such services. The flag State may increase the scope of control to be applied to these outsourced services. The process for outsourcing shall be defined within the RO's quality management system. For the purpose of accountability to the flag State, the work performed by the sub-contracted organization or service supplier constitutes the work of the RO and shall be subject to the requirements incumbent upon the RO under this Code.

5.9.2 Firms providing services on behalf of the owner of a ship or a mobile offshore drilling unit, the results of which are used by the RO in making decisions affecting the statutory certification and services shall be subject to approval and control by either the flag State or the RO in accordance with the procedures under their respective quality management system or the flag State requirements.

5.10 Control of monitoring and measuring devices

5.10.1 The RO shall determine the monitoring and measurement to be undertaken and the monitoring and measurement equipment needed to provide evidence of conformity to the applicable requirements.

5.10.2 The RO shall establish processes to ensure that monitoring and measurement can be carried out in a manner that is consistent with the monitoring and measurement requirements.

5.10.3 Where necessary to ensure valid results, measuring equipment shall:

.1 be calibrated or verified, or both, at specified intervals, or prior to use, against measurement standards traceable to international or national measurement standards; where no such standards exist, the basis used for calibration or verification shall be recorded;

.2 be adjusted or re-adjusted as necessary;

.3 have identification in order to determine its calibration status;

.4 be safeguarded from adjustments that would invalidate the measurement result; and

.5 be protected from damage and deterioration during handling, maintenance, and storage.

5.10.4 The RO shall assess and record the validity of previous measuring results when the equipment is found not to conform to requirements. The RO shall take appropriate action on the equipment affected. Records of results of calibration and verification shall be maintained.

5.10.5 When used in monitoring and measurement of specific requirements, the ability of computer software to satisfy the intended application shall be confirmed. This shall be undertaken prior to initial use and reconfirmed as necessary.

5.10.6 Where an RO is verifying testing at manufacturers, builders, repairers or owners premises and reporting the same, the RO shall ensure that the measuring devices used in the process are identified and that evidence of calibration is obtained. Where an RO is witnessing testing of service equipment installed or available on board a ship, a means shall be established so that the RO is satisfied as to the appropriate accuracy of the measuring equipment.

5.11 Complaints

The RO shall have a documented process to address complaints related to statutory certification and services.

5.12 Appeals

The RO shall have a documented process to address appeals related to statutory certification and services in accordance with the requirements of the flag State.

6 PERFORMANCE MEASUREMENT, ANALYSIS AND IMPROVEMENT

6.1 General

6.1.1 The RO shall plan and implement the monitoring, measurement, analysis and improvement processes needed to demonstrate conformity to statutory certification and services requirements, to ensure conformity of the quality management system, and to continually improve the effectiveness of the quality management system. This shall include the determination of applicable methods, including statistical techniques, and the extent of their use. The measurements employed by the RO shall be reviewed periodically, and data shall be verified on a continual basis for accuracy and completeness.

6.1.2 The RO shall develop key performance indicators with respect to the performance of statutory certification and services.

6.2 Internal audit

6.2.1 The RO shall implement an audit programme; including the completion of internal audits at planned intervals to determine whether the authorized activity conforms to the planned arrangements and that the quality management system is effectively implemented and maintained, and that a supervisory system is in place, which monitors statutory certification and services.

6.2.2 The audit programme shall take into consideration the status and importance of the processes and areas to be audited, as well as the results of previous audits, flag State feedback, complaints and appeals including port State and flag State inspections. When planning the internal audits, consideration shall be given to complaints received in the past (either related to the location or in general) and to the results of previous internal audits and to the operation of the locations.

6.2.3 The RO shall define the audit criteria, scope, frequency, and methods. Auditors shall be suitably qualified and selected in order to ensure objectivity and impartiality of the audit process. Auditors shall not audit their own work. The audit scope shall cover the processes for the statutory certification and services at various locations with a focus on verification of the efficient and effective implementation of the quality management system and applicable work processes at the individual location. The audit periods, which may be established according to the findings, shall ensure that each location is audited at least once per three years. Audits at locations shall also include visits to selected sites, which operate under the control of the location.

6.2.4 A documented procedure shall be established to define the responsibilities and requirements for planning and conducting audits, establishing records and reporting results. Records of audits and their results shall be maintained.

6.2.5 The management responsible for the area being audited shall ensure that any necessary corrections and corrective actions are taken without undue delay to eliminate detected nonconformities, observations (potential non-conformities) and their root causes.

6.3 Vertical Contract Audit

6.3.1 The RO shall carry out Vertical Contract Audits annually for each of the following processes:

- .1 plan approval;
- .2 new construction survey;
- .3 in-service periodical survey/audit; and
- .4 type approval (where applicable) or survey of other materials and equipment.

6.3.2 Evidence of completion of VCAs and findings thereof, shall be formally recorded.

6.4 Monitoring and measurement of processes

6.4.1 The RO shall apply suitable methods for monitoring, including a supervisory system that monitors the work activities carried out, and where applicable, measurement of the quality management system processes. These methods shall demonstrate the ability of the processes to achieve sustained compliance with the requirements of this Code and the agreement with the flag State, in particular that:

- .1 the RO's rules and/or regulations are complied with; and
- .2 the requirements of the statutory certification and services are satisfied.

6.4.2 When planned results are not achieved, correction and corrective action shall be taken, as appropriate.

6.4.3 The implemented methods should consider issues such as, but not limited to:

- .1 port State control detentions;
- .2 casualties; and
- .3 rework of plan approval letters and survey reports.

6.5 Control, monitoring and measurement of non-conformities, including statutory deficiencies

6.5.1 The RO shall monitor and measure the service delivery with statutory requirements and the RO's rules to verify that all requirements have been met. This shall be carried out at appropriate stages of the statutory certification and services process in accordance with the planned arrangements. Evidence of conformity with the statutory requirements and RO rules shall be maintained. Records shall indicate the person(s) approving or verifying compliance with the statutory requirements and the RO's rules.

6.5.2 The RO shall make provisions to ensure that non-conformities are identified and controlled. The controls and related responsibilities and authorities for dealing with non-conformities shall be defined in a documented procedure.

6.5.3 Where applicable, the RO shall deal with a non-conformity by one or more of the following ways:

.1 by taking action to eliminate the detected non-conformity;

.2 by authorizing its use, release or acceptance under the terms determined by the flag State;

.3 when accepting with or without correction by exemption or equivalence, consideration should be given to the non-conformities with rules and regulations or statutory requirements during:

.1 drawing approval,

.2 survey of materials and equipment,

.3 survey during construction and installation,

.4 survey during service;

.4 by taking action to preclude its original intended use or application; and

.5 by taking action appropriate to the effects, or potential effects, of the non-conformity when a non-conformity is detected.

6.5.4 When a non-conformity is corrected, it shall be subject to reverification to demonstrate conformity to the requirements.

6.5.5 Records of the nature of non-conformities and any subsequent actions taken, including exemption or equivalences obtained, shall be maintained.

6.5.6 The RO shall comply with the instructions of the flag State detailing actions to be followed in the event that a ship is found not fit to proceed to sea without danger to the ship or persons on board, or presenting unreasonable threat of harm to the marine environment.

6.5.7 The ROs shall cooperate with port State control Administrations where a ship to which the RO issued the certificates is concerned, in particular, in order to facilitate the rectification of reported deficiencies or other discrepancies.

6.5.8 The RO responsible for issuing the relevant certificate shall, upon receiving a report of an accident or discovering a defect to a ship which affects the safety of the ship or the efficiency or completeness of its life saving appliances or other equipment, cause investigations to be initiated to determine whether a survey is necessary.

6.6 Improvement

6.6.1 General

The RO shall continually improve the effectiveness of its quality management system through the use of the quality policy, quality objectives, audit results, analysis of data, corrective and preventive actions and management review.

6.6.2 Data analysis

6.6.2.1 The objective of data analysis is to determine the cause of problems to guide effective corrective and preventive action. The RO shall:

- .1 analyse data from various sources to assess performance against plans and goals and to identify areas for improvement;
- .2 make use of statistical methodologies for data analysis, which can help in assessing, controlling, and improving performance of processes; and
- .3 analyse the product requirements, as well as analysis of relevant processes, operations and quality records.

6.6.2.2 Information and data from all parts of the RO shall be integrated and analysed to evaluate the overall performance of the quality management system.

6.6.2.3 The results of analysis shall be documented and used to determine:

- .1 trends;
- .2 operational performance;
- .3 customer satisfaction and/or dissatisfaction through complaints or other quality indicators (PSC detentions, flag State non-conformities, etc.);

- .4 effectiveness and/or efficiency of processes; and
- .5 performance of suppliers.

6.6.3 Sources of information

The RO shall identify sources of information and establish processes for collection of information for planning continual improvement, corrective and preventive actions. Such information shall include, inter alia:

- .1 customer complaints;
- .2 non-conformance reports;
- .3 outputs from management reviews;
- .4 internal audit reports;
- .5 outputs from data analysis;
- .6 relevant records;
- .7 outputs from customer feedback and satisfaction measurements;
- .8 process measurements;
- .9 results of self-assessment; and
- .10 in-service experience.

6.6.4 Corrective action

6.6.4.1 The RO shall without undue delay take action to eliminate the causes of non-conformities in order to prevent recurrence. Corrective actions shall be appropriate to the effects of the non-conformities encountered and address all actual or potential effects of these.

6.6.4.2 A documented procedure shall be established to define requirements for:

- .1 reviewing non-conformities (including complaints);
- .2 determining the cause of non-conformities;

- .3 evaluating the need for action to ensure that non-conformities do not recur;
- .4 determining and implementing action needed;
- .5 records of the results of action taken; and
- .6 reviewing the effectiveness of the corrective action taken.

6.6.5 Preventive action

6.6.5.1 The RO shall take action to identify and eliminate the causes of potential non-conformities in order to prevent their occurrence. Preventive actions shall be appropriate to the nature and effects of the potential problems.

6.6.5.2 A documented procedure shall be established to define requirements for:

- .1 determining potential non-conformities and their causes;
- .2 evaluating the need for action to prevent occurrence of non-conformities;
- .3 determining and implementing action needed;
- .4 records of results of action taken; and
- .5 reviewing the effectiveness of the preventive action taken.

6.6.5.3 Examples of such methodologies may include risk analyses, trend analyses, statistical process control, fault-tree analyses, failure modes and effects and criticality analyses.

7 QUALITY MANAGEMENT SYSTEM CERTIFICATION

7.1 The RO shall develop, implement and maintain an effective internal quality management system that complies with the requirements of this Code and is based on appropriate parts of internationally recognized quality standards no less effective than the ISO 9000 series.

7.2 The RO's quality management system shall be periodically assessed and certified in accordance with the applicable international quality standards by a qualified body, accredited to comply with ISO/IEC 17021:2006 standard by an accreditation body that is signatory to the International Accreditation Forum (IAF) Multinational Recognition Agreement (MRA), recognized by the flag State as having

the necessary governance and competences to act independently of the ROs or their associations and having the necessary means to carry out its duties effectively and to the highest professional standards, safeguarding the independence of the persons performing them.

7.3 In pursuance of continually improving RO and flag State services, IMO endeavours to closely monitor the certification and audit process of the RO and its implementation to ensure its continued relevance and validity to the maritime industry in general and to the ROs, in particular. IMO will establish the working methods and rules of procedure for such monitoring.

8 AUTHORIZATION OF RECOGNIZED ORGANIZATIONS

8.1 General

Under the provisions of regulation I/6 of SOLAS 1974, article 13 of LL 66, regulation 6 of MARPOL Annex I and regulation 8 of MARPOL Annex II and article 6 of TONNAGE 69, a flag State may authorize an RO to act on its behalf in statutory certification and services and determination of tonnages only to ships entitled to fly its flag as required by these conventions. Such authorizations shall not require ROs to perform actions that impinge on the rights of another flag State.

8.2 Legal basis of the functions under authorization

The flag State shall establish the legal basis under which the authorization of statutory certification and services is administered. The following items shall be considered:

- .1 the formal written agreement with the RO;
- .2 acts, regulations and supplementary information;
- .3 interpretations; and
- .4 deviations and equivalent solutions.

8.3 Specification of authorization

The flag State shall specify the scope of authorization granted to an RO. The following specifications shall be considered:

- .1 ship types and sizes;
- .2 conventions and other instruments, including relevant national legislation;
- .3 approval of drawings;
- .4 approval of materials and equipment;
- .5 surveys, audits, inspections;
- .6 issuance, endorsement and/or renewal of certificates;
- .7 corrective actions;
- .8 withdrawal or cancellation of certificates; and
- .9 reporting requirements.

8.4 Resources

The flag State shall ensure that an RO has adequate resources in terms of technical, managerial and research capabilities to accomplish the tasks being assigned, in accordance with the minimum standards for ROs acting on behalf of the flag State set out in part 2 of this Code.

8.5 Instruments

The flag State shall provide the RO with access to all appropriate instruments of national law giving effect to the provisions of the conventions, notify the RO of any additions, deletions or revisions thereto in advance of their effective date and specify whether the flag State's standards go beyond convention requirements in any respect.

8.6 Instructions

8.6.1 The flag State shall issue specific instructions detailing the procedures to be followed in carrying out statutory certification and services, and actions to be followed in the event that a ship is found not fit to proceed to sea without danger to the ship or persons on board, or presenting unreasonable threat of harm to the marine environment.

8.6.2 Flag States shall ensure by appropriate means that ROs cooperate with each other in accordance with the provisions of this Code.

8.7 Records

The flag State shall specify that the RO maintain records, which can provide the flag State with data to assist in interpretation of convention regulations.

PART 3 OVERSIGHT OF RECOGNIZED ORGANIZATIONS

1 PURPOSE

Part 3 of the RO Code provides guidance on flag State's oversight of ROs authorized to perform statutory certification and services on its behalf. Part 3 also provides guidance on the principles of oversight that may include ship inspection, auditing, and monitoring activities.

2 SCOPE

Part 3 of the RO code is applicable to all flag States that have authorized ROs to perform statutory certification and services. Part 3 includes flag State oversight provisions and provides guidance, which is non-mandatory, to assist flag States in the development and implementation of an effective oversight programme of ROs.

3 REFERENCES

The following documents are referenced:

- .1 mandatory IMO instruments;
- .2 ISO 9000:2005, Quality Management Systems – Fundamentals and vocabulary;
- .3 ISO 9001:2008, Quality Management Systems – Requirements;
- .4 ISO/IEC 17020:1998, General Criteria for the operation of various types of bodies performing inspection;

.5 ISO 19011:2002, Guidelines for quality and/or environmental management systems auditing; and

.6 national legislation.

4 TERMS AND DEFINITIONS

4.1 *Audit* means a systematic, independent, and documented process for obtaining audit evidence and evaluating it objectively to determine the extent to which the audit criteria are fulfilled. Auditing is characterized by reliance on a number of principles. These make the audit an effective and reliable tool in support of management policies and controls, providing information on which an RO can act to improve its performance. Adherence to these principles is a prerequisite for providing audit conclusions that are relevant and sufficient and for enabling auditors working independently from one another to reach similar conclusions in similar circumstances.

4.2 *Audit criteria* means a set of policies, procedures or requirements.

4.3 *Audit evidence* means records, statements of fact, or other information, which are relevant to the audit criteria and verifiable. Audit evidence may be qualitative or quantitative.

4.4 *Audit findings* means results of the evaluation of the collected audit evidence against audit criteria. Audit findings can indicate conformity, observation (potential non-conformity) or non-conformity with audit criteria or opportunities for improvement.

4.5 *Audit conclusion* means an outcome of an audit, provided by the audit team, after consideration of the audit objectives and all audit findings.

4.6 *Audit client* means an organization or person requesting an audit.

4.7 *Auditee* is an organization recognized by a flag State that may be subject to an audit by the authorizing flag State.

4.8 *Auditor* means a person with the competence to conduct an audit.

4.9 *Audit team* means one or more auditors conducting an audit, supported if required by technical experts.

4.10 *Technical expert* means a person who provides specific knowledge or expertise to the audit team.

4.11 *Audit programme* means a set of one or more audits planned for a specific period and directed towards a specific purpose. An audit programme includes all activities necessary for planning, organizing, and conducting the audits.

4.12 *Audit plan* means a description of the activities and arrangements for an audit.

4.13 *Audit scope* means extent and boundaries of an audit. The audit scope generally includes a description of the physical locations, organizational units, activities and processes, as well as the time period covered.

4.14 *Competence* means demonstrated personal attributes and demonstrated ability to apply knowledge and skills.

4.15 *Oversight* means any activity by a flag State carried out to assure an RO's service complies with IMO and national requirements of the recognizing flag State.

4.16 *Monitoring* means any activity by a flag State where a flag State witnesses services by an RO or reviews documentation used by the RO and which is carried out to assure that RO services are in compliance with IMO and national requirements. Monitoring may be considered as a component of oversight.

5 ESTABLISHING AN OVERSIGHT PROGRAMME

5.1 Oversight

The flag State should establish or participate in an oversight programme with adequate resources for monitoring of, and communication with, its RO(s) in order to ensure that its international obligations are fully met, by:

- .1 exercising its authority to conduct supplementary surveys to ensure that ships entitled to fly its flag in fact comply with the requirements of the applicable international instruments;
- .2 conducting supplementary surveys as it deems necessary to ensure that ships entitled to fly its flag comply with national requirements, which supplement the international mandatory requirements; and
- .3 providing staff who have a good knowledge of the rules and regulations of the flag State and the ROs and who are available to carry out effective oversight of the ROs.

5.2 Flag State's supervision of duties delegated to an RO

The flag State's supervision of duties delegated to an RO should consider, inter alia, the following:

- .1 documentation of the RO's quality management system;
- .2 access to internal instructions, circulars and guidelines;

- .3 access to the RO's documentation relevant to the flag State's fleet;
- .4 cooperation with the flag State's inspection and verification work; and
- .5 provision of information and statistics; such as, but not limited to, damage and casualties relevant to the flag State's fleet.

5.3 Verification and monitoring

The flag State should establish a system to ensure the adequacy of statutory certification and services provided. Such a system should, inter alia, include the following items:

- .1 procedures for communication with the RO;
- .2 procedures for reporting to the flag State by the RO and the processing of such reports by the flag State. The following reporting requirements should be considered:
 - .1 the RO should notify the flag State immediately upon becoming aware of a situation involving a major deficiency, or serious safety-related issue, that would normally be considered sufficient to detain a ship from proceeding to sea pending correction;
 - .2 the RO should notify the flag State(s) immediately upon becoming aware of a situation aboard ship or within a company involving a major non-conformity, as defined in the *Guidelines on the Implementation of the International Safety Management (ISM) Code by Administrations* (resolution A.1022(26), as amended);
 - .3 the notification above should contain the name of the company or ship, the IMO number, the official number, if applicable, and a description of the major non-conformity, deficiency or issue;
 - .4 the RO should inform the flag State, as soon as possible, of any dangerous occurrences, accidents, machinery or structural breakdowns, or failures that they are aware of on a ship; and
 - .5 the RO should report to the flag State in writing the names and official numbers, if applicable, of any ships removed from the RO's list of classed/certified ships for which the RO has performed statutory certification and services. The report should contain a description of the reason(s) for removal from class, and this should be made within thirty (30) days of the removal becoming effective;
- .3 additional ship's inspections by the flag State;

.4 appropriate technical and/or safety related consultations between ROs regarding statutory certification and services, which may affect the validity of certificates issued either in whole or in part on behalf of the flag State(s);

.5 the flag State's evaluation/acceptance of the certification of the RO's quality management system by an independent body of auditors accepted by the flag State;

.6 monitoring and verification of statutory certification and services, which contribute either in whole or in part to compliance with a mandatory IMO instrument. The flag State should consider the implementation of the following:

.1 flag State's oversight of RO quality management systems;

.2 observation of or systematic review of reports of the quality management system audits conducted by other qualified persons or organizations external to and independent of the RO;

.3 verification and inspection of ships that are subject to statutory certification and services; and

.4 complaint and feedback system and corrective action follow-up;

.7 a flag State accepting ships constructed without its involvement should establish that an RO conducting statutory certification and services of the ship conforms to this Code; and

.8 for ships constructed without an identified flag State, the flag State specific requirements should be verified prior to certification.

6 PRINCIPLES OF AUDITING

6.1 The flag State should be satisfied that the RO has an effective quality management system in place. The flag State may rely upon the audits carried out by an accredited certification body or equivalent organizations. Intergovernmental cooperation in establishing common auditing practices is encouraged.

6.2 A flag State auditor should advance the following principles:

.1 ethical conduct: the foundation of professionalism. Trust, integrity, confidentiality and discretion are essential to auditing;

.2 fair presentation: the obligation to report truthfully and accurately. Audit findings, audit conclusions, and audit reports reflect truthfully and accurately the audit activities. Significant obstacles encountered during the audit and unresolved diverging opinions between the audit team and the auditee are reported; and

.3 due professional care: the application of diligence and judgment in auditing. Auditors exercise care in accordance with the importance of the task they perform and the confidence placed in them by audit clients and other interested parties. Having the necessary competence is an important factor.

6.3 Further principles relate to the audit, which is by definition independent and systematic.

.1 independence: the basis for the impartiality of the audit and objectivity of the audit conclusions. Auditors are independent of the activity being audited and are free from bias and conflict of interest. Auditors maintain an objective state of mind throughout the audit process to ensure that the audit findings and conclusions will be based only on the audit evidence;

.2 evidence-based approach: the rational method for reaching reliable and reproducible audit conclusions in a systematic audit process. Audit evidence is verifiable. It is based on samples of the information available, since an audit is conducted during a finite period of time and with finite resources. The appropriate use of sampling is closely related to the confidence that can be placed in the audit conclusions.

6.4 The guidance given in this Code is based on the principles set out above.

7 MANAGING AN OVERSIGHT PROGRAMME

7.1 General

7.1.1 The flag States are required to verify that the organizations recognized to perform statutory certification and services on their behalf fulfil the requirements of this Code. The purpose of this verification is to ensure that the RO is performing its statutory certification and service in compliance with this Code and its agreement with the flag State.

7.1.2 The flag State should develop, implement, and manage an effective oversight programme of the ROs that act on its behalf.

7.1.3 An oversight programme should include various monitoring activities, which may inter alia consist of audits, inspections and audit observations (potential non-conformities). The flag States' oversight programme of their ROs should be developed after carefully assessing the factors associated with the RO as well as the extent of access to the RO's records of statutory certification and services that are made available to the flag State. The programme should also consider the delivery of statutory certification and services with respect to the provisions of the Conventions and with respect to the national requirements and instructions published by the flag State. Factors should include:

.1 the scope and frequency of high level audits of the RO carried out by flag States and independent accredited bodies, and of internal audits carried out by the RO;

.2 the extent to which audit findings, observations (potential non-conformities) and corrective actions are made available to the flag State;

.3 the extent to which remote monitoring of the RO can be undertaken by the flag State which can manifest itself in several different ways depending on the scope of information that is electronically available to the flag State. Remote monitoring can include:

.1 review of the contents of survey reports associated with statutory certificates issued by the RO;

.2 review of the effectiveness of the control and rectification of deficiencies and outstanding requirements within the deadlines established by the flag State through the RO; and

.3 review of the RO's country-specific instructions to determine that the flag State's national requirements are properly and completely addressed by the RO;

.4 flag State inspections carried out on board ships to check the end-result of the certification process, with a specific interest in their national requirements and/or implementation of instructions issued to the RO; and

.5 port State control detentions and deficiencies allocated to the responsibility of the RO.

7.1.4 An oversight programme should also include all activities necessary for planning and organizing the types and number of monitoring activities, and for providing resources to conduct them effectively and efficiently within the specified periods.

7.1.5 Those assigned the responsibility for managing the oversight programme should:

.1 establish, implement, monitor, review and improve the oversight programme; and

.2 identify the necessary resources and ensure they are available and provided, as required.

7.1.6 An oversight programme should also include planning, the provision of resources and the establishment of procedures to conduct monitoring activities within the programme.

7.2 Oversight programme objectives and extent

7.2.1 Objectives of an oversight programme

7.2.1.1 The flag State should establish objectives for an oversight programme, to direct the planning and conduct of monitoring activities.

7.2.1.2 The following objectives should be considered:

- .1 management priorities;
- .2 flag State intentions;
- .3 flag State system requirements;
- .4 statutory, regulatory and contractual requirements;
- .5 need for ROs to be evaluated;
- .6 flag State, ROs, and other requirements;
- .7 needs of other interested parties; and
- .8 risks to the flag State.

7.2.2 Extent of an oversight programme

7.2.2.1 The flag State's oversight programme should reflect the size, nature and complexity of the flag State's authorization programme, as well as the following factors:

- .1 the scope, objective and duration of monitoring activities to be conducted;
- .2 the frequency of monitoring activities to be conducted;
- .3 the number, importance, complexity, similarity, and locations of the ROs;
- .4 standards, statutory, regulatory, and contractual requirements and other monitoring criteria;
- .5 the need for accreditation or registration/certification of ROs;
- .6 conclusions of previous monitoring activities;
- .7 the concerns of interested parties; and
- .8 significant changes to an RO or its operations.

7.2.2.2 A flag State may enter into a written agreement to participate in combined monitoring/oversight activities with another flag State or States that have authorizations with the same RO provided that the level of detail regarding individual flag State requirements and individual flag State performance are addressed at a level equivalent to an oversight programme conducted by each of the individual flag State. Conversely no flag State may be compelled by another flag State or organization to accept oversight of an RO by others in lieu of conducting its own individual flag State oversight unless it so elects by written agreement or is so provided in the law of that State. A copy of all such agreements should be submitted to IMO for the information of the Member States.

7.3 Oversight programme responsibilities, resources and procedures

7.3.1 Oversight programme responsibilities

7.3.1.1 The flag State is responsible for managing its oversight programme. The flag State should utilize competent individuals that have an understanding of the oversight requirements, audit principles, and the application of audit techniques. They should have management skills as well as technical and business understanding relevant to the activities to be monitored.

7.3.1.2 Those assigned the responsibility for managing the oversight programme should:

- .1 establish the objectives and extent of the oversight programme;
- .2 establish the responsibilities and procedures, and ensure resources are provided;
- .3 ensure the implementation of the oversight programme;
- .4 ensure that appropriate oversight programme records are maintained; and
- .5 monitor, review and improve the oversight programme.

7.3.2 Oversight programme resources

When identifying resources for the oversight programme, the flag State should consider the following:

- .1 financial resources necessary to develop, implement, manage, and improve oversight activities;
- .2 auditing techniques;

- .3 processes to achieve and maintain the competence of staff, and to improve oversight performance;
- .4 the availability of staff and technical experts having competence appropriate to the particular oversight programme objectives;
- .5 the extent of the oversight programme; and
- .6 travelling time, accommodation and other oversight needs.

7.3.3 Oversight programme procedures

7.3.3.1 The flag State's oversight programme procedures should address the following:

- .1 planning and scheduling of oversight activities;
- .2 assuring the competence of assigned personnel;
- .3 selecting appropriate personnel and assigning their roles and responsibilities;
- .4 conducting monitoring activities;
- .5 conducting follow-up, if applicable;
- .6 maintaining oversight programme records;
- .7 monitoring the performance and effectiveness of the oversight programme; and
- .8 reporting on the overall achievements of the oversight programme.

7.3.3.2 For flag States with a limited authorization programme, the activities above may be addressed in a single procedure.

7.3.4 Oversight programme implementation

The implementation of a flag State oversight programme should include the following factors:

- .1 communicating the objectives of the oversight programme to relevant parties;

- .2 coordinating and scheduling monitoring activities relevant to the oversight programme;
- .3 establishing and maintaining a process for the evaluation of assigned personnel and their continual professional development;
- .4 selecting and appointing assigned personnel;
- .5 providing necessary resources to the oversight programme, specifically the corresponding monitoring activities;
- .6 robust execution of monitoring activities according to the oversight programme;
- .7 ensuring the control of records of the monitoring activities;
- .8 ensuring review and approval of monitoring activity reports, and ensuring their distribution to interested parties; and
- .9 ensuring follow-up, if applicable.

7.3.5 Oversight programme records

7.3.5.1 The flag State's monitoring records should be maintained to demonstrate the implementation of the oversight programme and should include the following:

- .1 all records related to monitoring activities, such as:
 - .1 plans;
 - .2 reports;
 - .3 non-conformity reports;
 - .4 corrective and preventive action reports, and
 - .5 follow-up reports, if applicable;
- .2 results of oversight programme review; and
- .3 records related to personnel covering subjects, such as:
 - .1 assigned personnel competence and performance evaluation;
 - .2 monitoring and/or audit team selection; and
 - .3 maintenance and improvement of competence.

7.3.5.2 Records should be retained and suitably safeguarded.

7.4 Oversight programme monitoring and reviewing

7.4.1 The implementation of a flag State oversight programme should be monitored and, at appropriate intervals, reviewed to assess whether its objectives have been met and to identify opportunities for improvement.

7.4.2 The flag State should develop and use performance indicators to monitor the effectiveness of its oversight programme for ROs. The following factors should be considered:

- .1 the ability of assigned personnel to implement the oversight plan;
- .2 conformity with the requirements of the RO Code, monitoring activities, and schedules; and
- .3 feedback from clients, ROs and assigned personnel.

7.4.3 The flag State should consider the following performance indicators when evaluating the performance of the ROs:

- .1 port State performance of ROs;
- .2 results of RO's internal audits;
- .3 results of quality management system audits performed by third-party organizations (ACBs);
- .4 the results of previous performance monitoring; and
- .5 condition/compliance of ships that receive survey and certification from the ROs.

7.4.4 The flag State should, on a periodic basis, evaluate its overall performance with respect to the implementation of administrative processes, procedures and resources necessary to meet its obligations as required by the conventions to which it is party.

7.4.5 Other measures to evaluate the performance of the flag States may include, inter alia, the following:

- .1 port State control detention rates;
- .2 flag State inspection results;
- .3 casualty statistics;

- .4 communication and information processes;
- .5 annual loss statistics (excluding constructive total losses (CTLs)); and
- .6 other performance indicators as may be appropriate, to determine whether staffing, resources and administrative procedures are adequate to meet their flag State obligations. Other performance measurement indicators may consist of the following:

- .1 fleet loss and accident ratios to identify trends over selected time periods;
- .2 the number of verified cases of detained ships in relation to the size of the fleet;
- .3 the number of verified cases of incompetence or wrongdoing by individuals holding certificates or endorsements issued under its authority;
- .4 responses to port State deficiency reports or interventions;
- .5 investigations into very serious and serious casualties and lessons learned from them;
- .6 technical and other resources committed;
- .7 results of inspections, surveys and controls of the ships in the fleet;
- .8 investigation of occupational accidents;
- .9 the number of incidents and violations under MARPOL, as amended; and
- .10 the number of suspensions or withdrawals of certificates, endorsements and approvals.

7.4.6 The oversight programme review should also consider:

- .1 results and trends from monitoring;
- .2 conformity with procedures;
- .3 evolving needs and expectations of interested parties;
- .4 oversight programme records;
- .5 alternative or new auditing practices or monitoring activities; and
- .6 consistency in performance between audit teams in similar situations.

7.4.7 Results of oversight programme reviews can lead to corrective and preventive actions and the improvement of the oversight programme.

Appendix 1

REQUIREMENTS FOR TRAINING AND QUALIFICATION OF RECOGNIZED ORGANIZATION'S TECHNICAL STAFF

A1.1 Definitions

A1.1.1 *Survey staff* are the personnel authorized to carry out surveys and to conclude whether or not compliance has been achieved.

A1.1.2 *Plan approval staff* are the personnel authorized to carry out design assessment and to conclude whether or not compliance has been achieved.

A.1.1.3 *Audit staff* are the personnel authorized to carry out audits and to conclude whether compliance has been achieved.

A1.1.4 *Trainee* is a person receiving theoretical and practical training under the supervision of a trainer/tutor.

A1.1.5 *Trainer* is a designated person having experience within a relevant area or a proficient expert in a special field recognized by the RO to give theoretical training through classroom teaching, special seminars or individual training.

A1.1.6 *Tutor* is a qualified and designated person from among the RO's staff having appropriate experience and capability in the relevant areas of activities in which they assist, consult and supervise the practical training of a trainee until the latter is qualified.

A1.1.7 *Technical staff* are the personnel qualified to carry out technical activity as survey staff or plan approval staff or, Marine Management Systems audit staff.

A1.1.8 *Support staff* are the personnel assisting survey and/or plan approval staff in connection with classification and statutory work.

A1.2 Trainee entry requirements

RO personnel performing, and responsible for, statutory work shall have as a minimum the formal education requirements defined in part 2, section 4.2.5.

A1.3 Modules

A1.3.1 The RO shall define the required competence criteria for each relevant type of survey, and type of plan approval activity and audit to be performed.

A1.3.2 The RO shall define the necessary theoretical and practical training modules required to meet the competence criteria defined for survey, plan approval and marine management systems audit staff. The training modules shall cover as a minimum:

- .1 learning and competence objectives;
- .2 scope of training; and
- .3 evaluation criteria and pass requirements.

A1.3.3 Through studying the training modules, trainees shall acquire and develop general knowledge and understanding applicable to different types of ships and types of work according to the flag State requirements, RO's rules and regulations and international conventions and codes.

A1.4 Theoretical training for survey and plan approval staff

A1.4.1 The objective of theoretical training is to ensure that familiarization with rules, technical standards or statutory regulations and any additional requirement specific to the type of survey or ships is sufficient for the areas of activity.

A1.4.2 Theoretical training shall include:

- .1 general modules for theoretical training; and
- .2 special modules for theoretical training in the particular specialty.

A1.4.3 General modules for theoretical training shall include general subjects with respect to:

- .1 activity and functions of IMO and maritime Administrations;
- .2 activity and functions of classification societies;
- .3 classification of ships and mobile offshore drilling units;
- .4 types of certificates and reports issued on completion of class and statutory surveys;
- .5 quality management system;
- .6 personal safety regulations; and
- .7 legal and ethical issues.

A1.4.4 The programmes of theoretical training for survey and plan approval staff shall be documented in a training plan and developed according to the areas of activity (types or categories of surveys, types of ships, subjects such as hull, machinery, electrical engineering, etc.).

A1.4.5 In case of an existing gap in the formal educational background in some particular field of activity, theoretical training shall be extended.

A1.4.6 In case survey or plan approval staff have obtained particular qualifications through their previous work experience prior to their joining the RO, the training plan may be reduced.

A1.4.7 Additions or reductions in the individual training plans shall be documented.

A1.4.8 In case of extension of areas of activity the training plan shall be developed and documented accordingly.

A1.4.9 Theoretical training may be received through classroom teaching, special seminars, individual training, self-study or computer-assisted training.

A1.5 Practical training for survey and plan approval staff (see appendix 2 for specific criteria for each certificate)

A1.5.1 General

Practical training shall ensure the trainee is sufficiently proficient to carry out survey or design assessment work independently.

A1.5.2 Plan approval staff

A1.5.2.1 Practical training shall be commensurate with the complexity of design assessment (review of technical design of ships, review of technical documentation on materials and equipment) and shall be carried out under the supervision of a tutor.

A1.5.2.2 Practical training carried out shall be recorded.

A1.5.3 Survey staff

A1.5.3.1 Practical training shall be commensurate with the complexity of the survey (types or categories of surveys, types of ships, specific subjects (hull,

machinery, and electrical engineering)) and shall be carried out under the supervision of a tutor.

A1.5.3.2 Selection of particular surveys depends on the specialty/qualification to be granted and shall include classification and statutory types of surveys of the following, as appropriate:

- .1 new construction;
- .2 ships and mobile offshore drilling units in operation; and
- .3 materials and equipment.

A1.5.3.3 Practical training carried out shall be recorded.

A1.5.4 Examinations and tests for survey and plan approval staff

A1.5.4.1 Competence gained through the theoretical training shall be demonstrated through written or oral examination or through suitable computer tests.

A1.5.4.2 Examinations and tests shall cover the sets of modules attended by the trainee, as applicable.

A1.5.4.3 With respect to competence gained through practical training being demonstrated by:

- .1 a surveyor, this shall be accomplished by the surveyor satisfactorily completing the surveys associated with the competence whilst under the supervision of the tutor. The surveyor would be expected to be able to answer associated technical questions raised as thought necessary by the tutor to confirm levels of understanding. The results of the tutor's review shall be annotated on the respective training record; and
- .2 a plan approval staff member, this shall be accomplished by the staff member satisfactorily completing the appraisal of drawings against the relevant classification rules and statutory regulations as verified through a review by the tutor of the staff member's work. The results of the tutor's review shall be annotated on the respective training record.

A1.5.4.4 A competent person shall perform examinations of theoretical training or witnessing practical competence.

A1.5.4.5 During examinations and tests, use of the relevant working documents (rules, conventions, checklists, etc.) by the trainee shall be considered allowable.

A1.5.5 Audit staff

A1.5.5.1 Theoretical training

A1.5.5.1.1 Theoretical training should address the following:

- .1 principles and practice of management systems auditing;
- .2 the requirements of the International Safety Management (ISM) Code and its interpretation and application;
- .3 mandatory rules and regulations and applicable codes, guidelines and standards recommended by the IMO, flag States, classification societies and maritime industry organization; and
- .4 basic shipboard operations including emergency preparedness and response. The time spent on each topic and the level of detail that it is necessary to include will depend on the qualifications and experience of the trainees, their existing competence in each subject, and the number of training audits to be carried out.

A1.5.5.1.2 The training may be modular in structure, in which case the period over which the theoretical training is delivered shall not exceed 12 months.

A1.5.5.1.3 Where appropriate, some elements may be delivered by means such as distance learning and e-learning. However, at least fifty per cent of the total theoretical training days shall be classroom-based in order to allow for discussion and debate and to allow candidates to benefit from the experience of the trainer.

A1.5.5.2 Examination

A1.5.5.2.1 Confirmation that the learning objectives have been met shall be demonstrated by written examination at the end of the theoretical training, or at the end of each module if the training is not delivered in a single training course.

A1.5.5.2.2 If the trainee fails the written examination, or any part thereof; a single resist will be permitted. A candidate who fails the resist will be required to undergo the corresponding theoretical training again before being allowed to make another attempt at the examination.

A1.5.5.2.3 A candidate who passes a written examination shall receive a certificate, statement or other record indicating which of the competences have been addressed, and the dates on which the corresponding training took place.

A1.5.5.3 Practical training

A1.5.5.3.1 A person authorized to carry out ISM audits shall have completed at least the minimum number of training audits under supervision as specified by the RO.

A1.5.5.3.2 The RO shall establish procedures for ensuring and demonstrating that the required competence has been achieved.

A1.6 Qualification

A1.6.1 After completion of the theoretical and practical training, with positive results, the trainee is granted the appropriate authorizations to work independently. The activities they are qualified to perform (types of surveys, types of ships, types of design approval, etc.) are identified.

A1.6.2 The criteria adopted by the RO for granting qualifications shall be documented in the appropriate quality management system documents.

A1.7 Assessment of training effectiveness

A1.7.1 The methods of training effectiveness assessment may include monitoring, testing, etc., on the regular basis according to the RO's system.

A1.7.2 The criteria adopted by the RO for training effectiveness assessment shall be documented in the appropriate RO quality management system documents.

A1.7.3 Evidence of training effectiveness assessment shall be provided.

A1.8 Maintenance of qualification

A1.8.1 The criteria adopted by the RO for maintenance or updating of qualifications shall be in accordance with and documented in the appropriate RO quality management system documents.

A1.8.2 Updating of qualifications may be done through the following methods:

.1 self-study (unassisted study);

.2 different courses and seminars organized in local offices and/or in the main offices of the RO;

.3 extraordinary technical seminars in case of significant changes in the RO's rules or international conventions, codes, etc. (with examination if required); and

.4 special training on specific works or type of survey in some areas of the activity, which are determined by activity monitoring or by a long time absence of practical experience.

A1.8.3 Maintenance of qualifications in accordance with these criteria shall be verified at annual performance review.

A1.9 Activity monitoring

A1.9.1 Purpose

Activity monitoring has the purpose:

.1 to assess whether the individuals are competent and capable of carrying out their authorized and assigned work independently, consistent with the RO's policies and practices;

.2 to identify needs for continual improvement in aligning the technical services across the organization; and

.3 to identify need for improvements in the guidance processes and/or tools provided for the staff.

A1.9.2 Monitoring

A1.9.2.1 Headquarters, regional or local offices, may initiate activity monitoring. It shall be carried out by persons who are qualified in the survey or audit being monitored.

A1.9.2.2 It shall be carried out to the extent that the work of each surveyor or auditor engaged in survey or audit work will be monitored at least once every other calendar year. Where a person carries out both survey and audit work, they shall be monitored in both work activities at least once every other calendar year. Only one type of survey for a qualified surveyor and one type of audit for a qualified auditor need be monitored within the two-year cycle. Persons doing plan approval shall be monitored at least once every other calendar year.

A1.9.2.3 Subsequent to the monitoring, the monitoring surveyor or auditor shall report the activity.

A1.9.2.4 Should any comments be necessary, or findings made, these will be included in the report, for review and corrective action.

A1.9.3 Method

A1.9.3.1 Activity monitoring shall be performed by personnel authorized to undertake activity monitoring.

A1.9.3.2 Preparation shall include familiarization with the processes, requirements and tools (e.g. software) associated with the activity to be witnessed during the activity monitoring.

A1.9.3.3 The monitoring process shall include a review of relevant performance information related to the individual's work. This may include: report and certificate accuracy, meeting objectives, received complaints, PSC detention feedback.

A1.9.3.4 Survey, audit or plan approval activity selected for monitoring shall have an extent such as to cover a maximum possible range of activity and qualifications that can be monitored during the attendance.

A1.9.3.5 Monitoring shall include, but not be limited to, evaluation of the individual's:

- .1 personal safety awareness;
- .2 understanding and application of the relevant requirements;
- .3 technical capabilities;
- .4 understanding of the related requirements; and
- .5 standards of reporting and communication.

A1.9.4 Reporting

Subsequent to the monitoring, a report shall be made with conclusions with respect to:

- .1 whether the individuals assessed are capable of carrying out their authorized and assigned work (including particularly positive aspects);
- .2 any areas of improvement; and
- .3 any recommended training requirements.

A1.9.6 Implementation

The RO shall:

- .1 document the activity monitoring methodology, including how it is reported;
- .2 document how the authorization to undertake activity monitoring is achieved;
- .3 document consequence and actions to undertake if activity-monitoring timing is exceeded;
- .4 maintain records to demonstrate that all relevant staff has been monitored in the prescribed period; and
- .5 maintain records to demonstrate level of technical performance and the effect of possible improvement activities across the organization through the analysis of activity monitoring.

A1.10 Training of support staff

Support staff shall have training and/or supervision commensurate with the tasks they are authorized to perform.

A1.11 Records

Records shall be maintained for each surveyor/plan approval staff member, indicating:

- .1 formal education background;
- .2 professional experience prior to joining the RO;
- .3 evidence of theoretical training completed;
- .4 evidence of practical training completed;
- .5 evidence of examinations and tests;
- .6 professional experience during employment at the RO; and
- .7 periodical updating of knowledge.

Appendix 2

SPECIFICATIONS ON THE SURVEY AND CERTIFICATION FUNCTIONS OF RECOGNIZED ORGANIZATIONS ACTING ON BEHALF OF THE FLAG STATE

A2.1 SCOPE

A2.1.1 This document contains minimum specifications for organizations recognized as capable of performing statutory work on behalf of a flag State in terms of certification and survey functions connected with the issuance of international certificates.

A2.1.2 The principle of the system described below is to divide the specifications required into different elementary modules with a view to selecting the relevant modules for each function of certification and survey.

A2.2 AREAS OF INTEREST COVERED BY ELEMENTARY MODULES

- .1 Management
- .2 Technical appraisal
- .3 Surveys
- .4 Qualifications and training.

A2.2.1 Management

Module 1A: Management functions

The management of the RO shall have the competence, capability and capacity to organize, manage and control the performance of survey and certification functions in order to verify compliance with requirements relevant to the tasks delegated and shall, inter alia:

- .1 possess an adequate number of competent supervisory, technical appraisal and survey personnel;
- .2 provide for the development and maintenance of appropriate procedures and instructions;
- .3 provide for the maintenance of up-to-date documentation on interpretation of the relevant instruments;
- .4 give technical and administrative support to field staff; and
- .5 provide for the review of survey reports and provision of experience feedback.

A2.2.2 Technical appraisal

Module 2A: Hull structure

The RO shall have the appropriate competence, capability and capacity to perform the following technical evaluations and/or calculations pertaining to:

- .1 longitudinal strength;
- .2 local scantlings such as plates and stiffeners;
- .3 structural stress, fatigue and buckling analyses; and
- .4 materials, welding and other pertinent methods of material-joining, for compliance with relevant rules and convention requirements pertaining to design, construction and safety.

Module 2B: Machinery systems

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 propulsion, auxiliary machinery and steering gear;
- .2 piping; and
- .3 electrical and automation systems,

for compliance with relevant rules and convention requirements pertaining to design, construction and safety.

Module 2C: Subdivision and stability

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 intact and damage stability;
- .2 inclining test assessment;
- .3 grain loading stability; and

.4 watertight and weathertight integrity.

Module 2D: Load line

The RO shall have the appropriate competence, capability and capacity to perform the following technical evaluations and/or calculations pertaining to:

- .1 freeboard calculation; and
- .2 conditions of assignment of freeboard.

Module 2E: Tonnage

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to tonnage computation.

Module 2F: Structural fire protection

The RO shall have the appropriate competence, capability, and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 structural fire protection and fire isolation;
- .2 use of combustible materials;
- .3 means of escape; and
- .4 ventilation systems.

Module 2G: Safety equipment

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 life-saving appliances and arrangements;
- .2 navigation equipment;

- .3 fire detection and fire alarm systems and equipment;
- .4 fire-extinguishing system and equipment;
- .5 fire control plans;
- .6 pilot ladders and pilot hoists;
- .7 lights, shapes and sound signals; and
- .8 inert gas systems.

Module 2H: Oil pollution prevention

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 monitoring and control of oil discharge;
- .2 segregation of oil and ballast water;
- .3 crude oil washing;
- .4 protective location of segregated ballast spaces;
- .5 pumping, piping and discharge arrangements; and
- .6 shipboard oil pollution emergency plans (SOPEPs).

Module 2I: NLS pollution prevention

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 list of substances the ship may carry;
- .2 pumping system;
- .3 stripping system;
- .4 tank-washing system and equipment; and
- .5 underwater discharge arrangements.

Module 2J: Radio

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations pertaining to:

- .1 radiotelephony;
- .2 radiotelegraphy; and
- .3 GMDSS.

Alternatively, a professional radio installation inspection service company approved and monitored by the RO according to an established and documented programme may perform these services. This programme is to include the definition of the specific requirements the company and its radio technicians shall satisfy.

Module 2K: Carriage of dangerous chemicals in bulk

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 ship arrangement and ship survival capacity;
- .2 cargo containment and material of construction;
- .3 cargo temperature control and cargo transfer;
- .4 cargo tank vent systems and environmental control;
- .5 personnel protection; operational requirements; and
- .6 list of chemicals the ship may carry.

Module 2L: Carriage of liquefied gases in bulk

The RO shall have the appropriate competence, capability and capacity to perform technical evaluations and/or calculations pertaining to:

- .1 ship arrangement and ship survival capacity;
- .2 cargo containment and material of construction;

- .3 process pressure vessels and liquid, vapour and pressure piping systems;
- .4 cargo tank vent systems and environmental control;
- .5 personnel protection;
- .6 use of cargo as fuel; and
- .7 operational requirements.

A2.2.3 Surveys

Module 3A: Survey functions

The RO shall have the appropriate competence, capability and capacity to perform the required surveys under controlled conditions as per the RO's internal quality management system and, representing an adequate geographical coverage and local representation as required. The work to be covered by the staff is described in the relevant sections of the appropriate survey guidelines developed by the Organization.

A2.2.4 Qualifications And Training

Module 4A: General qualifications

RO personnel performing, and responsible for, statutory work shall meet, as a minimum, the requirements defined in part 2, section 4.2.5.

Module 4B: Radio survey qualifications

A professional radio installation inspection service company, approved and monitored by the RO according to an established and documented programme, may do surveys. This programme is to include the definition of the specific requirements the company and its radio technicians shall satisfy, including, inter alia, requirements for internal tutored training covering at least:

- .1 radiotelephony;
- .2 radiotelegraphy;
- .3 GMDSS; and

.4 initial and renewal surveys.

Radio technicians carrying out surveys shall have successfully completed, as a minimum, at least one year of relevant technical school training, the internal tutored training programme of his/her employer and at least one year of experience as an assistant radio technician. For exclusive radio surveyors to the RO, equivalent requirements as above apply.

A2.3 SPECIFICATIONS PERTAINING TO THE VARIOUS CERTIFICATES

A2.3.1 Passenger ship safety certificate

Initial certification, renewal survey

A2.3.1.1 Module Nos. 1A, 2A, 2B, 2C, 2D, 2F, 2G, 2J, 3A, 4A and 4B apply.

A2.3.1.2 For this certification, the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: SOLAS 74, as amended.
- .2 FS: SOLAS 74, as amended:
 - .1 initial survey, report, and issuance of certificate; and
 - .2 renewal survey, report- and issuance of certificate.

A2.3.2 Cargo ship safety construction certificate

Initial certification, annual/intermediate, renewal surveys

A2.3.2.1 Module Nos. 1A, 2A, 2B, 2C, 2F, 3A and 4A apply.

A2.3.2.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: SOLAS 74 chapters II-1, II-2 and XII with any amendments and appropriate classification rules.
- .2 FS: Pertinent technical surveys (class surveys or similar), newbuilding:
 - .1 hull structure and equipment; and

.2 machinery and systems installation and testing.

.3 FS: Pertinent technical surveys (class surveys or similar), ships in operation:

.1 annual/intermediate survey;

.2 renewal survey; and

.3 bottom survey.

.4 FS: SOLAS 74 chapters II-1, II-2 and XII, as amended:

.1 initial survey, report, issuance of certificate;

.2 annual/intermediate survey and report; and

.3 renewal survey, report and issuance of certificate.

A2.3.3 Cargo ship safety equipment certificate

Initial certification, annual, periodical, renewal surveys

A2.3.3.1 Module Nos. 1A, 2G, 3A and 4A apply.

A2.3.3.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

.1 TS: SOLAS 74 chapters II-1, II-2, III and V, as amended, and applicable aspects of COLREG 72, as amended.

.2 FS: SOLAS 74 chapters II-1, II-2, III and V, as amended, and applicable aspects of COLREG 72, as amended:

.1 initial survey, report and issuance of certificate;

.2 annual/periodical survey and report; and

.3 renewal survey, report and issuance of certificate.

A2.3.5 International Safety Management Code certification

Initial certification, annual/intermediate verifications, renewal certification

A2.3.5.1 All of the modules, with the exception of 2E (tonnage), apply to the extent that they relate to an RO's ability to identify and evaluate the mandatory rules and regulations with which a company's safety management system and ships shall comply.

A2.3.5.2 For this certification, the system shall comply with the qualification and training requirements for ISM Code assessors contained in the Guidelines on Implementation of the International Safety Management (ISM) Code by Administrations.

A2.3.6 International load line certificate

Initial certification, annual, renewal surveys

A2.3.6.1 Module Nos. 1A, 2A, 2C, 2D, 3A and 4A apply.

A2.3.6.2 For this certification, the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Calculation of freeboard and approval of drawings for conditions of assignment according to ILLC 1966.
- .2 FS: Pertinent technical surveys (class surveys or similar), newbuilding:
 - .1 hull structural survey;
 - .2 hull penetrations and closing appliances; and
 - .3 stability/inclining test.
- .3 FS: Pertinent technical surveys (class surveys or similar), ships in operation:
 - .1 annual survey;
 - .2 renewal survey; and
 - .3 bottom survey.
- .4 FS: Measurement for load line/initial survey report.
- .5 FS: Conditions for assignment/initial survey report.
- .6 FS: Load line marking verification/initial survey report.
- .7 FS: Load line annual survey.
- .8 FS: Load line renewal survey, report and issuance of certificate.

A2.3.7 International oil pollution prevention certificate

Initial certification, annual, intermediate, renewal surveys

A2.3.7.1 Module Nos. 1A, 2A, 2B, 2C, 2H, 3A and 4A apply.

A2.3.7.2 For this certification, the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Approval of drawings and manuals according to MARPOL, Annex I.
- .2 FS: MARPOL, Annex I, as amended:
 - .1 initial survey, report and issuance of certificate;
 - .2 annual/intermediate survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.8 International pollution prevention certificate for the carriage of noxious liquid substances in bulk

Initial certification, annual, intermediate, renewal surveys

A2.3.8.1 Module Nos. 1A, 2A, 2B, 2C, 2I, 3A and 4A apply.

A2.3.8.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Approval of drawings and manuals according to MARPOL, Annex II and appropriate codes.
- .2 FS: MARPOL, Annex II and appropriate codes:
 - .1 initial survey, report and issuance of certificate;
 - .2 annual/intermediate survey and report; and
 - .3 renewal survey, report and issuance of certificate.

A2.3.9 International certificate of fitness for the carriage of dangerous chemicals in bulk

Initial certification, annual, intermediate, renewal surveys

A2.3.9.1 Module Nos. 1A, 2A, 2B, 2C, 2K, 3A and 4A apply.

A2.3.9.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

.1 TS: Approval of drawings and manuals according to International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code).

.2 FS: IBC Code:

.1 initial survey, report and issuance of certificate;

.2 annual/intermediate survey and report; and

.3 renewal survey, report and issuance of certificate.

A2.3.10 International certificate of fitness for the carriage of liquefied gases in bulk

Initial certification, annual, intermediate, renewal surveys

A2.3.10.1 Module Nos. 1A, 2A, 2B, 2C, 2L, 3A and 4A apply.

A2.3.10.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

.1 TS: Approval of drawings and manuals according to International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code).

.2 FS: IGC Code:

.1 initial survey, report and issuance of certificate;

.2 annual/intermediate survey and report; and

.3 renewal survey, report and issuance of certificate.

A2.3.11 International tonnage certificate (1969)

Initial certification

A2.3.11.1 Module Nos. 1A, 2E and 4A apply.

A2.3.11.2 For this certification the system shall cover practical tutored training on the following issues as appropriate for Technical Appraisal and Support staff (TS) and Field Surveyors (FS), respectively:

- .1 TS: Measurement and computation of tonnage according to:
 - .1 1969 Tonnage Measurement Convention; and
 - .2 Pertinent IMO resolutions.
- .2 FS: Marking survey and report.

Appendix 3 ELEMENTS TO BE INCLUDED IN AN AGREEMENT

A formal written agreement or equivalent between the flag State and the RO should, as a minimum, cover the following items:

- 1 Application
- 2 Purpose
- 3 General conditions
- 4 The execution of functions under authorization:
 - .1 Functions in accordance with the general authorization
 - .2 Functions in accordance with special (additional) authorization
 - .3 Relationship between the organization's statutory and other related activities
 - .4 Functions to cooperate with port States to facilitate the rectification of reported port State control deficiencies or the discrepancies within the organization's purview
- 5 Legal basis of the functions under authorization:
 - .1 Acts, regulations and supplementary provisions

.2 Interpretations

.3 Deviations and equivalent solutions

6 Reporting to the flag State:

.1 Procedures for reporting in the case of general authorization

.2 Procedures for reporting in the case of special authorization

.3 Reporting on classification of ships (assignment of class, alterations and cancellations), as applicable

.4 Reporting of cases where a ship did not in all respects remain fit to proceed to sea without danger to the ship or persons on board or presenting unreasonable threat of harm to the environment

.5 Other reporting

7 Development of rules and/or regulations – Information:

.1 Cooperation in connection with development of rules and/or regulations – liaison meetings

.2 Exchange of rules and/or regulations and information

.3 Language and form

8 Other conditions:

.1 Remuneration

.2 Rules for administrative proceedings

.3 Confidentiality

.4 Liability³

³ ROs and its employees who are involved in or responsible for delivery of statutory certification and services may be required by the law of the flag State to be covered by professional indemnity or professional liability insurance in the event that liability is finally and definitively imposed on the flag State for loss or damage which is proved in a court of law to have been caused by any negligent act or omission by its RO. In this connection, the flag State may also consider placing a limitation on the level of liability and indemnification to be covered under that insurance or other compensation arrangements.

.5 Financial responsibility

.6 Entry into force

.7 Termination

- .8 Breach of agreement
- .9 Settlement of disputes
- .10 Use of subcontractors
- .11 Issue of the agreement
- .12 Amendments

9 Specification of the authorization from the flag State to the organization:

- .1 Ship types and sizes
- .2 Conventions and other instruments, including relevant national legislation
- .3 Approval of drawings
- .4 Approval of material and equipment
- .5 Surveys
- .6 Issuance of certificates
- .7 Corrective actions
- .8 Withdrawal of certificates
- .9 Reporting

10 The flag State's supervision of duties delegated to the organization:

- .1 Documentation of quality assurance system
- .2 Access to internal instructions, circulars and guidelines
- .3 Access by the flag State to the organization's documentation relevant to the flag State's fleet
- .4 Cooperation with the flag State's inspection and verification work
- .5 Provision of information and statistics on, e.g. damage and casualties relevant to the flag State's fleet.