



Government Gazette Staatskoerant

REPUBLIC OF SOUTH AFRICA
REPUBLIEK VAN SUID-AFRIKA

Regulation Gazette

No. 9995

Regulasiekoerant

Vol. 577

Pretoria, 23 July 2013
Julie

No. 36688

N.B. The Government Printing Works will not be held responsible for the quality of "Hard Copies" or "Electronic Files" submitted for publication purposes



AIDS HELPLINE: 0800-0123-22 Prevention is the cure

IMPORTANT NOTICE

The Government Printing Works will not be held responsible for faxed documents not received due to errors on the fax machine or faxes received which are unclear or incomplete. Please be advised that an "OK" slip, received from a fax machine, will not be accepted as proof that documents were received by the GPW for printing. If documents are faxed to the GPW it will be the sender's responsibility to phone and confirm that the documents were received in good order.

Furthermore the Government Printing Works will also not be held responsible for cancellations and amendments which have not been done on original documents received from clients.

CONTENTS • INHOUD

No.

Page
No. Gazette
No.**GOVERNMENT NOTICES****Transport, Department of***Government Notices*

R. 510	Merchant Shipping Act (57/1951): (Withdrawal notice: Merchant Shipping Regulations, 2013	3	36688
R. 511	do.: Merchant Shipping Regulations, 2013.....	4	36688

GOVERNMENT NOTICES

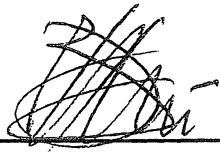
DEPARTMENT OF TRANSPORT

No. R. 510

23 July 2013

WITHDRAWAL NOTICE: MERCHANT SHIPPING (SAFE MANNING, TRAINING AND CERTIFICATE) REGULATIONS, 2013

I, Benedict Dikobe Martins, Minister of Transport in terms of powers vested in me hereby, withdraw with immediate effect the Merchant Shipping (Safe Manning, Training and Certificate) Regulations, 2013 that were made known by means of Government Notice No. 432 issued under Government Gazette No. 36578 dated the 18th June 2013.



Mr B. D Martins, MP

Minister of Transport


Date: 07.07.2013

No. R. 511

23 July 2013

MERCHANT SHIPPING ACT, 1951 (ACT NO. 57 OF 1951)**MERCHANT SHIPPING (SAFE MANNING, TRAINING AND
CERTIFICATION) REGULATIONS, 2013**

I Dikobe Benedict Martins, Minister of Transport, hereby in terms of section 356 of the Merchant Shipping Act, 1951 (Act No. 57 of 1951) makes the Merchant Shipping (Safe Manning, Training and Certification) Regulations, 2013 as contemplated in the Schedule.



Mr D. B. MARTINS, MP**MINISTER OF TRANSPORT****DATE: 06.04.2013.****Schedule**

Arrangement of regulations**Part 1 GENERAL**

1. Definitions
2. Introduction and classes of certificates
3. Validity and revalidation of certificates
4. Equivalency of Certificates
5. Registrar and Deputy Registrar of Seafarers
6. Chief Examiner and Senior Examiners
7. Quality assurance

- 8 Qualifications committee
- 9 Syllabus Committee
- 9A Institute of Professional South African Mariners

PART 2 ASSESSMENT

- 10 Application for assessment
- 11 Declaration and proof of qualifying service
- 12 Bribery
- 13 Misaid, lost or destroyed certificates
- 14 Unsatisfactory conduct
- 15 Assessing competence
- 16 Moderation of Written Examination Papers
- 17 Level 3 assessment
- 18 Proficiency in English

PART 3 CERTIFICATION REQUIREMENTS

Division 1—Deck officer certificates

- 19 Skipper (< 200GT port operations)
- 20 Master (< 200GT near-coastal)
- 21 Master (< 200GT)
- 22 Mate (< 500GT near-coastal)
- 23 Mate (< 500GT)
- 24 Master (< 1600GT port operations)
- 25 Master (port operations)
- 26 Master (< 500GT near coastal)
- 27 Master (< 500GT)
- 28 Deck officer (unlimited)
- 29 Chief mate (< 3000GT)
- 30 Master (< 3000GT)
- 31 Chief mate
- 32 Master
- 33 Mining operations and non-trading vessel operation limitations
- 34 Master (special grade)

Division 2 Fishing- Deck Officer Certificates

- 35 Deck officer fishing (< 24m)
- 36 Deck officer fishing (≥ 24m)

- 37 Skipper fishing (< 24m limited waters)
- 38 Skipper fishing (< 24m unlimited waters)
- 39 Skipper fishing (≥ 24m limited waters)
- 40 Skipper fishing (≥ 24m unlimited waters)

Division 2A Radiocommunications and radio Operator Certificates

40A GMDSS radio operators

40B Radio operators

Division 3 Engineer Officer Certificates

- 41 Chief engineer (< 750kW port operations)
- 42 Chief engineer (< 1500kW port operations)
- 43 Chief engineer officer (port operations)
- 44 Marine motorman Grade 2
- 45 Marine motorman Grade 1
- 46 Marine motorman Higher Grade
- 47 Engineer officer
- 48 Second engineer (< 3000kW)
- 49 Chief engineer (< 3000kW)
- 50 Second engineer
- 51 Chief engineer
- 52 Electro technical officer
- 53 Sea service requirements for steam and combined (steam and motor) certificates of competency
- 54 Chief engineer officer (special grade)

Division 4 Fishing Engineer Certificates

- 55 Second engineer (fishing)
- 56 Chief engineer (< 3000kW fishing)
- 57 Chief engineer (fishing)

Division 5 Rating Certificates and Certificates of Proficiency

- 58 Ordinary seafarer deck
- 59 Able seafarer deck (port operations)
- 60 Able seafarer deck (fishing)
- 61 Able seafarer deck
- 62 Ordinary seafarer engine
- 63 Able seafarer engine (port operations)

- 64 Able seafarer engine
- 65 Electro-technical rating
- 66 General purpose rating (port operations)
- 67 Pre-sea training
- 68 Personal survival techniques
- 69 Basic training
- 70 Proficiency in survival craft and rescue boats
- 71 Proficiency in fast rescue boats
- 72 Ship security officer
- 73 Efficient cook

Division 6 Personnel on Tankers and Passenger Ships

- 74 Special requirements for personnel on oil and chemical tankers
- 75 Special requirements for personnel on gas tankers
- 76 Special requirements for personnel on passenger ships

Division 7 Qualifying Service and Limitations.

- 77 Misrepresenting qualifying service
- 78 Proof of qualifying service
- 79 Qualifying service as rating
- 80 Validity of qualifying service
- 81 Calculating qualifying service
- 82 Sea service performed on ships not regularly proceeding to sea, or employed in mining operations
- 83 Proof of service on foreign ships
- 84 Removal of mining operations limitation

PART 4 TRAINING

- 85 Maritime training providers
- 86 Training programmes and courses
- 87 Accelerated training programmes
- 88 Training record book
- 89 Duties of masters and persons conducting in-service training

PART 5 MANNING REQUIREMENTS

- 90 Application
- 91 Responsibilities of owners and masters
- 92 Watchkeeping standards

- 93 Hours of work: general duty of owners, masters and others
- 94 Alcohol and drug abuse
- 95 Determination of minimum number of persons employed on South African ships
- 96 Employment of persons holding foreign certificates
- 97 Employment of persons holding foreign certificates on fishing vessels
- 98 Recognition of foreign certificates

PART 6 GENERAL MANNING LEVELS

- 99 Employment of certificated deck officers on ships other than fishing vessels
- 100 Employment of certificated deck officers on fishing vessels
- 101 Employment of certificated engineer officers on ships other than fishing vessels
- 102 Employment of certificated engineer officers on fishing vessels
- 103 Employment of certificated radio operators
- 104 Employment of certificated ratings on ships other than fishing vessels
- 105 Employment of certificated ratings on fishing vessels

PART 7 EMPLOYMENT OF SEAFARERS IN ACCORDANCE WITH OCCUPATIONAL SAFETY, SECURITY AND MEDICAL REQUIREMENTS

- 106 Employment of qualified personnel on tankers
- 107 Employment of qualified personnel with security training
- 108 Employment of qualified personnel passenger ships
- 109 Employment of qualified electro-technical officers and ratings
- 110 Employment of qualified medical personnel
- 111 Employment of qualified fire-fighting personnel
- 112 Employment of qualified personnel on ships equipped with survival craft or rescue boats
- 113 Employment of qualified personnel on ships equipped with a fast rescue boat

PART 8 SUPPLEMENTAL

- 114 Exemptions
- 115 Equivalence of certificates and endorsements
- 116 Safe manning document
- 117 Carriage of documents
- 118 Offences, penalties and defences

PART 9 REPEAL OF REGULATIONS AND SAVINGS, TRANSITIONAL ARRANGEMENTS, AND TITLE AND COMMENCEMENT

- 119 Repeal of regulations
- 120 Transitional arrangements
- 121 Title and commencement

ANNEX 1**WATCHKEEPING PRINCIPLES AND ARRANGEMENTS FOR SHIPS OTHER THAN FISHING VESSELS****Part 1 Voyage planning**

- 1 General**
- 2 Planning prior to each voyage**
- 3 Verification and display of planned route**
- 4 Deviation from planned route**

Part 2 Watchkeeping principles in general**Part 3 Watchkeeping at sea****Division 1 Principles applying to watchkeeping generally**

- 1 General**
- 2 Protection of marine environment**

Division 2 Principles to be observed in keeping a navigational watch

- 1 General**
- 2 Look-out**
- 3 Watch arrangements**
- 4 Taking over the watch**
- 5 Performing the navigational watch**
- 6 Watchkeeping under different conditions and in different areas**

Division 3 Principles to be observed in keeping an engineering watch

- 1 General**
- 2 Watch arrangements**
- 3 Taking over the watch**
- 4 Performing the engineering watch**
- 5 Engineering watchkeeping under different conditions and in different areas**

Division 4 Principles to be observed in keeping a radio watch

- 1 General**
- 2 Watch arrangements**
- 3 Performing the radio watch**

Part 4 Watchkeeping in port**Division 1 Principles applying to all watchkeeping**

- 1 General**
- 2 Watch arrangements**
- 3 Taking over the watch**

- 4 Taking over the deck watch
- 5 Taking over the engineering watch
- 6 Performing the deck watch
- 7 Performing the engineering watch

Division 2 - Watch in port on ships carrying hazardous cargo

- 1 General
- 2 Cargo watch

ANNEX 2

WATCHKEEPING PRINCIPLES AND ARRANGEMENTS FOR FISHING VESSELS

Part 1 Voyage planning

- 1 General

Part 2 Watchkeeping at sea

Division 1- Principles applying to watchkeeping generally

- 1 General
- 2 Protection of marine environment

Principles to be observed in keeping a navigational watch

- 1 General
- 2 En route to or from fishing grounds
- 3 Navigation with pilot on board
- 4 Vessels engaged in fishing or searching for fish
- 5 Vessel at anchor
- 6 Performing the navigational watch
- 7 Watchkeeping under different conditions and in different areas

Principles to be observed in keeping an engineering watch

- 1 General
- 2 Watch arrangements
- 3 Taking over the watch
- 4 Performing the engineering watch
- 5 Restricted visibility
- 6 Vessel at anchor

Division 4 Principles to be observed in keeping a radio watch

- 1 General

PART 1 GENERAL

1. Definitions

- (1) In these regulations, any word or expression given a meaning in the Act shall have that meaning and, unless the context indicates otherwise –

“able seafarer deck” means a rating certificated in accordance with Part 3, Division 4, and a **“certificate of proficiency able seafarer deck”** shall be construed accordingly;

“able seafarer engine” means a rating certificated in accordance with Part 3, Division 4, and a **“certificate of proficiency able seafarer engine”** shall be construed accordingly;

“able seafarer (fishing)” means a rating certificated in accordance with Part 3 division 4, and a **“certificate of proficiency able seafarer (fishing)”** shall be construed accordingly;

“able seafarer deck (port operations)” means a rating certificated in accordance with Part 3, Division 4, limited to port operations only, and a **“certificate of proficiency able seafarer deck (port operations)”** shall be construed accordingly;

“able seafarer engine (port operations)” means a rating certificated in accordance with Part 3, Division 4, limited to port operations only, and a **“certificate of proficiency able seafarer engine (port operations)”** shall be construed accordingly;

“accelerated training” means an approved programme of intensive training that is designed to reduce the period of qualifying service;

“accredited institution” means a training institution accredited under regulation 85;

“accredited” means accredited by the Authority;

“approved” means approved by the Authority;

“appropriate certificate” means a certificate issued and endorsed in accordance with these regulations entitling the lawful holder to serve in the capacity and perform the functions involved at the level of responsibility specified on a ship of the type, tonnage, power and means of propulsion concerned while engaged on the particular voyage;

“approved accelerated training programme”, for certification of a particular kind, means an accelerated training programme approved for certification of that kind;

“approved trade” means an Engineering Trade that incorporates a formal workshop training element which would lead to exemption from modules required by the Code

“approved training”, for certification of a particular kind, means training programmes and/or courses approved for certification of that kind;

“approved training record book”, for certification of a particular kind, means a training record book approved for certification of that kind;

“assessor” means an examination moderator appointed by the Authority;

"assistant engineer officer" means a person on watch under the supervision of an engineer officer;

"Authority" has the same meaning as in the Act;

"basic training" means approved training in Personal Survival Techniques, Fire fighting and Fire Prevention, Elementary First Aid and Personal Survival and Social Responsibilities as specified in the Code;

"candidate" means a person desiring certification in terms of these regulations;

"certificate" and **"certification"** means a certificate of competency or proficiency and includes an endorsement;

"certificate of competency" means a certificate issued and endorsed for masters, officers and GMDSS radio operators in accordance with the provisions of Chapter II, III, IV or VII of the Annex of the STCW Convention, Chapter II of the STCW-F Convention and port operation certificates not issued under a Convention, and entitling the lawful holder thereof to serve in the capacity and perform the functions involved at the level of responsibility specified therein;

"certificate of qualification" means a certificate, other than a certificate of competency issued to a seafarer, stating that the relevant requirements of training, competencies or sea-going service have been met; and **"Certificate of Proficiency"** is deemed to have the same meaning as Certificate of Qualification;

"certificated" means duly certificated under the Act or deemed under the Act to be so certificated;

"chief engineer officer" means the senior engineer officer responsible for the mechanical propulsion and the operation and maintenance of the mechanical and electrical installations of a ship;

"chief examiner" means a person appointed in terms of regulation 6;

"chief mate" means the deck officer next in rank to the master and upon whom the command of the ship will fall in the event of the incapacity of the master;

"coastal skipper $\geq 9\text{m}$ " means a certificate of competency allowing the holder to operate a small vessel of 9m or more on seagoing voyages not exceeding 40 nautical miles offshore, issued in accordance with the Merchant Shipping (National Small Vessel Safety) Regulations, 2007 as amended;

"Code of Ethics" means the code of ethics for registered professional mariners of the Institute for Professional South African Mariners;

"contravene", in relation to a provision of these regulations, includes failing or refusing to comply with that provision;

"deck officer" means a ship's officer serving in the deck department on a ship, and includes the master;

"deck officer certificate" means the certification covered by Division 1 & 2 of Part 3;

“deputy registrar” means a person appointed in terms of regulation 5;

“designation” means a designation from the Institute of Professional South African Mariners;

“Disciplinary Code” means the disciplinary code of the Institute of Professional South African Mariners;

“documentary evidence” means documentation, other than a certificate of competency or certificate of proficiency, used to establish that the relevant requirements of the STCW Convention or STCW-F Convention have been met;

“dynamic positioning” means a system whereby a self-propelled vessel’s position and heading is automatically controlled by using its own propulsion unit;

“electro-technical officer” means a person who is qualified in terms of Division 3 Part 3 with specific competencies in the electronic and electrical skills required for service as a ship’s officer in the engine-room department on a ship;

“electro-technical rating” means a person who is qualified in terms of Division 4 of Part 3 for service as a ship’s rating in the engine-room department on a ship;

“endorsement” means a document that is appended to a certificate of competency and that modifies the terms of the certificate;

“engineer officer” means a ship’s officer serving in the engine department on a ship;

“engineer officer certificate” means the certification covered by Division 3 & 4 of Part 3;

“engineer rating” means a rating certificated as a rating forming part of an engineering watch or an able seafarer engine in accordance with Part 3, Division 4;

“equivalent certification” has the meaning given by regulation 4 (1);

“examiner” means a person appointed as an examiner under section 77(4) of the Act;

“familiarization training” means on-board training to familiarize the seafarer with his/ her duties and responsibilities with respect to safety, security and pollution prevention;

“fast rescue boat” means a rigid or semi-rigid inflatable boat used for rescue work and capable of manoeuvring, for at least 4 hours, at a speed of 20 knots in calm water with a crew of at least three persons and at a speed of at least 8 knots with a full complement;

“fishing vessel” means a vessel that is used wholly or principally for the taking, catching or capturing of fish or other living resources of the sea or seabed for financial gain or reward;

“foreign ship” means any ship that is not a South African ship;

“gas carrier” means a ship constructed or adapted and used for the carriage in bulk of any liquefied gas or other product listed in Chapter 19 of the IGC Code;

"general purpose rating (port operations)" means a rating (port operations) certificated as a general purpose rating (port operations) in accordance with Part 3, Division 4; and **"general purpose rating (port operations) certificate"** shall be construed accordingly;

"GMDSS" means the Global Maritime Distress and Safety System;

"GMDSS radio operator" means a person who is qualified in accordance with the provisions of Chapter IV of the STCW Convention;

"GT for a ship" and "GT" means its gross tonnage calculated in accordance with the Tonnage Regulations, 1968;

"IBC Code" means the latest edition of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk published by the International Maritime Organisation, as amended from time to time;

"IGC Code" means the latest edition of the International Code for the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk published by the International Maritime Organisation, as amended from time to time;

"Institute of Professional South African Mariners" means the SAQA registered body for the designation of professional status to South African mariners;

"length" has the same meaning in regulation 2 of the Tonnage Regulations, 1968. In the case of a fishing vessel, **"length"** refers to the length as shown on the ship's Certificate of Registry;

"limited waters", in relation to a fishing vessel, has the same meaning as **"near coastal waters"**;

"limited water voyage" has the same meaning as **"near coastal voyage"**;

"mate" has the same meaning as **"chief mate"**;

"management level" means the level of responsibility associated with—

- (a) serving as master, chief mate, chief engineer officer or second engineer officer on a seagoing ship; and
- (b) ensuring that all functions within the designated area of responsibility are properly performed;

"master" and **"skipper"** have the same meaning as described in Section 2(1) of the Act;

"merchant ship", for the purpose of these regulations, means any ship operated for commercial gain other than a fishing vessel;

"mining operations" means the exploitation by a ship at anchor or Dynamic Position (DP) mode, whether by mining, drilling or otherwise, of the mineral resources of the seabed or subsoil thereof;

“near-coastal voyage” means a voyage made by a ship of less than 500GT, exclusively within waters under South African jurisdiction or within adjoining waters under the jurisdiction of another Administration with which a near coastal voyage limit agreement has been entered into;

“near coastal voyage limit agreement” means an agreement in writing made entered into between the Authority and an Administration of another party specifying the details of involved trading areas and other relevant conditions thereof;

“near-coastal waters” means waters under South African jurisdiction and adjoining waters under the jurisdiction of another Administration with which a near coastal voyage limit agreement has been entered into;

“non-trading vessels” means vessels engaged on voyages during which no cargo operations take place;

“officer” means a ship's officer;

“officer in charge of an engineering watch” includes a designated duty engineer officer for a periodically unmanned engine-room;

“oil tanker” means a ship constructed and used for the carriage in bulk of petroleum or petroleum products;

“offshore” means seaward measured from the low-water line (as defined in section 1 of the Maritime Zones Act, 1994 (Act No. 15 of 1994)) along the coast of the African continent;

“onboard training” is training that is —

- (a) conducted principally on board a vessel during qualifying service; and
- (b) set out and assessed in an approved training record book;

“operational level” means the level of responsibility associated with —

- (a) serving as officer in charge of a navigational or engineering watch or as designated duty engineer officer for periodically unmanned machinery spaces or as radio operator on a ship to which these regulations apply; and
- (b) maintaining direct control over the performance of all functions within the designated area of responsibility in accordance with proper procedures and under the direction of an individual serving in the management level for that area of responsibility;

“ordinary seafarer deck” means a rating forming part of a navigational watch;

“ordinary seafarer engine” means a rating forming part of an engineering watch;

“Organisation” means the International Maritime Organisation;

"owner", in relation to a ship, includes any person such as the manager, operator, or the bareboat charterer, who has assumed the responsibility for the operation of the ship from the owner;

"party", in relation to the STCW or STCW-F Convention, means a State or Administration which is a member of the Organisation and is a signatory to the Convention.

"passenger ship" means a ship which carries more than 12 passengers;

"pleasure vessel" means a vessel that is used solely for sport or recreation;

"port operations" means voyages restricted to a port operations area; and **"port operations service"** shall be construed accordingly;

"port operations area" means the sea area within a radius of 15 nautical miles measured—

- (a) in the case of the port of Saldanha Bay, from the mid-point of an imaginary line joining the North Head and South Head lights; and
- (b) in the case of any other port in the Republic, from the outermost breakwater light;

"port operations vessel" means a harbour tug, dredger, hopper, pilot boat, work boat, bunker barge, ferry, tender, self-propelled floating crane or any other type of ship restricted to a port operations area;

"pre-sea training" means once-off mandatory approved training for all seafarers prior to their first employment on a vessel to which these regulations apply;

"propulsion power" means the total maximum continuous rated output power in kilowatts of a ship's main propulsion machinery appearing on the ship's certificate of registry or other official document;

"provisional certificate as ordinary seafarer" means a certificate of proficiency as ordinary seafarer, issued by the master;

"qualifying service", for certification of a particular kind, means the sea service or port operations service, as the case may be required for certification of that kind;

"radio duties" include, as appropriate, watch keeping and technical maintenance and repairs conducted in accordance with the Radio Regulations, the International Convention for the Safety of Life at Sea, 1974 (SOLAS) as amended, and at the discretion of the Authority, the relevant recommendations of the Organization.

"radio operator" means a person holding an appropriate certificate issued or recognized by the Authority under the provisions of the Radio Regulations;

"Radio Regulations" means the radio regulations of the International Telecommunications Union Convention that is in force;

"rating" means a seafarer other than a master or an officer;

"refresher training" means an approved abbreviated training course required for revalidation of Certificates of Competency or Certificates of Proficiency;

"Registrar" means a person appointed in terms of regulation 5;

"repealed regulations" means the regulations repealed by regulation 119;

"ro-ro passenger ship" means a passenger ship with ro-ro cargo spaces or special category spaces as defined in the International Convention for the Safety of Life at Sea, 1974 (SOLAS), as amended;

"safe manning document" means a document that describes the minimum manning considered necessary to ensure that a ship is sufficiently and efficiently manned, and that is issued—

- (a) in the case of a South African ship, by the Authority; and
- (b) in the case of any other ship, by or under the authority of the flag State;

"seagoing ship" means a ship other than one that navigates exclusively on inland waters or in a port operations area;

"sea service" means service on seagoing ships;

"second engineer officer" means the engineer officer next in rank to the chief engineer officer and upon whom responsibility for the mechanical propulsion and the operation and maintenance of the mechanical and electrical installations of the ship will fall in the event of the incapacity of the chief engineer officer;

"senior examiner" means an examiner appointed in terms in regulation 6;

"ship to which the Safety Convention applies" means any seagoing ship, except—

- (a) warships, ships owned by the South African Navy or naval auxiliaries;
- (b) ships of less than 500 GT, other than passenger ships;
- (c) ships not propelled by mechanical means;
- (d) wooden ships of primitive build;
- (e) ships used solely for sport or recreation; and
- (f) fishing vessels;

"ship to which the STCW Convention applies" means any seagoing ship, except

- (a) warships, naval auxiliaries or other vessels owned by the SA Navy;
- (b) fishing vessels;
- (c) ships used solely for sport or recreation; and

- (d) wooden ships of primitive build;

“skipper offshore $\geq 9\text{m}$ ” means a certificate of competency allowing the holder to operate a small vessel of 9m or more on extended seagoing voyages, issued in accordance with the Merchant Shipping (National Small Vessel Safety) Regulations, 2007 as amended;

“small vessel” means a vessel to which the Merchant Shipping (National Small Vessel Safety) Regulations, 2007, as amended, apply;

“South African ship” means a ship prescribed by the Ship Registration Act, 1998 and includes an unregistered ship having South African nationality;

“specified in the Code” means specified in the South African Maritime Qualifications Code published by the Authority, as amended from time to time;

“STCW Convention” means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as amended;

“STCW-F Convention” means the International Convention on Standards of Training, Certification and Watchkeeping for Fishing Vessel Personnel, 1995;

“support level” means the level of responsibility associated with performing assigned tasks, duties or responsibilities on a trading ship under the direction of an individual serving in the operational or management level;

“tanker” means—

- (a) **“Oil Tanker”**, means a ship constructed or used for the carriage in bulk of petroleum and petroleum products in bulk;
- (b) **“Chemical Tanker”**, means a ship constructed or adapted and used for the carriage in bulk of any liquid product listed in Chapter 17 of the International Bulk Chemical Code; and
- (c) **“Liquefied Gas Tanker”** means a ship constructed or adapted and used for the carriage of any liquid product listed in Chapter 19 of the International Gas Carrier Code;

“the Act” means the Merchant Shipping Act, 1951 (Act No. 57 of 1951), as amended;

“the Code” means the South African Maritime Qualifications Code published by the Authority, as amended from time to time;

“the Regulations” means the Merchant Shipping (Safe Manning, Training and Certification) Regulations, 2013, published by Government Notice No. 36688

“trading ship” means any seagoing ship engaged on regular seagoing voyages, excluding—

- (a) warships, naval auxiliaries;
- (b) fishing vessels;

- (c) ships used solely for sport or recreation; and
- (d) sailing ships of traditional build;

“training ship” means a ship approved by the Administration for the purpose of accommodating and providing approved on-board training of more than 12 cadets;

“unlimited voyage” means a voyage other than one contemplated in the definitions of near-coastal voyage and port operations;

“unlimited waters” when used in relation to certificates for fisherman, means waters beyond limited waters;

“valid”, in relation to a certificate or other document, means a certificate or document that is current and that has not been suspended or cancelled;

“watchkeeping officer” means a ship’s officer whose duties include —

- (a) If serving in the deck department, taking charge of a navigational watch on the ship; and
- (b) If serving in the engineering department, taking charge of an engineering watch on a ship;

“watchkeeping personnel” means everyone forming part of a navigational or engineering watch on a ship;

“waters under South African jurisdiction” means waters comprising —

- (a) the internal and territorial waters of the Republic; and
- (b) the exclusive economic zone of the Republic.

- (2) A reference in these regulations to a particular level of assessment shall be read as a reference to assessment at that level in accordance with regulation 15.
- (3) All seafarers shall have completed Basic Training before being assigned safety or pollution prevention duties or before issue of any Certificate of Proficiency or Competency.
- (4) All seafarers shall have completed safety familiarization training before being assigned shipboard duties.

2. Introduction and classes of certificates

- (1) These regulations prescribe the conditions to be met and the standards of competence required for the issue of the certification specified in sub-regulations (2) to (7);
- (2) Subject to subregulation (7), the certificates of competency, with their limitations, endorsements and relative levels of responsibility (if any), applicable to deck officers are:
 - (a) Master (special grade);

- (b) Master —
 - (i) master of a ship of any tonnage on unlimited voyages (management level) [STCW Regulation II/2- No limitation].
 - (ii) chief mate of a ship of any tonnage on unlimited voyages (management level) [STCW Regulation II/2- No limitation].
 - (iii) officer in charge of a navigational watch on a ship of any tonnage on unlimited voyages (operation level) [STCW Regulation II/1- No limitation].
- (c) Chief Mate—
 - (i) chief mate of a ship of any tonnage on unlimited voyages (management level) [STCW Regulation II/2- No limitation].
 - (ii) officer in charge of navigational watch of a ship of any tonnage on unlimited voyages (operational level) [STCW Regulation II/1- No limitation].
 - (iii) endorsed Master of a ship of less than 500GT on unlimited voyages (management level) [STCW Regulation II/3- No limitation].
 - (iv) endorsed master of a ship of less than 3000GT on unlimited voyages (management level).
- (d) Master (< 3000GT)—
 - (i) master of a ship of less than 3000GT on unlimited voyages (management level) [STCW Regulation II/2- Tonnage limitation].
 - (ii) Chief mate of a ship of—
 - (aa) any tonnage if the candidate holds a certificate of competency as chief mate (management level) [STCW Regulation II/2- No limitation]; or
 - (bb) less than 3000GT on unlimited voyages if the candidate holds a certificate of competency as deck officer or chief mate (< 3000GT) (management level) [STCW Regulation II/2- Tonnage limitation].
 - (iii) Officer in charge of navigational watch of a ship of any tonnage on unlimited voyages (operational level) [STCW Regulation II/2- No limitation].
- (e) Chief mate (< 3000GT)—
 - (i) Chief mate of a ship less than 3000GT (management level) [STCW Regulation II/2- Tonnage limitation].

- (ii) Officer in charge of navigational watch of a ship of any tonnage on unlimited voyages (operational level) [STCW Regulation II/1- No limitation].
 - (ii) Endorsed master of a ship less than 500GT on unlimited voyages (management level) [STCW Regulation II/3- Tonnage limitation].
- (f) Deck Officer—
 - (i) officer in charge of a navigational watch on a ship of any tonnage on unlimited voyages (operation level) [STCW Regulation II/1- No limitation].
 - (ii) endorsed chief mate of a ship less than 3000GT on unlimited voyages (management level) [STCW Regulation II/2- Tonnage limitation].
 - (iii) endorsed master of a ship of less than 200GT on near-coastal/unlimited voyages (management level) [STCW Regulation II/3- Tonnage limitation].
 - (iv) endorsed master of a ship of less than 500GT on near-coastal/unlimited voyages (management level) [STCW Regulation II/3- Tonnage limitation].
 - (v) endorsed master of a ship of less than 3000GT on unlimited voyages (management level) [STCW Regulation II/2- Tonnage limitation].
- (g) Master (< 500GT)—
 - (i) Master of ship of less than 500GT on unlimited voyages (management level) [STCW Regulation II/3- No limitation].
 - (ii) Endorsed officer in charge of a navigational watch on a ship of any tonnage on unlimited voyages (operational level)[STCW Regulation II/1- No limitation].
 - (iii) master of a ship of any tonnage operating within a port operations area.
- (h) Mate (< 500GT)—
 - (i) Officer in charge of navigational watch on ships less than 500GT on unlimited voyages (operational level) [STCW Regulation II/3- No limitation].
 - (ii) Endorsed master of a ship less than 200GT on unlimited voyages (Management Level) [STCW Regulation II/3- No limitation].
- (i) Master (< 200GT)—
 - (i) Master of a ship less than 200GT on unlimited voyages (management level) [STCW Regulation II/3- No limitation].

- (ii) officer in charge of a navigational watch of a ship less than 500GT on unlimited voyages (operational level) [STCW Regulation II/3- No limitation].
- (j) Master (< 500 GT near coastal)—
 - (i) master of a ship of less than 500GT on near-coastal voyages (management level) [STCW Regulation II/3- No limitation].
 - (ii) endorsed officer in charge of a navigational watch on a ship of any tonnage on unlimited voyages (operation level) [STCW Regulation II/1- No limitation].
- (k) Mate (< 500GT near coastal)—
 - (i) officer in charge of a navigational watch on ships of less than 500GT on near-coastal voyages (operational level) [STCW Regulation I/3- No limitation].
 - (ii) endorsed master of a ship of less than 200GT on near-coastal/ unlimited voyages (management level) [STCW Regulation II/3- Tonnage limitation].
- (l) Master (< 200GT near coastal)—
 - (i) master of a ship of less than 200GT on near-coastal voyages; (management level) [STCW Regulation II/3- Tonnage limitation].
 - (ii) endorsed officer in charge of a navigational watch on ships of less than 500GT on near-coastal voyages (operational level) [STCW Regulation II/3- No limitation].
- (m) Master (\geq 1600GT port operations)—
 - (i) master of a ship of any tonnage operating within port operations area.
- (n) Master (< 1600GT port operations)—
 - (i) master of a ship of < 1600GT operating within a port operations area; and
 - (ii) officer in charge of navigational watch of a ship of any tonnage operating within a port operations area.
- (o) Skipper (< 200GT port operations)—
 - (i) master of a ship of less than 200GT operating within a port operations area; and
 - (ii) officer in charge of navigational watch of a ship of less than 1600GT operating within a port operations area.

- (3) Subject to subregulation (7), the certificates of competency, with their limitations, endorsements and relative levels of responsibility (if any), applicable to fisherman are:
- (a) Skipper fishing $\geq 24\text{m}$ (unlimited)—
 - (i) Master of any ship engaged in fishing on unlimited waters [STCW-F Regulation II/1 - No limitation]; and
 - (ii) officer in charge of a navigational watch of any ship engaged in fishing on unlimited voyages [STCW-F Regulation II/2- No limitation].
 - (b) Skipper fishing $< 24\text{m}$ (unlimited)—
 - (i) Master of a ship of less than 24m engaged in fishing on unlimited waters [STCW-F Regulation II/1 - Length limitation].
 - (ii) Officer in charge of navigational watch of a ship of less than 24m engaged in fishing on unlimited voyages [STCW-F Regulation II/2- No limitation].
 - (iii) Endorsed master of a ship of 24m or more in length engaged in fishing on limited voyages [STCW-F Regulation II/3- Limited waters].
 - (c) Skipper fishing $\geq 24\text{m}$ (limited)—
 - (i) Master of any ship engaged in fishing on limited waters [STCW-F Regulation II/3- No limitation]; and
 - (ii) Officer in charge of navigational watch of any ship engaged in fishing on unlimited voyages [STCW-F Regulation II/2- No limitation].
 - (iii) Endorsed master of a ship of less than 24m engaged in fishing on unlimited waters [STCW-F Regulation II/1 - Length limitation].
 - (d) Skipper fishing $< 24\text{m}$ (limited)—
 - (i) Master of a ship of less than 24m engaged in fishing on limited waters [STCW-F Regulation II/1 - Length limitation]; and
 - (ii) Officer in charge of navigational watch of a ship less than 24m engaged in fishing on unlimited waters [STCW-F Regulation II/2- Length limitation].
 - (e) Deck officer fishing ($< 24\text{m}$)—
 - (i) Officer in charge of navigational watch of a ship less than 24m engaged in fishing on unlimited waters [STCW-F Regulation II/2- Length limitation].
 - (f) Deck officer fishing ($\geq 24\text{m}$)—

- (i) Officer in charge of navigational watch of any ship engaged in fishing on unlimited waters [STCW-F Regulation II/2- No limitation].
- (3A) Radiocommunication and Radio operators
 - (a) GMDSS radio operators [STCW Regulation IV/2]
 - (i) GMDSS first-class radio electronic certificate
 - (ii) GMDSS second-class radio electronic certificate
 - (iii) GMDSS general operator's certificate
 - (b) Radio operators
 - (i) Long range certificate
 - (ii) Short range certificate
- (4) Subject to subregulation (7), the certificates of competency, with their limitations, endorsements and relative levels of responsibility (if any), applicable to engineer officers are:
 - (a) Chief engineer officer (special grade)
 - (b) Chief engineer officer—
 - (i) chief engineer officer of a ship of unlimited propulsion power (management level); [STCW Regulation III/2- no limitation].
 - (ii) second engineer officer of a ship of unlimited propulsion power (management level); [STCW Regulation III/2- no limitation].
 - (iii) officer in charge of an engineering watch on a ship of unlimited kilowatt propulsion power (operational level); [STCW Regulation III/1- No limitation].
 - (c) Second engineer officer (unlimited)—
 - (i) second engineer officer of a ship of unlimited propulsion power (management level); [STCW Regulation III/2- No limitation].
 - (ii) officer in charge of an engineering watch on a ship of unlimited propulsion power (operational level); [STCW Regulation III/1- No limitation].
 - (iii) endorsed chief engineer officer of a ship of less than 3000kW propulsion power (management level); [STCW Regulation III/3- Power limitation].
 - (d) Chief Engineer Officer (< 3000kW)—
 - (i) chief engineer of a ship of less than 3000kW propulsion power (management level); [STCW Regulation III/3- Power limitation].

- (ii) second engineer of a ship:
 - (aa) of unlimited propulsion power if the candidate holds a certificate of competency as second engineer officer of a vessel of unlimited propulsion power (management level); [STCW Regulation III/2- No limitation]; and
 - (bb) of less than 3000kW propulsion power if the candidate holds a certificate of competency as second engineer less than 3000kW (management level); [STCW Regulation III/3- Power limitation].
- (iii) engineer officer in charge of an engineering watch on a ship of unlimited propulsion power (operational level). [STCW Regulation III/1- No limitation].
- (e) Second Engineer Officer (< 3000kW)—
 - (i) second engineer officer of a ship of less than 3000kW propulsion power (management level); [STCW Regulation III/3- Power limitation].
 - (ii) officer in charge of an engineering watch on a ship of unlimited propulsion power (operational level); [STCW Regulation III/1- No limitation].
 - (iii) endorsed chief engineer officer of a ship of less than 750kW propulsion power (management level); [STCW Regulation III/3- Power limitation].
- (f) Engineer Officer—
 - (i) engineer officer in charge of an engineering watch on a ship of unlimited propulsion power (operational level); [STCW Regulation III/1- No limitation].
 - (ii) endorsed second engineer officer of a ship of less than 3000kW propulsion power (management level); [STCW Regulation III/3- Power limitation].
 - (iii) endorsed chief engineer officer of a ship of less than 3000kW propulsion power (management level); [STCW Regulation III/3- Power limitation].
 - (iv) endorsed chief engineer officer of a ship of less than 750kW propulsion power (management level); [STCW Regulation III/3- Power limitation].
 - (v) chief engineer of a ship of less than 1500kW propulsion power in port operations service.
 - (vi) endorsed chief engineer officer of a ship of unlimited propulsion power operating within a port operations area.

- (g) Electro-technical Officer—
 - (i) officer in charge of electronic equipment on board a ship of 1000 Volts or more (management level); [STCW Regulation III/6- No limitation].
- (h) Marine Motorman Grade 2—
 - (i) chief engineer of any vessel < 350kW propulsion power (management level); [STCW Regulation III/3- Power limitation]
 - (ii) officer in charge of engineering watch of any vessel <1000kW propulsion power (operational level); [STCW Regulation III/3- Power limitation].
- (i) Marine Motorman Grade 1—
 - (i) chief engineer of any vessel < 1000kW propulsion power on near-coastal or limited waters voyages (management level); [STCW Regulation III/3- Power Limitation and STCW-F Regulation II/5- Power limitation].
 - (ii) officer in charge of engineering watch of any vessel < 2 000kW propulsion power on near-coastal or limited waters voyages (operational level); [STCW Regulation III/3- Power Limitation and TCW-F Regulation II/5- Power limitation].
 - (iii) chief engineer of a port operations vessel < 750kW propulsion power.
 - (iv) officer in charge of engineering watch of a vessel of less than 750kW, but less than 500GT, propulsion power (operational level) [STCW Regulation III/3- Power limitation].
- (j) Marine Motorman Higher Grade—
 - (i) chief engineer on any vessel of <2000kW propulsion power(management level); [STCW Regulation III/3- Power limitation].
 - (ii) chief engineer officer of a ship of any propulsion power operating within a port operations area.
 - (iii) officer in charge of engineering watch of any vessel < 3 000kW propulsion power on near-coastal or limited waters voyages (operational level); [STCW Regulation III/3- Power Limitation and STCW-F Regulation II/5- Power limitation].
 - (iv) chief engineer of a near coastal vessel of < 1500kW propulsion power and < 500GT.
 - (v) chief engineer on unlimited vessels < 750kW propulsion power and < 500GT.
- (k) Chief Engineer Officer (port operations)—

- (i) chief engineer of a ship of any propulsion power operating within port operations area.
- (l) Chief Engineer Officer < 1500kW (port operations)—
 - (i) chief engineer officer of a ship of less than 1500kW propulsion power operating within in a port operations area.
 - (ii) officer in charge of an engineering watch on a ship of any kilowatt propulsion power operating in a port operations area.
- (m) Chief Engineer (< 750kW port operations)—
 - (i) chief engineering officer of a ship of less than 750kW propulsion power; and
 - (ii) second engineering officer of a ship of less than 1500kW propulsion power.
- (5) Subject to subregulation (7), the certificates of competency, with their limitations, endorsements and relative levels of responsibility (if any), applicable to engineer officers on fishing vessels are:
 - (a) Second Engineer Officer (fishing)—
 - (i) Officer in charge of engineering watch on fishing vessels of unlimited propulsion power (operational level); [STCW-F Regulation II/5- No limitation].
 - (ii) second engineer of a fishing vessel of < 3000kW propulsion power (management level); [STCW-F Regulation II/5- No limitation].
 - (b) Chief Engineer Officer (< 3000kW fishing)—
 - (i) chief engineer of a fishing vessel of less than 3000kW propulsion power (management level); [STCW-F Regulation II/5- Power limitation].
 - (ii) second engineer of a fishing vessel of unlimited propulsion power (management level); [STCW-F Regulation II/5- No limitation].
 - (iii) officer in charge of engineering watch of a fishing vessel of unlimited propulsion power(operational level). [STCW-F Regulation II/5- No limitation].
 - (c) Chief Engineer Officer (fishing)—
 - (i) chief engineer of a fishing vessel of any propulsion power (management level); [STCW-F Regulation II/5- Power limitation].
 - (ii) second engineer of a fishing vessel of unlimited propulsion power (management level); [STCW-F Regulation II/5- No limitation].

- (iii) officer in charge of engineering watch of a fishing vessel of unlimited propulsion power (operational level). [STCW-F Regulation II/5- No limitation].
 - (iv) endorsed engineer officer of the watch on a ship of unlimited propulsion power (operational level); [STCW Regulation III/1– No limitation]
- (6) Subject to subregulation (7), the certificates of qualification, with their relative levels of responsibility (if any), applicable to ratings are:
 - (a) ordinary seafarer deck (support level) [STCW Regulation II/4].
 - (b) able seafarer deck (support level) [STCW Regulation II/5].
 - (c) able seafarer (fishing) (support level) [STCW-F Conference Resolution 4].
 - (d) ordinary seafarer engine (support level) [STCW Regulation III/4].
 - (e) able seafarer engine (support level) [STCW Regulation III/5].
 - (f) electro-technical rating (support level) [STCW Regulation III/7].
 - (g) able seafarer deck (port operations).
 - (h) able seafarer engine (port operations).
 - (i) general purpose rating (port operations).
 - (j) efficient cook.
- (7) The other certificates of proficiency which may be issued are:
 - (a) Basic training as per relevant Convention [STCW Regulation VI/1 & STCW-F Regulation III/1.1].
 - (b) Proficiency in survival craft and rescue boats [STCW Regulation VI/2 (STCW Code Section A-VI/2-1)].
 - (c) Proficiency in personal survival techniques [STCW Regulation VI/1 (STCW Code Section A-VI/1-1)].
 - (d) Proficiency in personal survival and social responsibilities [STCW Regulation VI/1 (STCW Code Section A-VI/1-4)].
 - (e) Proficiency in fire fighting and fire prevention [STCW Regulation VI/1 (STCW Code Section A-VI/1-2)].
 - (f) Proficiency in advanced fire fighting [STCW Regulation VI/3 (STCW Code Section A-VI/3)].
 - (g) Proficiency in medical first aid [STCW Regulation VI/4 (STCW Code Section A-VI/4-1)].

- (h) Proficiency in medical care [STCW Regulation VI/4 (STCW code Section A-VI/4-2)].
 - (i) Proficiency in fast rescue boats [STCW Regulation VI/2 (STCW Code Section A-VI/2-2)].
 - (j) Proficiency in basic training for oil & chemical tankers [STCW Regulation V/1-1 (STCW Code Section A-V/1-1-1)].
 - (k) Proficiency in basic training for liquefied gas tankers [STCW Regulation V/1-1 (STCW Code Section A-V/1-1-2)].
 - (l) Proficiency in advanced training in oil tankers [STCW Regulation V/1-1 (STCW Code Section A-V/1-1-3)].
 - (m) Proficiency in advanced training in chemical tankers [STCW Regulation V/1-2 (STCW Code Section A-V/1-2-1)].
 - (n) Proficiency in advanced training in liquefied gas tankers [STCW Regulation V/1-2 (STCW Code Section A-V/1-2-2)].
 - (o) Designated security duties training [STCW Regulation VI/6 (STCW Code Section A-VI/6-2)].
 - (p) Ship security officer [STCW Regulation VI/5].
 - (q) Security awareness [STCW Regulation VI/6 STCW Code Section A-VI/6-1]
 - (r) Crowd management training [STCW Regulation V/2].
 - (s) Safety training for passenger ships [STCW Regulation V/2].
 - (t) Crisis management and human behaviour training [STCW Regulation V/2 STCW Code Section A-V/2].
 - (u) Passenger safety, cargo safety and hull integrity training [STCW Regulation V/2].
- (8) The ranking of voyage limitations, for certification in subregulations (2), (3), (4) and (5) is such that the holder of:
- (a) a certificate unlimited as to voyages may serve in the certificated capacity on ships engaged on unlimited voyages or voyages of any limitation.
 - (b) a certificate limited to near-coastal voyages may serve in the certificated capacity on ships engaged on near-coastal voyages and in port operations but not on unlimited voyages.
 - (c) a certificate limited to port operations may serve in the certificated capacity only on ships engaged in port operations.

- (d) a certificate limited to mining operations or non-trading vessels operations may serve in the certificated capacity only on ships employed in those operations.
- (9) The certificates mentioned in subregulations (2),(3),(3A), (4), (5), (6) and (7) shall be issued and endorsed in accordance with the STCW Convention or STCW-F Convention as applicable, except:
 - (a) all certificates of competency (special grade).
 - (b) all port operations certification.
 - (c) the certificate of proficiency as efficient cook.
 - (d) long and short range radio operators certification
- (10) The following certificates shall be professional designations awarded to members of the Institute of Professional South African Mariners:
 - (a) Master (Special grade), Master, Chief Mate and Deck Officer.
 - (b) Chief Engineer (Special Grade), Chief Engineer, Second Engineer, Engineer Officer.
 - (c) Any other certificate or qualification that the Institute might deem fit
- (11) Members of the Institute of Professional South African Mariners (IPSAM) shall abide by the Code of Ethics and be subject to the Disciplinary Code, both published in the Code.

3 Validity and revalidation of certificates

- (1) A certificate of competency and proficiency issued in terms of these regulations, and any equivalent certification, is not valid for sea service or port operations service unless revalidated at intervals not exceeding five years to establish continued professional competence in accordance with subregulation (3).
- (2) Continued professional competence is established by:
 - (a) completing, during the preceding five years, at least 12 months sea service or port operations service, as appropriate to the certification held;
 - (b) having completed three months approved sea service in the rank specified in the certificate held during the preceding six months;
 - (c) performing functions considered by the Authority to be equivalent to the service mentioned in subparagraph (1); or
 - (d) where candidates have not completed the appropriate sea service for their certificate of competency held, they shall complete:
 - (aa) in a supernumerary capacity, at least three months sea service, or port operations service as appropriate to the certification held; or

- (bb) having served in a rank lower than the certificate of competency held for a period of at least three months, such candidates shall be issued with an interim certificate allowing him/her to do so;
 - and an assessment at level 3 to meet the standard of competence specified in the Code; and
 - (e) by completing applicable approved (refresher) training and meeting the standards of competence specified in the Code.
- (3) The certificates of proficiency listed in regulation 2(7)(a) to (h) shall be revalidated by completing an approved refresher training course and meeting the standards specified in the Code. Those certificates of proficiency listed in regulation 2(6) and 2(7)(i) to (u) may be revalidated by establishing continued professional competence by completing, during the preceding five years at least 12 months sea service while performing the appropriate competencies specified in the Code.
- (4) Application for revalidation shall be made in the form and manner, include the information and be accompanied by the documents specified by the Authority.
- (5) The Authority shall, if it is satisfied that the applicant meets the requirements of subregulation (2) or (3), issue to the applicant an endorsement extending the validity of his or her certificate.
- (6) Application for revalidation of certificates may be made within a period of six months before the fifth anniversary of the certificate held and shall be revalidated for a further period of five years from the date of initial expiry.
- (7) Deck officers applying to revalidate their certificates of competencies, equivalent to certificates in Part 3 Division 1 shall—
- (a) have attended an approved course covering Electronic Chart Display and Information Systems (ECDIS) in the preceding five years; or
 - (b) have served on vessels equipped with ECDIS for a period of 12 months in the preceding five years;
- and meet the standards of competence specified in the Code.

4 Equivalency of Certificates

- (1) Valid certification that was issued before the commencement of these regulations shall be taken to be equivalent to certification specified in regulation 115.
- (2) The certificates referred to in subregulation (1) are to be exchanged for the corresponding new certificates within the time and in the manner specified by the Authority.

5 Registrar and Deputy Registrar of Seafarers

- (1) The Authority shall designate members of its staff to be the Registrar and Deputy Registrar of Seafarers.
- (2) In addition to functions bestowed by any other law, the functions of the Registrar shall be:
 - (a) to issue certificates of competency and qualification in accordance with the Act;
 - (b) to issue endorsements to certificates in accordance with the Act;
 - (c) to maintain an electronic register of all certificates of competency and of proficiency issued or recognized under the Act, and of all matters affecting them;
 - (d) to make available information on the status of certificates of competency and of proficiency, including the matters affecting them, to other competent authorities or shipping firms requesting verification of the authenticity or validity of certificates produced to them;
 - (e) to support the chief examiner in his duties in relation to regulation 6; and
 - (f) to perform the functions incidental to those referred to in paragraphs (a) to (d).
- (3) The Registrar shall perform his or her functions in accordance with any applicable quality assurance system implemented pursuant to regulation 7.

6 Chief Examiner and Senior Examiners

- (1) The Authority shall designate in writing, from among the examiners, a senior examiner (deck), a senior examiner (engine), senior examiner (deck fishing), senior examiner (engine fishing) senior examiner (small vessels), senior examiner (radio) and a chief examiner.
- (2) In addition to the functions specified in these regulations, a chief and a senior examiner have the other functions specified in his or her instrument of designation.
- (3) The chief examiner and senior examiner's duties are:
 - (a) Developing policies on assessment, evaluation and examinations;
 - (b) Developing and maintaining the quality assurance system for the matters relating to applicable examinations and standards;
 - (c) Designating examination centres;
 - (d) Keeping abreast with the developments at the Organisation;
 - (e) Communicating information relating to these regulations as required by the STCW Convention and STCW-F Convention to the Organisation;

- (f) Ensuring standards of accreditation and the auditing of training institutions are maintained; and
- (g) To audit parties to the conventions for the purpose of recognition of foreign certificates and qualifications.

7 Quality assurance

The Authority shall implement and maintain a quality assurance system that covers at least the working procedures of the examiners and Registrar.

8 Qualifications committee

- (1) The Authority shall establish a qualifications committee to advise it about the implementation and interpretation of the relevant Conventions, these regulations and the related provisions of the Code.
- (2) All senior examiners, the registrar and the chief examiner shall be members of the qualifications committee, which shall be chaired by the chief examiner.

9 Syllabus Committee

- (1) The Authority shall establish a syllabus committee the functions of which shall be to interpret the syllabuses set out in the Code and to keep these regulations and the Code under review.
- (2) The syllabus committee will consist of:
 - (a) the chair, who shall be the chief examiner;
 - (b) the other senior examiners;
 - (c) the Registrar; and
 - (d) other members, invited by the Authority, who shall be persons with appropriate knowledge and experience in matters relating to the education and training of seafarers.

9A Institute of Professional South African Mariners

- (1) The Authority shall establish an Institute of Professional South African Mariners (IPSAM) to carry out the functions as specified in the Code.
- (2) The Authority shall form structures necessary to ensure that the functions of the Institute of Professional South African Mariners are carried out efficiently and effectively.

PART 2 ASSESSMENT

10 Application for assessment

- (1) Every application for assessment and issue of certificate or endorsement shall be in the prescribed format.
- (2) Where proof of identity is required, such proof may be in the form of a valid South African identity document or passport or, in the case of a foreign citizen or resident, a valid passport.
- (3) A candidate who has successfully applied for issue of a certificate and/or endorsement in which he or she does not need to be assessed at Level 3 may be issued with an interim certificate. An interim certificate shall be in the prescribed format.
- (4) An application which requires an assessment at Level 3 shall be made 14 days before the examination dates published by the Authority. Special arrangements for examination may be made with the proper officer of a port in which the examination is to take place.
- (5) In the case of doubt about the appropriateness or sufficiency of a candidate's qualifying service, the candidate may submit his or her case, accompanied by the relevant certificates, discharge, testimonial, training records, watchkeeping certificates and such other documents as may be required, for determination by the relevant senior examiner.
- (6) Applications for certificates and endorsements by candidates abroad may be submitted and shall include full particulars of the case, accompanied by certified copies of the relevant documents. Original documents should not accompany such applications.

11 Declaration and proof of qualifying service

- (1) Certificates of discharge or a duly completed Seaman's Record Book shall be accepted as sufficient proof of the service recorded therein.
- (2) Each candidate shall be required to make a declaration of qualifying service referred to in regulation 78, and shall be required to explain, in writing, to the satisfaction of the examiner concerned, any period of discontinuity in such service.
- (3) A candidate for a deck officer certificate, where service in charge of a watch is required, shall—
 - (a) produce certificates of watchkeeping service signed by the respective Masters of the ships on which he or she has served, stating that he or she has acted as a watchkeeping officer for at least eight hours out of every 24 hours' service claimed.
 - (a) A candidate for a first deck officer certificate shall produce testimonials signed by the respective Masters of the ships on which he or she has served.

- (4) A candidate for an engineer officer certificate, where service in charge of a watch and workshop training is required, shall—

- (a) For workshop training:

- (i) An artisan in an approved trade, may submit proof of the modules completed during training. At the discretion of the senior engineer examiner, credits may be given for modules that are similar to those required in the accredited workshop training course; or
- (ii) submit proof of having completed the approved workshop training course at an accredited training institution.

- (b) For service in charge of a watch—

Submit watchkeeping certificates as proof of qualifying service. These shall be signed by either the chief engineer officer or master of the ship concerned and shall state:

- (i) the candidate's actual rank on watch;
- (ii) the number of engineer officers simultaneously on watch;
- (iii) the type of propulsion machinery and the propulsion power (in kilowatts) of the ship;
- (iii) the nature of duties performed; and
- (iv) where service in charge of a watch is required, that the candidate has acted as a watchkeeping officer for at least—
 - (aa) eight hours in every 24 hours' service claimed on ships having a continuously manned engine room; and
 - (bb) 24 hours in every 72 hours' service claimed on ships having a periodically unmanned engine room.

12 Bribery

A candidate who has been convicted of bribery as described in section 314 of the Act or upon whom a penalty for such bribery has been imposed under section 324 of the Act shall be disqualified from obtaining any certification in terms of these regulations for a period expiring 12 months after the date of the conviction or imposition of the penalty, as the case may be.

13 Mislaidd, lost or destroyed certificates

The Registrar may issue replacement certificates on application made by the holder in accordance with section 82 of the Act.

14 Unsatisfactory conduct

- (1) If a candidate's conduct during qualifying service was unsatisfactory, the Authority:

- (a) may refuse the application for certification; and
 - (b) the examiner may require that the candidate perform a further period of qualifying service, not exceeding 24 months, before reapplying for the certification concerned.
- (2) For the purpose of these regulations, “**unsatisfactory conduct**” means:
- (a) signing a crew agreement and failing, without reasonable excuse, to join the ship concerned.
 - (b) absence without leave, or desertion, from a ship.

15 Assessing competence

- (1) Candidates required to meet an applicable standard of competence specified in the Code shall be assessed to meet that standard at one or more of the following levels (listed from lowest to highest), as the case requires:
- (a) Level 1: candidates required to complete onboard training shall be assessed at this level in an approved training record book.
 - (b) Level 2 candidates required to complete approved training shall be assessed at this level at the accredited maritime training provider providing the training.
 - (c) Level 3: candidates for a certificate of competency, any endorsement to a certificate of competency (except in terms of Division 5 of Part 3), or the removal of any limitation to a certificate of competency shall be assessed at this level by way of oral examination to assess a candidates competence in the practical aspects of a seafarer’s duties and responsibilities.
- (2) A candidate meets the standards of competence specified in the Code when:
- (a) For a certificate of competency as an officer, the candidate has been assessed and found competent at levels 1, 2 and 3.
 - (b) For a certificate of qualification, the candidate has been assessed and found competent at levels 1 and 2.
 - (c) For a certificate of qualification as an ordinary seafarer, the candidate has been assessed and found competent at level 1.
- (3) A candidate required to be assessed at level 3 shall have been found competent at lower levels.

16 Moderation of Written Examination Papers

- (1) This regulation applies to written examinations that form part of assessment at level 2 for certificates of competency covered by these regulations.
- (2) The Authority shall designate, in writing, one or more examiners to do any one or more of the following:

- (a) moderate examination question papers, memoranda and scripts, provided that examination question papers and memoranda are submitted 30 days prior to the examination date;
 - (b) re-mark examination scripts, if requested by the maritime training provider concerned; and
 - (c) consult with instructors and assessors, about defects or other problems detected in examination memorandum scripts and/or question papers;
- (3) For a course covering the syllabus in the Code for chartwork, navigation, naval architecture, emergency procedures the minimum aggregate mark for a candidate for a certificate of deck competency shall be 60 per cent. For other candidates, and courses covering other syllabuses, the minimum aggregate mark shall be 50 per cent.
- (4) In the case of doubt about a candidate's aggregate mark for a course covering the syllabus in the Code for chartwork, navigation, naval architecture, emergency procedures or engineering knowledge, the decision of the relevant senior examiner shall be final.

17 Level 3 assessment

- (1) All certificates issued under Part 3 Divisions 1, 2, 3 and 4 of these regulations shall be assessed at level 3.
- (2) The assessment shall be conducted by an examiner in the presence of an assessor in accordance with the guidelines specified by the Authority.
- (3) A candidate who has been assessed as competent and complies with all requirements for the issue of the certificate concerned shall be issued, by the examiner, with an interim certificate prescribed below:
 - a) shall be valid for six months from the date of issue;
 - (b) during that period, serves as interim certification specifying functions, levels and applicable limitations (pending the issue of the appropriate full-term certification by the Registrar);
 - (c) shall be surrendered to the Authority when the holder is issued with the full term certification; and
 - (d) shall be in the form prescribed by the Authority.
- (4) If a candidate is assessed as not yet competent, the examiner shall issue the candidate with a written notice signed by the examiner, stating:
 - (a) the details of the assessment;
 - (b) the conditions (if any) imposed by the examiner;
 - (c) the requirement to produce the notice when next applying for assessment at level 3; and

- (d) shall be in the form prescribed by the Authority.
- (5) If a candidate is assessed as not yet competent because of a significant deficiency in the candidate's practical knowledge, the examiner may require that the candidate complete a further period of appropriate qualifying service, not exceeding six months, before reapplying for the certification concerned.
- (6) If a candidate, without reasonable excuse, fails to appear for the assessment at the appointed time and place, the examiner shall assess the candidate as not yet competent by default.

18 Proficiency in English

- (1) For certification as master or ship's officer, a candidate shall have a command of English that is appropriate to the efficient discharge of routine and emergency duties and responsibilities associated with the certificate concerned.
- (2) An examiner may require that a candidate demonstrate proficiency consistent with subregulation (1).
- (3) A requirement under subregulation (2) shall take account of:
 - (a) the obligation of the Authority under the STCW Convention and STCW-F Convention; and
 - (b) any related resolutions adopted by the Organisation.

PART 3 CERTIFICATION REQUIREMENTS

Division 1—Deck officer certificates

19 Skipper (< 200GT port operations)

For the certificate of competency as skipper (port operations), a candidate shall—

ALTERNATIVE A: Candidates making entry at this level

- (1) be at least 18 years of age; and
- (2) have at least 12 months sea service in the deck department on any of the following ships of 25 GT or more—
 - (a) seagoing ships;
 - (b) fishing vessels;
 - (c) port operation vessels; or
 - (d) naval ships of 14m or more in length; and

- (3) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates with Coastal Skipper $\geq 9\text{m}$ or Skipper Offshore $\geq 9\text{m}$

- (1) be at least 18 years of age; and
- (2) have at least nine months sea service in the deck department on any of the following ships of 25 GT or more—
 - (a) seagoing ships;
 - (b) fishing vessels;
 - (c) port operation vessels; or
 - (d) naval ships of 14m or more in length; and
- (3) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

20 Master (< 200GT near-coastal)

For the certificate of competency as master (<200GT near coastal), a candidate shall—

ALTERNATIVE A: Candidates making entry at this level

- (1) be at least 20 years of age; and
- (2) have at least 24 months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall—
 - (a) trading ships;
 - (b) fishing vessels; or
 - (c) naval ships of 14m or more in length;
- (3) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding the certificate of competency as skipper (port operations)

- (1) have completed, while holding as a minimum the certificate of competency as skipper (port operations), at least 12 months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall:
 - (a) trading ships;
 - (b) fishing vessels; or
 - (c) naval ships of 14m or more in length;
- (2) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (3) have completed approved training and met the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding the certificate of competency as coastal skipper $\geq 9\text{m}$ or Skipper Offshore $\geq 9\text{m}$

- (1) have completed, while holding as a minimum the certificate of competency as coastal skipper $\geq 9\text{m}$ or skipper offshore $\geq 9\text{m}$, at least 18 months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall:
 - (a) trading ships;
 - (b) fishing vessels; or
 - (c) naval ships of 14m or more in length; and
- (2) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (3) have completed approved training and met the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding certificate of competency as skipper fishing ($< 24\text{m}$ limited waters) or higher

- (1) have completed, while holding as a minimum the certificate of competency as skipper fishing ($< 24\text{m}$ limited waters), at least six months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall:
 - (a) trading ships;
 - (b) fishing vessels; or
 - (c) naval ships of 14m or more in length; and
- (2) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least three months; and

- (3) have completed approved training and met the standards of competence specified in the Code.

ALTERNATIVE E: Candidates with naval bridge watchkeeping certificate

- (1) have completed, while holding as a minimum naval bridge watchkeeping certificate, at least six months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall:
 - (a) trading ships;
 - (b) fishing vessels; or
 - (c) naval ships of 14m or more in length; and
- (2) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (3) have completed approved training and met the standards of competence specified in the Code.

21 Master (< 200GT)

For the certificate of competency as Master (< 200GT), a candidate shall—

ALTERNATIVE A: Candidates making entry at this level

- (1) Be at least 20 years of age;
- (2) Have at least 24 months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall engaged on unlimited voyages:
 - (a) trading ships;
 - (b) fishing vessels; or
 - (c) naval ships of 14m or more in length; and
- (3) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and met the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding certificate of competency as master (< 200GT near-coastal)

- (1) have at least six months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall engaged on unlimited voyages—
 - (a) trading ships;

- (b) fishing vessels; or
- (c) naval ships of 14m or more in length; and
- (2) have performed, during the required sea service, bridge watchkeeping duties; and
- (3) have completed approved training and met the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding skipper offshore $\geq 9\text{m}$ or skipper ($< 200\text{GT}$ port operations)

- (1) have at least 18 months sea service in the deck department on any of the following types of ships of 25GT or more and/or 14m or more in length overall engaged on unlimited voyages;
 - (a) trading ships;
 - (b) fishing vessels; or
 - (c) naval ships of 14m or more in length; and
- (2) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (3) have completed approved training and met the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding certificate of competency as skipper fishing ($< 24\text{m}$ unlimited waters)

- (1) have completed approved training and met the standards of competence specified in the Code.

ALTERNATIVE E: Candidates holding naval bridge watchkeeping certificate

- (1) have attained six months bridge watchkeeping service whilst holding naval bridge watchkeeping certificate on naval vessels $\geq 14\text{m}$ in overall length engaged on unlimited voyages.
- (2) have completed approved training and met the standards of competence specified in the Code.

22 Mate ($< 500\text{GT}$ near-coastal)

For the certificate of competency as mate ($< 500\text{GT}$ near-coastal), a candidate shall—

ALTERNATIVE A: Candidates making entry at this level without accelerated training

- (1) be at least 18 years of age;
- (2) have at least 36 month sea service in the deck department on trading ships of 100GT or more on any seagoing voyages;

- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book;
- (4) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (5) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates making entry at this level following accelerated training

- (1) be at least 18 years of age;
- (2) have at least 12 months sea service in the deck department on trading ships of 100GT or more on any seagoing voyages;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book;
- (4) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (5) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding as a minimum a certificate of competency as master (<200GT near-coastal) and candidates holding a minimum skipper fishing (< 24m limited waters)

- (1) have at least 12 months sea service in the deck department on trading ships of 100GT or more on any voyages;
- (2) have performed, during the required sea service, bridge watchkeeping duties; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding as a minimum master (< 200GT) or skipper fishing (<24m unlimited waters)

- (1) have at least 6 months sea service in the deck department on trading ships of 100GT or more on any voyages;
- (2) have performed, during the required sea service, bridge watchkeeping duties; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE E: Candidates holding naval bridge watchkeeping certificates

- (1) have at least six months sea service in the deck department on trading ships of 100GT or more on any voyages;
- (2) have completed an approved onboard training record book;

- (3) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

23 Mate (< 500GT)

For the certificate of competency as mate (< 500GT), a candidate shall—

ALTERNATIVE A: Candidates making entry at this level without accelerated training

- (1) be at least 18 years of age;
- (2) have at least 36 months sea service in the deck department on trading ships of 100GT or more on unlimited voyages;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book;
- (4) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (5) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates making entry at this level following accelerated training

- (1) be at least 18 years of age;
- (2) have at least 12 months sea service in the deck department on trading ships of 100GT or more on unlimited voyages;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book;
- (4) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (5) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding skipper fishing (< 24m or ≥ 24m limited waters)

- (1) have at least 12 months sea service in the deck department on trading ships of 100GT or more on unlimited voyages;
- (2) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding certificate of competency as master (< 200GT near coastal), master (< 200GT), mate (< 500GT near coastal) or skipper fishing (< 24m or ≥24m unlimited waters)

- (1) have at least six months sea service in the deck department on trading ships of 100GT or more on unlimited voyages;
- (2) have completed, during the required sea service, onboard training that is documented in an approved training record book;
- (3) have performed, during the required sea service, bridge watchkeeping duties; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE E: Candidates holding naval bridge watchkeeping certificate

- (1) have at least six months sea service in the deck department on trading ships of 100GT or more on unlimited voyages;
- (2) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months and completed an approved onboard training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

24 Master (< 1600GT port operations)

For the certificate of competency as master (port operations), a candidate shall—

- (1) be at least 20 years of age;
- (2) have completed at least 12 months port operations service under the supervision of a master on port operations vessels of 100GT or more; while holding as a minimum the certificate of competency as skipper (< 200GT port operations); and
- (3) have completed approved training and meet the standards of competence specified in the Code.

25 Master (port operations)

For the certificate of competency or endorsement as master (port operations), a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as master (<1600GT port operations)

- (1) be at least 20 years of age;
- (2) have completed at least six months port operations service as the officer in charge of navigational watch or master on port operations vessels of 1000GT or more; and

- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding certificate of competency as master (< 500GT near-coastal)

- (1) be at least 20 years of age;
- (2) have completed, while holding as a minimum the certificate of competency as master (< 500GT near coastal), at least six months sea service as officer in charge of a navigational watch on trading ships of 100GT or more on unlimited voyages; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding naval bridge watchkeeping certificate with command endorsement

- (1) have proof of being a commander onboard as South African Navy ship of 24m or more for a countable six months and six months bridge watchkeeping service on trading ships of 100GT or more on unlimited seagoing voyages under the supervision of a watchkeeping officer; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

28 Deck officer (unlimited)

For the certificate of competency as deck officer, a candidate shall—

ALTERNATIVE A: Candidates making entry at this level without accelerated training

- (1) be at least 18 years of age;
- (2) have at least 36 months sea service in the deck department on trading ships of 500GT or more on unlimited voyages;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book;
- (4) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (5) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates making entry at this level following accelerated training

- (1) be at least 18 years of age;
- (2) have at least 12 months sea service in the deck department on trading ships of 500GT or more on unlimited voyages as part of an approved accelerated training programme that includes onboard training documented in an approved training record book;

- (3) have performed, during the required sea service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding certificate of competency as mate (< 500GT near-coastal or unlimited) or master (< 200GT near-coastal or unlimited)

- (1) have completed at least six months bridge watchkeeping duties under the supervision of a certificated deck officer on trading ships of 500GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding certificate of competency as master (< 500GT near-coastal)

- (1) have completed at least three months watchkeeping duties under the supervision of a certificated deck officer on trading ships of 500GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE E: Candidates holding certificate of competency as master (< 500GT)

- (1) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE F: Candidates holding naval bridge watchkeeping certificate

- (1) have completed, while holding as a minimum the naval bridge watchkeeping certificate, at least six months watchkeeping duties under the supervision of a certificated deck officer on trading ships of 500GT or more on unlimited voyages;
- (2) complete onboard training documented in an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE G: Candidates holding certificate of competency as skipper fishing (\geq 24m unlimited)

- (1) have completed, while holding as a minimum the certificate of competency as skipper fishing \geq 24m, at least six months watchkeeping duties under the supervision of a certificated deck officer on trading ships of 500GT or more on unlimited voyages;
- (2) complete onboard training documented in an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

29 Chief mate (< 3000GT)

For the certificate of competency as chief mate of a ship of less than 3000GT on unlimited voyages, a candidate shall—

ALTERNATIVE A: Candidates holding certificate of competency as deck officer (unlimited)

- (1) have completed at least 12 months sea service as officer in charge of a navigational watch on trading ships of 500GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding certificate of competency as skipper fishing (\geq 24m unlimited)

- (1) have completed at least 12 months sea service as skipper of a fishing vessel \geq 1000GT plus three months sea service on trading ships of 500GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a naval bridge watchkeeping certificate with vessel command experience

- (1) have completed, while holding as a minimum naval bridge watchkeeping certificate, at least six months sea service as a commander of a South African Navy ship over 30m in length plus three months sea service on trading ships of 500GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

30 Master (< 3000GT)

For the certificate of competency as master (< 3000GT), a candidate shall—

ALTERNATIVE A: Candidates holding certificate as chief mate or chief mate (<3000GT)

- (1) have completed 12 months sea service as chief mate on trading ships of 500GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding certificate as deck officer (unlimited), chief mate or chief mate (< 3000 GT)

- (1) have completed 36 months sea service as officer in charge of navigational watch on trading ships of 500GT or more on unlimited voyages; and

- (2) have completed approved training and meet the standards of competence specified in the Code.

31 Chief mate

For the certificate of competency as chief mate, a candidate shall—

ALTERNATIVE A: Candidates holding certificate of competency as deck officer (unlimited)

- (1) have completed at least 12 months sea service as officer in charge of a navigational watch on trading ships of 1600GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding certificate of competency as chief mate (<3000GT) or master (< 3000GT)

- (1) have completed at least six months sea service as chief officer on trading ships of 1600GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

32 Master

For the certificate of competency as master, a candidate shall—

ALTERNATIVE A: Candidates holding certificate of competency as deck officer

- (1) have completed at least 36 months sea service as officer in charge of a navigational watch on trading ships of 1600GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding certificate of competency as chief officer

- (1) have completed at least 12 months sea service as chief officer on trading ships of 1600GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding certificate of competency as chief officer (<3000GT)

- (1) have completed, while holding as a minimum the certificate of competency as chief mate (< 3000GT), at least 18 months sea service as chief officer on trading ships of 1600GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding certificate of competency as master (< 3000GT)

- (1) have completed, while holding as a minimum the certificate of competency as master (< 3000GT), at least six months sea service as chief officer on trading ships of 1600GT or more on unlimited voyages; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

33 Mining operations and non-trading vessel operation limitations

- (1) If more than half of a candidate's qualifying service for certification referred to in regulation 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32 is made up of sea service performed on ships employed in mining operations contemplated in regulation 82(3) the certification concerned shall be limited to mining operations.
- (2) If more than half of a candidate's qualifying service for certification referred to in regulation 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32 is made up of sea service performed on vessels engaged in non-trading vessel operations, the certification concerned shall be limited to voyages on non-trading vessels.
- (3) For this regulation, references in regulations 20, 21, 22, 23, 26, 27, 28, 29, 30, 31, 32 to sea service shall be taken to include sea service performed on ships employed in mining operations or non-trading vessels as appropriate.

34 Master (special grade)

For the certificate of competency as master (special grade), a candidate shall have completed approved training and meet the standards of competence specified in the Code

Division 2 Fishing- Deck Officer Certificates**35 Deck officer fishing (< 24m)**

For the certificate of competency as deck officer, a candidate shall—

ALTERNATIVE A: Candidates making entry at this level without accelerated training

- (1) be at least 18 years of age;
- (2) have at least 24 months sea service in the deck department of a fishing vessel of 12m or more in length on any seagoing fishing voyages and has completed an approved onboard training record book;
- (3) have performed, during the required seagoing service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE B: Candidates making entry at this level following accelerated training

- (1) be at least 18 years of age;
- (2) have at least 12 months sea service in the deck department of a fishing vessel of 12m or more in length on any seagoing fishing voyages, has completed training as part of an accelerated training programme that is documented in an approved training record book;
- (3) have performed, during the required seagoing service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as skipper offshore $\geq 9\text{m}$

- (1) have at least 15 months sea service as an officer in charge of navigational watch of a fishing vessel of 12m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE D: Candidates holding a certificate of competency as coastal skipper $\geq 9\text{m}$

- (1) have at least 18 months sea service as an officer in charge of navigational watch of a fishing vessel of 12m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

36 Deck officer fishing ($\geq 24\text{m}$)

For the certificate of competency as deck officer, a candidate shall—

ALTERNATIVE A: Candidates making entry at this level without accelerated training

- (1) be at least 18 years of age;
- (2) have at least 24 months sea service in the deck department of a fishing vessel of 18m or more in length on any seagoing fishing voyages;
- (3) have performed, during the required seagoing service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months and obtained a steering certificate; and
- (4) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE B: Candidates making entry at this level on accelerated training

- (1) be at least 18 years of age;

- (2) have at least 12 months sea service in the deck department of a fishing vessel of 18m or more in length on any seagoing fishing voyages, as part of an accelerated training programme that is documented in an approved training record book;
- (3) have performed, during the required seagoing service, bridge watchkeeping duties under the supervision of a certificated deck officer for at least six months; and
- (4) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as deck officer fishing (<24m)

- (1) have at least six months sea service as an officer in charge of a navigational watch on vessels of 18m or more on any seagoing voyages; and
- (2) meet the standard of competence specified in the Code.

37 Skipper fishing (< 24m limited waters)

For the certificate of competency as skipper fishing (< 24m limited waters), a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as deck officer fishing (<24m)

- (1) have, whilst holding, as a minimum, a certificate of competency as deck officer fishing (< 24m), at least 12 months sea service as an officer in charge of navigational watch of a fishing vessel of 12m or more in length on any seagoing fishing voyages; and
- (2) Have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency issued in terms of Division 1 of this Part

- (1) have, whilst holding, as a minimum, a certificate of competency as master (< 200GT near-coastal), at least six months sea service as an officer in charge of navigational watch of a fishing vessel of 12m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

38 Skipper fishing (< 24m unlimited waters)

For the certificate of competency as skipper fishing (< 24m unlimited waters), a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as deck officer fishing (<24m unlimited waters)

- (1) have at least 12 months sea service as an officer in charge of navigational watch of a fishing vessel of 12m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as skipper fishing < 24m limited waters)

- (1) have at least 12 months sea service as an officer in charge of navigational watch of a fishing vessel of 12m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency issued in terms of Division 1 of this Part

- (1) have, whilst holding, as a minimum, a certificate of competency as master (< 200GT near-coastal), at least six months sea service as an officer in charge of navigational watch of a fishing vessel of 12m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

39 Skipper fishing (≥ 24m limited waters)

For the certificate of competency as skipper fishing (≥ 24m limited waters), a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as deck officer fishing (≥24m)

- (1) have at least 12 months sea service as an officer in charge of navigational watch of a fishing vessel of 18m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as skipper fishing (< 24m unlimited waters)

- (1) have at least six months sea service as an officer in charge of navigational watch of a fishing vessel of 18m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency issued in terms of Division 1 of this Part

- (1) have, whilst holding, as a minimum, a certificate of competency as deck officer, at least 12 months sea service as an officer in charge of navigational watch, of which at

least six months is spent on fishing vessels of 18m or more in length on any seagoing fishing voyages; and

- (2) have completed approved training and meet the standard of competence specified in the Code.

40 Skipper fishing ($\geq 24\text{m}$ unlimited waters)

For the certificate of competency as skipper fishing ($\geq 24\text{m}$ unlimited waters), a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as deck officer fishing ($\geq 24\text{m}$)

- (1) have at least 12 months sea service as an officer in charge of navigational watch of a fishing vessel of 24m or more in length on unlimited seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as skipper fishing ($< 24\text{m}$ unlimited waters) or skipper fishing ($\geq 24\text{m}$ limited waters)

- (1) have at least six months sea service as an officer in charge of navigational watch of a fishing vessel of 18m or more in length on unlimited seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency issued in terms of Division 1 of this Part

- (1) have, whilst holding, as a minimum, a certificate of competency as deck officer, at least 12 months sea service as an officer in charge of navigational watch, of which at least six months is spent on fishing vessels of 18m or more in length on any seagoing fishing voyages; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

Division 2A Radiocommunications and radio Operator Certificates

40A GMDSS radio operators

- (1) Every person in charge of or performing radio duties on a ship required to participate in the GMDSS shall hold an appropriate certificate related to GMDSS, issued or recognised by the Authority under the provisions of the Radio Regulations.
- (2) In addition, every candidate for a certificate of competency under this division for service on a ship, which is required by the International Convention for the Safety of Life at Sea, 1974 as amended to have a radio installation, shall:

- (i) be at least 18 years of age
- (ii) have completed approved training and meet the standard of competence specified in the Code

40B Radio operators

- (1) Every person in charge of or performing radio duties on a ship not required to comply with the provisions of the GMDSS in Chapter IV of the SOLAS Convention shall hold an appropriate certificate issued or recognised by the Authority under the provisions of the Radio Regulations.
- (2) In addition, every candidate for a certificate of competency under this division for service on a ship, required to have a radio installation, shall:
 - (i) be at least 16 years of age
 - (ii) have completed approved training and meet the standard of competence specified in the Code

Division 3 Engineer Officer Certificates

41 Chief engineer (< 750kW port operations)

For the endorsement as chief engineer officer of a ship of less than 750kW propulsion power, a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as marine motorman grade 2

- (1) have completed at least 18 months approved sea service on a ship of 100kW or more propulsion power under the supervision of a qualified engineer officer; and
- (2) have completed approved training and meet the standard of competence specified in the Code, and pass an assessment at level 3.

ALTERNATIVE B: Candidates making an entry at this level

- (1) have completed at least 24 months approved sea service on a ship of 100kW or more propulsion power under the supervision of a qualified engineer officer; and
- (2) have completed approved training and meet the standard of competence specified in the Code, and pass an assessment at level 3.

ALTERNATIVE C: Candidates holding an approved trade certificate

- (1) have completed at least 12 months approved sea service on a ship of 100kW or more propulsion power under the supervision of a qualified engineer officer; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

42 Chief engineer (< 1500kW port operations)

For the certificate of competency as chief engineer officer of a ship of less than 1500kW propulsion power operating within a port operations area, a candidate shall—

ALTERNATIVE A: Candidates making entry at this level

- (1) be at least 18 years of age;
- (2) have completed at least 18 months port operations service in the engineering department of a ship of 750kW propulsion power or more under the supervision of a qualified engineer officer as part of an accelerated training programme documented in a training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as chief engineer (<750kW port operations)

- (1) have completed 12 months approved sea service as an engineer officer in charge of a watch on sea going or port operations vessels of 750kW propulsion power or more;
- (2) have completed an approved accelerated training programme that includes onboard training documented in an approved training record book; and
- (3) meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as marine motorman grade 1

- (1) have completed at least 12 months port operations service in the engineering department of a ship of 750kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

43 Chief engineer officer (port operations)

For the certificate of competency as chief engineer officer (port operations), a candidate shall—

ALTERNATIVE A: Candidates making entry at this level

- (1) have completed, while holding as a minimum the certificate of competency as:
 - (a) chief engineer (< 1500kW port operations);
 - (b) engineer officer; or
 - (c) a certificate of competency as marine motorman higher grade;

at least 12 months port operations service or sea service as officer in charge of an engineering watch on ships of 750kW propulsion power or more of which at least three months shall have been on ships of 1500kW propulsion or more; and

- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as chief engineer (<750kW port operations)

- (1) have completed at least 18 months port operations service or sea service as officer in charge of an engineering watch on ships of 750kW propulsion power or more of which at least six months is on vessels of 1500kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as second engineer (<3000kW)

- (1) have completed approved training and meet the standards of competence specified in the Code.

44 Marine motorman Grade 2

- (1) A candidate for a certificate as marine motorman grade 2 qualifies for a credit on required sea service on academic qualifications as follows:
 - (a) 3 months if holding an able seafarer engine certificate of proficiency.
 - (b) 3 months if holding grade 10 or higher school certificate or national technical certificate 1 or higher certificate.
- (2) A candidate for a certificate as marine motorman grade 2 shall—

ALTERNATIVE A: Candidates making entry with no prior engineering experience

- (a) be at least 18 years of age;
- (b) have at least 18 months approved sea service on ships of 100kW propulsion power or more; and
- (c) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates making entry with an approved trade certificate

- (a) be at least 18 years of age;
- (b) have at least six months approved sea service on ships of 100kW propulsion power or more; and

- (c) have completed approved training and meet the standards of competence specified in the Code.

45 Marine motorman Grade 1

A candidate for marine motorman grade 1 examination shall as holder of a grade 2 certificate of proficiency—

ALTERNATIVE A: Candidates holding a certificate of competency as marine motorman grade 2

- (1) have at least 12 months approved sea service on ships of 350kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as chief engineer (< 750kW port operations)

- (1) have at least 12 months approved sea service on ships of 350kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

46 Marine motorman Higher Grade

A candidate for marine motorman higher grade examination shall—

ALTERNATIVE A: Candidates holding a certificate of competency as marine motorman grade 1

- (1) have approved sea service of 12 months as second engineer on ships of 750kW or more propulsion power; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as marine motorman grade 1

- (1) have approved sea service of six months as chief engineer on ships of 750kW or more propulsion power; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: candidates holding a certificate of competency as chief engineer (< 750kW port operations)

- (1) have approved sea service of 12 months as an officer in charge of engineering watch on ships of 750kW or more propulsion power; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

47 Engineer officer

For the certificate of competency as engineer officer, a candidate shall—

ALTERNATIVE A: Candidates making entry without an accelerated training programme

- (1) be at least 18 years of age;
- (2) have at least 36 months sea service in the engine department on trading ships of 750kW propulsion power or more;
- (3) have performed engineering watchkeeping duties for at least six months in the period above under the supervision of a qualified engineer officer;
- (4) have completed, during the required sea service, onboard training that is documented in an approved training record book; and
- (5) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates making entry with an accelerated training programme.

- (1) be at least 18 years of age;
- (2) have completed at least 12 months approved sea service in the engine department on trading ships of 750kW propulsion power or more;
- (3) have performed engineering watchkeeping duties for at least six months in the period above under the supervision of a qualified engineer officer;
- (4) have completed an approved accelerated training programme that includes onboard training documented in an approved training record book; and
- (5) meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as marine motorman higher grade

- (1) have completed at least six months sea service performing watchkeeping duties in the engine room on trading ships of 750kW propulsion power or more under the supervision of a certificated engineer officer; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding a certificate of competency as chief engineer (port operations)

- (1) have completed at least three months approved sea service in the engine department on trading ships of 750kW propulsion power or more while performing watchkeeping duties under the supervision of a certificated engineer officer; and
- (2) meet the standards of competence specified in the Code.

ALTERNATIVE E: Candidates holding a certificate of proficiency as able seafarer engine.

- (1) have completed at least 12 months approved sea service in the engine department on trading ships of 750kW propulsion power or more under the supervision of a certificated engineer officer;
- (2) have performed engineering watchkeeping duties for at least 6 months under the supervision of a qualified engineer officer;
- (3) have completed an approved accelerated training programme of at least 24 months that includes onboard training documented in an approved training record book; and
- (4) meet the standards of competence specified in the Code.

ALTERNATIVE F: Candidates holding a certificate of competency as chief engineer (<3000kW fishing).

- (1) have completed at least three months approved sea service in the engine department on trading ships of 750kW propulsion power or more while performing watchkeeping duties under the supervision of a certificated engineer officer documented in an approved training record book; and
- (2) meet the standards of competence specified in the Code.

ALTERNATIVE G: Candidates holding a navy watchkeeping certificate or higher on accelerated training programme.

- (1) have completed at least 6 months approved sea service as part of accelerated training programme in the engine department on trading ships of 750kW propulsion power or more;
- (2) have performed engineering watchkeeping duties for the period above under the supervision of a qualified engineer officer documented in an approved training record book; and
- (3) have completed an approved training and meet the standards of competence specified in the Code.

ALTERNATIVE H: Candidates holding a navy watchkeeping certificate or higher without an accelerated training programme

- (1) have completed at least 12 months approved sea service as part of accelerated training programme in the engine department on trading ships of 750kW propulsion power or more;

- (2) have performed engineering watchkeeping duties for the period of six months under the supervision of a qualified engineer officer documented in an approved training record book; and
- (3) have completed an approved training and meet the standards of competence specified in the Code.

48 Second engineer (< 3000kW)

For the certificate of competency as second engineer officer of a ship of less than 3000kW propulsion power, a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as engineer officer

- (1) have completed at least 12 months sea service as officer in charge of an engineering watch on trading ships of 750kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as chief engineer (fishing)

- (1) have completed at least six months sea service as officer in charge of an engineering watch on trading ships of 750kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a navy watchkeeping certificate having served as chief engineer of a naval vessel with more than 750kW propulsion power

- (1) provide proof of having served as chief engineer of a naval vessel with more than 750kW propulsion power;
- (2) have completed at least six months sea service as officer in charge of an engineering watch on trading ships of 750kW propulsion power or more;
- (3) performed watchkeeping duties for the period required above; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

49 Chief engineer (< 3000kW)

For the certificate of competency as chief engineer officer of a ship of less than 3000kW propulsion power, a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as engineer officer

- (1) have at least 36 months sea service as an officer in charge of engineering watch on trading ships of at least 750kW but less than 3000kW propulsion power; and

- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as second engineer officer 3000kW or second engineer

- (1) have completed at least 12 months sea service as second engineer on trading ships of 750kW but less than 3000kW propulsion power; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as second engineer

- (1) have completed approved training and meet the standard of competence specified in the Code.

50 Second engineer

For the certificate of competency as second engineer officer, a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as engineer officer

- (1) have completed at least 12 months sea service as officer in charge of an engineering watch on trading ships of 3000kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as second engineer officer <3000kW

- (1) have completed at least six months sea service as an officer in charge of engineering watch on trading ships of 3000kW propulsion power or more; and
- (2) have completed approved training and meet the standard of competence specified in the Code.

ALTERNATIVE C: Candidates holding a navy watchkeeping certificate having served as chief engineer of a naval vessel with more than 3000kW propulsion power or more

- (1) provide proof of having served as chief engineer for a period of six months of a naval vessel with more than 750kW propulsion power;
- (2) have completed at least 12 months sea service as officer in charge of an engineering watch or supernumerary on trading ships of 3000kW propulsion power or more; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

51 Chief engineer

For the certificate of competency as chief engineer officer a candidate shall—

ALTERNATIVE A: Candidates holding a certificate of competency as engineer officer

- (1) have at least 36 months sea service as an officer in charge of engineering watch on trading ships of at least 3000kW propulsion power; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as second engineer

- (1) have at least 12 months sea service whilst serving as second engineer on trading ships of at least 3000kW propulsion power; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as chief engineer (<3000kW)

- (1) have at least 12 months sea service whilst serving as second engineer on trading ships of at least 3000kW propulsion power; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

52 Electro technical officer

A candidate for the certificate of competency as electro technical officer of a ship of 1000 Volts and 750kW propulsion power or more shall—

ALTERNATIVE A: Candidates on accelerated training programme

- (1) be at least 18 years of age;
- (2) have completed at least 12 months approved sea service as part of an approved accelerated training programme that is documented in an approved training record book;
- (3) have successfully completed training and have passed a theoretical examination at an accredited institution;
- (4) have successfully completed workshop skills training; and
- (5) meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates without an accelerated training programme

- (1) be at least 18 years of age;
- (2) have completed at least 36 months approved sea service in the engine room of vessels over 750kW propulsion power in excess of 1000Volts documented in an approved training record book;

- (3) have successfully completed training and have passed a theoretical examination at an accredited institution;
- (4) have successfully completed workshop skills training; and
- (5) which meets the standards of competence specified in the Code.

53 Sea service requirements for steam and combined (steam and motor) certificates of competency

- (1) The STCW Convention defines seagoing service as service onboard a ship relevant to the issue or revalidation of a certificate or other qualification.
- (2) The period of sea service required for certification varies with the level of certification.
- (3) A summary of qualifying sea service requirements for engineer certificates of competency is given in the table below:

LEVEL	ENDORSEMENT	QUALIFYING SERVICE	TOTAL MINIMUM SEA SERVICE
Engineer officer (OOW)		Minimum Watchkeeping on main propulsion machinery or UMS duties (on ships of 750kW or more) under the supervision of an engineer officer.	Total minimum sea service
	Motor (M)	6 months on motor ships, plus 6 months approved service as cadet engineer .	12 months
	Steam (S)	6 months on steam ships, plus 6 months approved service as cadet engineer.	12 months
	Combined Steam & Motor (S&M)	14 months, 4 steam and 4 motor, plus 6 months approved service as cadet engineer.	14 months
2 nd Engineer ships less than 3 000 kW		Minimum sea service while qualified to serve as engineer officer of the watch (on ships of 750kW or more)	Total minimum sea service (with EOW certificate)
	Motor (M)	12 months on motor ships	12 months
	Steam (S)	12 months on steam ships	12 months
	Combined Steam & Motor (S&M)	18 months (9 steam and 9 motor)	18 months
2 nd Engineer ships \geq 3000 kW		Minimum sea service while qualified to serve as EOW (on ships of 3000kW or more)	Total minimum sea service (with EOW certificate)
	Motor (M)	12 months on motor ships	12 months
	Steam (S)	12 months on steam ships	12 months
	Combined Steam & Motor (S&M)	18 months (9 steam and 9 motor)	18 months
Chief engineer ships < 3 000 kW		Minimum sea service while qualified to serve as 2 nd Engineer (on ships of 750kW or more)	Total minimum sea service
	Motor (M)	12 months in charge of watch or UMS duties on motor ships of 750kW or more	36 months (EOW + 2EO + 12 months)
	Steam (S)	12 months in charge of watch or UMS duties on steam ships of 750kW or more	36 months (EOW + 2EO + 12 months)
	Combined Steam & Motor (S&M)	18 months (9 steam and 9 motor in charge of watch or UMS duties on ships of \leq 3000kW)	48 months (EOW + 2EO + 18 months)
Chief engineer ships \geq 3 000 kW		Minimum sea service while qualified to serve as 2 nd engineer (on ships of 3000kW or more)	Total minimum sea service
	Motor (M)	12 months in charge of watch or UMS duties on motor ships of 3000kW or more	36 months (EOW + 2EO + 12 months)
	Steam (S)	12 months in charge of watch or UMS duties on steam ships of 3000kW or more	36 months (EOW + 2EO + 12 months)
	Combined Steam & Motor (S&M)	18 months (9 steam and 9 motor in charge of watch or UMS duties on ships of 3000kW or more)	48 months (EOW + 2EO combined + 18 months)

54 Chief engineer officer (special grade)

For the certificate of competency as chief engineer officer (special grade), a candidate shall have completed approved training and meet the standards of competence specified in the Code

Division 4 Fishing Engineer Certificates

55 Second engineer (fishing)

A candidate for the second engineer (fishing) examination shall—

ALTERNATIVE A: Candidates making entry on accelerated training programme.

- (1) be not less than 18 years of age;
- (2) have at least 12 months approved sea service in the engine department of a fishing vessel of 750kW propulsion power or more under the supervision of a qualified engineer officer; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates making entry without accelerated training programme.

- (1) be not less than 18 years of age;
- (2) have at least 18 months approved sea service in the engine department of a fishing vessel of 750kW propulsion power or more under the supervision of a qualified engineer officer; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as marine motorman grade 1

- (1) have approved sea service of six months on fishing vessels of 750kW propulsion power or more under the supervision of a qualified engineer officer; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding a certificate of competency as engineer officer

- (1) have at least three months sea service on fishing vessels of 750kW propulsion power or more under the supervision of a qualified engineer officer; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

56 Chief engineer (< 3000kW fishing)

For a certificate of competency as chief engineer (< 3000kW fishing)—

ALTERNATIVE A: Candidates holding a certificate of competency as second engineer officer (fishing)

- (1) have at least 12 months sea service on fishing vessels of 750kW propulsion power or more; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as second engineer or chief engineer (< 3000kW)

- (1) have at least 12 months sea service on fishing vessels as second engineer, supernumerary or officer in charge of a watch; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as chief engineer (port operations) and engineer officer

- (1) have at least 12 months sea service on ships or fishing vessels of 750kW propulsion power or more, of which at least three months shall be on fishing vessels as Second Engineer Officer in charge of a watch; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding a certificate of competency as marine motorman higher grade

- (1) have at least six months sea service on ships or fishing vessels of 750kW propulsion power or more, of which at least three months shall be on fishing vessels as second engineer officer in charge of a watch; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

57 Chief engineer (fishing)

For a certificate of competency as chief engineer (fishing)—

ALTERNATIVE A: Candidates holding a certificate of competency as chief engineer (<3000kW fishing)

- (1) have at least 12 months sea service as second engineer on fishing vessels of 3000kW propulsion power or more; and

- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of competency as chief engineer (<3000kW fishing)

- (1) have at least 18 months sea service as engineer officer on fishing vessels of 3000kW propulsion power or more, and
- (2) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as chief engineer (<3000kW fishing)

- (1) have at least six months sea service as chief engineer of a fishing vessel of 750kW or more; and
- (2) have at least six months sea service as second engineer on fishing vessels of 3000kW propulsion power or more; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding certificate of competency as second engineer

- (1) have at least 6 months sea service on fishing vessels of 2000kW propulsion power or more, of which at least three months shall be on fishing vessels as an officer in charge of engineering watch; and
- (2) have completed approved training and meet the standards of competence specified in the Code.

Division 5 Rating Certificates and Certificates of Proficiency

58 Ordinary seafarer deck

- (1) For the purpose of this regulation; a provisional certificate is valid for a period of six months from the date of issue and shall be exchanged for a certificate of proficiency as ordinary seafarer deck issued by the Authority within the period of validity.
- (2) For the certificate of proficiency as ordinary seafarer deck, a candidate shall—

ALTERNATIVE A: Candidates without accelerated training programme

- (1) be at least 16 years of age;

- (2) have at least six months sea service in the deck department on vessels of 25GT or more on any voyages;
- (3) have completed, during the required sea service, onboard training with a steering certificate and meet the standards of competence specified in the Code; and
- (4) hold the provisional certificate of proficiency as ordinary seafarer deck issued by the master of the ship on which the onboard training was completed.

ALTERNATIVE B: Candidates on accelerated training programme

- (1) be at least 16 years of age;
- (2) have completed at least two months sea service in the deck department on vessels of 25 GT or more on any voyages as part of an approved accelerated training programme that includes onboard training documented in an approved training record book and meet the standards of competence specified in the Code; and
- (3) hold the provisional certificate of proficiency as ordinary seafarer deck issued by the master of the ship on which the onboard training was completed.

59 Able seafarer deck (port operations)

For the certificate of proficiency as able seafarer deck (port operations), a candidate shall—

ALTERNATIVE A: Candidates without accelerated training programme

- (1) be at least 18 years of age;
- (2) have completed, whilst holding as a minimum the certificate of proficiency as ordinary seafarer deck at least 18 months port operations service on ships of 25GT or more;
- (3) have completed, during the required port operations service, onboard training that is documented in an approved training record book; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates following an accelerated training programme

- (1) be at least 18 years of age;
- (2) have completed, whilst holding as a minimum the certificate, or provisional certificate, of proficiency as ordinary seafarer deck (port operations), at least 12 months port operations service on ships of 25GT or more as part of an approved accelerated training programme that includes onboard training documented in an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

60 Able seafarer deck (fishing)

For the certificate of proficiency as able seafarer deck (fishing), a candidate shall—

ALTERNATIVE A: Candidates without accelerated training programme.

- (1) be at least 18 years of age;
- (2) have completed, whilst holding as a minimum the certificate of proficiency as rating forming part of navigational watch, at least 18 months sea service in the deck department on fishing vessel of 100GT or more on unlimited or near-coastal voyages and have completed an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates with accelerated training programme.

- (1) be at least 18 years of age;
- (2) have completed, whilst holding as a minimum the certificate of proficiency as Ordinary Seafarer, at least 12 months sea service in the deck department on fishing vessel of 100GT or more on unlimited or near-coastal voyages as part of an approved accelerated training programme that includes onboard training documented in an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as able seafarer (unlimited)

- (1) be at least 18 years of age;
- (2) have at least 3 months sea service in the deck department on fishing vessels of 100GT or more on unlimited or near-coastal voyages;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book as is applicable; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding a certificate of competency as able seafarer (port operations)

- (1) be at least 18 years of age;
- (2) have at least six months sea service in the deck department on fishing vessels of 100GT or more on unlimited or near coastal voyages;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book as is applicable; and

- (4) have completed approved training and meet the standards of competence specified in the Code.

61 Able seafarer deck

For the certificate of proficiency as able seafarer deck, a candidate shall—

ALTERNATIVE A: Candidates without accelerated training programme

- (1) be at least 18 years of age;
- (2) have completed, while holding as a minimum the certificate of proficiency as rating forming part of navigational watch, at least 18 months sea service in the deck department on trading ships of 100GT or more on unlimited or near-coastal voyages and have completed an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates following an accelerated training programme

- (1) be at least 18 years of age;
- (2) have completed, while holding as a minimum the certificate of proficiency as Ordinary Seafarer, at least 12 months sea service in the deck department on trading ships of 100GT or more on unlimited or near coastal voyages as part of an approved accelerated training programme that includes onboard training documented in an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as able seafarer (fishing)

- (1) be at least 18 years of age;
- (2) have at least three months sea service in the deck department on trading ships of 100GT or more on unlimited or near-coastal voyages;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book as is applicable; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE D: Candidates holding a certificate of competency as able seafarer (port operations)

- (1) be at least 18 years of age;
- (2) have at least 6 months sea service in the deck department on trading ships of 100GT or more on unlimited or near-coastal voyages;

- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book as is applicable; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

62 Ordinary seafarer engine

- (1) For the purpose of this regulation; a provisional certificate is valid for a period of six months from the date of issue and shall be exchanged for a certificate of proficiency as ordinary seafarer engine issued by the Authority within the period of validity.
- (2) For the certificate of proficiency as ordinary seafarer engine, a candidate shall:

ALTERNATIVE A: Candidates making entry without accelerated training

- (1) be at least 16 years of age;
- (2) have at least six months service in the engine department on trading ships of 350kW or more;
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book and meet the standards of competence specified in the Code; and
- (4) hold the provisional certificate of proficiency as ordinary seafarer engine issued by the chief engineer officer of the ship on which the onboard training was completed.

ALTERNATIVE B: Candidates making entry with accelerated training

- (1) be at least 16 years of age;
- (2) have completed at least two months service in the engine department on trading ships of 350kW or more as part of an approved accelerated training programme documented in an approved training record book and meet the standards of competence specified in the Code; and
- (3) hold the provisional certificate of proficiency as ordinary seafarer engine issued by the chief engineer officer of the ship on which the onboard training was completed.

63 Able seafarer engine (port operations)

For the certificate of qualification as proficiency as able seafarer engine (port operations), a candidate shall—

ALTERNATIVE A: Candidates without accelerated training

- (1) be at least 18 years of age;
- (2) have completed, while holding as a minimum the certificate, or provisional certificate, of proficiency as ordinary seafarer engine (port operations) or ordinary seafarer engine, at least 12 months port operations service on ships of 350kW or more;

- (3) have completed, during the required port operations service, onboard training record book; and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates with accelerated training

- (1) be at least 18 years of age;
- (2) have completed, while holding as a minimum the certificate, or provisional certificate, of proficiency as ordinary seafarer engine (port operation) or ordinary seafarer engine, at least six months port operations service on ships of 350kW or more as part of an approved accelerated training programme that includes onboard training documented in an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

64 Able seafarer engine

For the certificate of proficiency as able seafarer engine, a candidate shall—

ALTERNATIVE A: Candidates without accelerated training

- (1) be at least 18 years of age;
- (2) have completed, while holding as a minimum the certificate of proficiency as ordinary seafarer engine, at least 12 months sea service in the engine department on trading ships of 350kW or more; and
- (3) have completed, during the required sea service, onboard training that is documented in an approved training record book; and have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates with accelerated training

- (1) be at least 18 years of age;
- (2) have completed, while holding as a minimum the certificate, or provisional certificate, of proficiency as ordinary seafarer engine at least six months sea service in the engine department on trading ships of 350kW or as part of an approved accelerated training programme that includes onboard training documented in an approved training record book; and
- (3) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE C: Candidates holding a certificate of competency as able seafarer engine (port operations)

- (1) have completed at least one month sea service in the engine department on trading ships of 350kW or more; and

- (2) have completed approved training and meet the standards of competence specified in the Code.

65 Electro-technical rating

Every candidate for certification shall—

- (1) be at least 18 years of age;
- (2) have completed approved seagoing service including not less than 12 months training and experience; and
- (3) have qualifications that meet the technical competences of the Code .

66 General purpose rating (port operations)

For the certificate of proficiency as general purpose rating (port operations), a candidate shall—

ALTERNATIVE A: Candidates holding certificates of proficiency as ordinary seafarer deck and ordinary seafarer engine

- (1) be at least 18 years of age;
- (2) whilst holding the certificates of proficiency as ordinary seafarer deck and as ordinary seafarer engine have at least 18 months sea service or port operations service on ships of 25GT or more made up of:
 - (a) at least six months in the deck department;
 - (b) at least six months in the engine department;
 - (c) the remaining six months in either deck or engine department;
- (3) have completed, during the required sea service or port operations service, an approved onboard training record book (deck and engine); and
- (4) have completed approved training and meet the standards of competence specified in the Code.

ALTERNATIVE B: Candidates holding a certificate of proficiency as able seafarer deck/engine

- (1) whilst holding the certificates of proficiency as able seafarer deck/engine have at least 6 months sea service or port operations service in the engine-room/deck department of ships of 25GT or more which shall be comprised as follows:
 - (a) 2 months sea service as engine/deck hand; and
 - (b) 4 months whilst holding provisional certificate of competency as ordinary seafarer engine/deck;
- (2) have completed, during the required sea service or port operations service, an approved onboard training record book; and

- (3) have completed approved training and meet the standards of competence specified in the Code.

67 Pre-sea training

All seafarers shall have completed approved training and meet the standards of competence specified in the Code before being employed on a ship to which these regulations apply.

68 Personal survival techniques

For a certificate of proficiency in Personal Survival Techniques, a candidate shall have completed approved training and meet the standards of competence specified in the Code.

69 Basic training

For a certificate of proficiency in Basic Training, a candidate shall—

- (1) be at least 16 years of age; and
- (2) have completed, before joining a vessel, approved training and meet the standards of competence specified in the Code.

70 Proficiency in survival craft and rescue boats

For the certificate of proficiency as being proficient in survival craft and rescue boats, a candidate shall—

- 1) be at least 18 years of age;
- (2) have at least six months sea service or port operation service on ships of 100GT or more; and
- (3) have completed an approved training course and meet the standards of competence specified in the Code.

71 Proficiency in fast rescue boats

For the certificate of proficiency in fast rescue boats, a candidate shall—

- (1) hold the certificate of proficiency in survival craft and rescue boats; and
- (2) while holding that certificate, have completed approved training and meet the standards of competence specified in the Code.

72 Ship security officer

For the certificate of proficiency as ship security officer, a candidate shall—

- (1) have at least 12 months sea service in the deck department on trading ships of 500GT or more or passenger vessels engaged on international voyages; and

- (2) have completed approved training and meet the standards of competence specified in the Code.

73 Efficient cook

For the certificate of proficiency as efficient cook, candidates shall—

- (1) be at least 18 years of age;
- (2) have completed approved training and meet the standards of competence specified in the Code; and
- (3) have at least three months sea service in the catering department on any of the following kinds of ships:
 - (a) trading ships of 100GT or more on unlimited or near-coastal voyages; or
 - (b) fishing vessels requiring to have an efficient cook onboard.

Division 6 Personnel on Tankers and Passenger Ships

74 Special requirements for personnel on oil and chemical tankers

- (1) In addition to other training required by these regulations, officers and ratings assigned specific duties and responsibilities related to cargo or cargo equipment on oil and chemical tankers shall hold a certificate in basic training for oil and chemical tanker cargo operations. A candidate for a certificate in basic training for oil and tanker cargo operations shall—
 - (a) have completed, in the proceeding five years, at least three months sea service on oil or chemical tankers; or
 - (b) have completed approved basic training for oil and chemical tankers and meet the standards of competence specified in the Code;
- (2) Masters, chief engineer officers, chief mates, second engineer officers and any person with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo-related operations on oil tankers shall hold a certificate in advanced training for oil tanker cargo operations. A candidate for a certificate in advanced training in oil tanker cargo operations shall—
 - (a) hold a certificate in basic training in oil and chemical tanker cargo operations, and while holding this certificate;
 - (b) have completed, in the preceding five years, at least three months sea service in a watchkeeping capacity on oil tankers; and
 - (c) have completed approved advance training for oil tanker cargo operations and meet standards of competence specified in the Code.

- (3) Masters, chief engineer officers, chief mates, second engineer officers and any person with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo-related operations on chemical tankers shall hold a certificate in advanced training for oil tanker cargo operations. A candidate for a certificate in advanced training in chemical tanker cargo operations shall—
 - (a) hold a certificate in basic training in oil and chemical tanker cargo operations, and while holding this certificate;
 - (b) have completed, in the preceding five years, at least three months sea service in a watchkeeping capacity on chemical tankers; and
 - (c) have completed approved advance training for chemical tanker cargo operations and meet standards of competence specified in the Code.
- (4) Masters, officers and ratings who are qualified in accordance with this regulation shall be required, at intervals not exceeding five years, to show continued professional competence on the type of tanker for which the certificate of proficiency or endorsement is required to be revalidated, in accordance with regulation 3(2) and 3(3).

75 Special requirements for personnel on gas tankers

- (1) In addition to other training required by these regulations, officers and ratings assigned specific duties and responsibilities related to cargo or cargo equipment on liquefied gas tankers shall hold a certificate in basic training for liquefied gas tanker cargo operations. A candidate for a certificate in basic training for liquefied gas tanker cargo operations shall—
 - (a) have completed, in the preceding five years, at least three months sea service on gas tankers; or
 - (b) have completed approved basic training for liquefied gas tankers cargo operations and meet the standards of competence specified in the Code;
- (2) Masters, chief engineer officers, chief mates, second engineer officers and any person with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning and on oil or chemical or gas tankers shall hold a certificate in advanced training for liquefied gas tanker cargo operations. Candidates for a certificate in advanced training for liquefied gas tanker shall—
 - (a) hold a certificate in basic training in liquefied gas tanker cargo operations;
 - (b) have completed, in the preceding five years, at least three months sea service in a watchkeeping capacity on liquefied gas tankers; and
 - (c) have completed approved advance training for that type of tanker and meet standards of competence specified in the Code.
- (3) Masters, officers and ratings who are qualified in accordance with this regulation shall be required, at intervals not exceeding five years, to show continued professional

competence on the type of tanker for which the certificate of proficiency or endorsement is required to be revalidated, in accordance with regulation 3(2) and 3(3).

76 Special requirements for personnel on passenger ships

- (1) This regulation applies to masters, officers, ratings and other personnel serving on passenger ships engaged on near coastal or unlimited voyages. Ships of Class IIA, V and Class VI passenger ships, within the classes of regulation 4 of the Life Saving Equipment Regulations, 1968, shall comply with subregulation (4) and (5) in accordance with their level of responsibility.
- (2) Prior to being assigned shipboard duties on passenger ships, seafarers referred to in subregulation (1) shall have successfully completed training required by subregulations (4) to (7) in accordance with their capacity, duties and responsibilities and shall be issued with documentary evidence attesting the successful completion of training.
- (3) Seafarers who are required to be trained in accordance with subregulations (4), (6) and (7) shall, at intervals not exceeding five years, complete approved (refresher) training and meet the standard of competence specified in the Code.
- (4) Masters, officers and other personnel designated on muster lists to assist passengers in emergency situations on passenger ships shall have completed approved training in crowd management and meet the standard of competence specified in the Code.
- (5) Personnel providing direct service to passenger in passenger spaces shall have completed approved training in passenger ship safety and meet the standard of competence specified in the Code.
- (6) Masters, chief mates, chief engineers, second engineer officers and every person having responsibility for the safety of passengers in emergency situations on passenger ships shall have completed approved training in crisis management and human behaviour and meet the standard of competence specified in the Code.
- (7) Masters, chief mates, chief engineers, second engineer officers and every person assigned immediate responsibility for embarking and disembarking passengers, loading, discharging or securing cargo, or closing hull operations on passenger ships shall have completed approved training in passenger safety, cargo safety and hull integrity and meet the standard of competence specified in the Code.

Division 7 Qualifying Service and Limitations.

77 Misrepresenting qualifying service

- (1) A candidate who wilfully misrepresents his or her qualifying service shall be disqualified from certification in terms of these regulations until he or she has made up any deficiency in qualifying service plus an additional 12 months of the appropriate service.

- (2) Additional service performed because of subregulation (1) shall not count towards the qualifying service of any other certification (whether in terms of these regulations or otherwise under the Act).

78 Proof of qualifying service

- (1) A candidate must produce proof of qualifying service to the examiner's satisfaction.
- (2) The examiner may require that the candidate explain to the examiner's satisfaction any period of discontinuity in qualifying service.

79 Qualifying service as rating

Sea service or port operations service performed as a rating shall count in full toward the qualifying service for a first certificate of competency.

80 Validity of qualifying service

Qualifying service shall have been performed not earlier than 10 years before the date of application for the certification concerned.

81 Calculating qualifying service

- (1) Qualifying service shall be calculated from the date of engagement on a ship to the date of discharge from the ship, and is calculated by taking the actual days between the days of engagement and discharge, both inclusive, and reckoning 30 days to a month, 12 months to a year.
- (2) Qualifying service performed on vessels restricted to port operations shall be calculated as follows:
 - a. a shift of at least eight hours performed during a 24-hour period is equivalent to one day's qualifying service.
 - b. a shift of more than eight hours shall not count as more than one days' qualifying service.

82 Sea service performed on ships not regularly proceeding to sea, or employed in mining operations

- (1) Service performed on ships not regularly proceeding to sea shall count in full towards qualifying service for a deck officer certificate if the time actually spent at sea equals or exceeds two-thirds of the total period of the candidate's service on the ship. If the time actually spent at sea is less than two thirds, then one and a half times the time actually spent at sea shall count towards qualifying service.
- (2) The time spent by a candidate standing by a ship under construction or refit, but not exceeding six months in any qualifying period, shall count in full towards qualifying service.

- (3) Notwithstanding anything to the contrary in these regulations, sea service performed on ships employed in mining operations counts towards the qualifying service for a deck officer certificate, as follows:
- (a) in the case of a certificate limited to mining operations, the sea service counts in full towards the qualifying service; and
 - (b) in all other cases —
 - (i) if mining operations were conducted for more than two thirds of the period of sea service, the sea service counts in full towards the qualifying service; or
 - (ii) if mining operations were conducted for less than two thirds of the period of sea service, the sea service is not to count for more than one-half of the qualifying service.
- (4) A candidate claiming qualifying service in accordance with subregulation (1) or (3) shall produce a statement from the Master or owner of each ship on which the service was performed, giving particulars of the dates when:
- (a) the ship was at sea on passage and at anchor and of the work that the ship was engaged in and of the area of operation; or (as the case may be) and/or
 - (b) the ship was under construction or refit.
- (5) Qualifying service claimed in accordance with this regulation shall count as service on ships on unlimited or near-coastal voyages, as the case may be.

83 Proof of service on foreign ships

Service performed on a ship not registered in the Republic shall count as qualifying service unless the service cannot be verified by the Authority or, in a case where it cannot be so verified, by or on behalf of the government of the country to which the ship belongs.

84 Removal of mining operations limitation

- (1) The holder of certification who desires the removal of a mining operations limitation shall—
- (a) have completed at least half the qualifying service for the desired certificate; and
 - (b) meet the standards of competence specified in the Code.

PART 4 TRAINING

85 Maritime training providers

- (1) The authority may grant an accreditation to a training provider to conduct any training required by the Code. Such accreditation given in terms of these regulations shall:

- (a) be given in writing;
 - (b) not be valid for a period exceeding three years;
 - (c) state the date which it takes effect and expires and the conditions under which it is given;
 - (d) shall stipulate the minimum duration of the course and maximum number of candidates permitted; and
 - (e) may, immediately after an audit, be altered, suspended or cancelled, provided that if the accreditation is cancelled, a minimum of 30 days' notice shall be given.
- (2) To be accredited as maritime training provider authorized to conduct approved training in terms of these regulations, a training provider shall:
- (a) have appointed instructors who—
 - (i) have appreciation of the training programme and an understanding of the specific training objectives for the particular type of training to be conducted;
 - (ii) are qualified in the task for which the training is to be conducted; and
 - (iii) if training is to be conducted using a simulator;
 - (aa) have received appropriate guidance in instructional techniques involving the use of simulators; and
 - (bb) have gained practical operational experience on the particular type of simulator to be used;
 - (b) have appointed assessors who—
 - (i) have an appropriate level of knowledge and understanding of the competence to be assessed;
 - (ii) are qualified in the task for which the assessments to be made;
 - (iii) have received appropriate guidance in assessment methods and practice;
 - (iv) have gained practical assessment experience; and
 - (v) if they are to conduct assessment involving the use of simulators, have gained practical assessment experience on the particular type of simulator to be used under the supervision and to the satisfaction of an experienced assessor;
 - (c) maintain a quality management system with procedures to—
 - (i) Maintain records of dates when courses are held;
 - (ii) record the outcome of the courses for all candidates;

- (iii) keep the records for a period of five years; and
 - (iv) record the candidates' full names, date of birth, place of birth and Identity Document number or passport for a foreign candidate;
 - (d) conduct internal audits annually and submit a copy to the authority;
 - (e) have adequate facilities and training equipment as specified in the Code;
 - (f) make available, in January each year, a schedule of planned courses for the year ahead. Such schedule shall be updated each time a course is run outside the scheduled dates; and
 - (g) the quality management system referred to in paragraph (c) of this subregulation, and records required shall be made accessible within a two day period for inspection and auditing.
- (3) Application for accreditation shall be made in the form and manner, include the information and be accompanied by the documents specified in by the Authority.
- (4) For accreditation, a maritime training provider shall allow the Authority:
- (a) to inspect the provider's facilities, training and assessment arrangements, methods and materials; and
 - (b) to interview the provider's students, administrative personnel, and training instructions, supervisors and assessors.
- (5) An accredited maritime training provider shall:
- (a) make available to the Authority any information it may require about approved training offered by the provider; and
 - (b) inform the Authority, without delay, of any change in the personnel delivering the training or the methods or material for delivering it.
- (6) Every accredited training provider authorised to conduct level 2 assessments in terms of regulation 15 shall:
- (a) submit, for moderation by an examiner, all final examination question papers and memoranda before the examination is written by candidates;
 - (b) submit, for moderation by an examiner, final examination scripts, before a final mark is given to the candidates;
 - (c) make available to an examiner any examination scripts, assessment results, course assignments, progress reports or other training-related reports that the Authority may require; and
 - (d) for audit purposes, keep for at least five years the information referred to in paragraphs (a) and (b).

- (7) An examiner may visit an accredited maritime training provider at any reasonable time to inspect and audit the conduct of any activity covered by the provider's accreditation.
- (8) Where an accredited institution has been found to have contravened the conditions of accreditation which cannot be rectified, the authority may refuse to accredit such an institution.
- (9) The Authority shall publish a marine notice with details of courses and institutions accredited.

86 Training programmes and courses

- (1) To be approved in terms of these regulations, a training programme or course shall—
 - (a) be structured in accordance with written programmes that
 - (i) are based on the relevant syllabuses in the Code; and
 - (ii) include such methods and media of delivery, procedures, and course material as are necessary to achieve the standards of competence specified in the Code; and
 - (b) be conducted, supervised and evaluated by persons qualified in accordance with regulation 85(2)(a), (b) and (c), respectively.
- (2) Application for approval shall be made in the form and manner, include the information and be accompanied by the documents specified by the Authority.

87 Accelerated training programmes

- (1) To be approved in terms of these regulations, an accelerated training programme (accelerated training) shall—
 - (a) be set out in a training plan that states, for each stage of the programme:
 - (i) the objectives;
 - (ii) the outcomes, taking in account the relevant competencies specified in the Code; and
 - (iii) how the outcomes will be achieved;
 - (b) provide intensive and systematic practical training and experience in the duties and responsibilities associated with the kind of certification concerned;
 - (c) be conducted, supervised and evaluated by persons qualified in accordance with subregulations (2), (3) and (4), respectively;
 - (d) provide appropriate periods, within the normal operational requirements of the ship, for the completion of onboard training; and

- (e) provide for the keeping of comprehensive records in relation to training conducted under the programme.
- (2) Anyone conducting accelerated training shall—
 - (a) have an appreciation of the training programme and an understanding of the specific training objectives for the particular type of training being conducted;
 - (b) be qualified in the task for which the training is being conducted; and
 - (c) if conducting training using a simulator:
 - (i) have received appropriate guidance in instructional techniques involving the use of simulators; and
 - (ii) have gained practical operational experience on the particular type of simulator being used.
- (3) A person responsible for supervising accelerated training shall have a thorough understanding of the training programme and of the specific objectives for each type of training being conducted.
- (4) A person assessing the competence of a candidate undergoing accelerated training shall—
 - (a) have an appropriate level of knowledge and understanding of the competence to be assessed;
 - (b) be qualified in the task for which the assessment is being made;
 - (c) have received appropriate guidance in assessment methods and practice; and
 - (d) if conducting assessment involving the use of simulators, have gained practical assessment experience on the particular type of simulator under the supervision and to the satisfaction of an experienced assessor.
- (5) Application for approval shall be made in the form and manner, include the information and be accompanied by the documents specified by the Authority.
- (6) The Authority may approve ships carrying more than 12 cadets where approved procedures, policies, training officers, accommodation and facilities are provided as training ships.
- (7) Every accelerated training programme approved by the Authority shall be published in a marine notice.

88 Training record book

- (1) An approved training record book shall meet the form and content requirements as specified by the Authority taking into account:
 - (a) the principles and standards set out in the appropriate Convention;

- (b) any related guidance published by the Organisation, and
 - (c) the relevant syllabi in the Code.
- (2) Application for approval shall be made in the form and manner, include the information and be accompanied by the documents specified by the Authority.
- (3) Every candidate shall keep his or her training record book up to date and available for inspection at all reasonable times.
- (4) If the Authority finds that the holder of an approved training record book has deliberately misrepresented information in the book, the holder shall, apart from any other penalty that may be imposed, be required to complete an additional 12 months appropriate qualifying service.

89 Duties of masters and persons conducting in-service training

- (1) Every person conducting in-service training shall ensure that:
- (a) appropriate periods are set aside for completion of the programme of on-board training within the normal operational requirements of the ship;
 - (b) at the beginning of the programme and at the start of each voyage on a different ship, candidates are given comprehensive information and guidance as to what is expected of them and how the training programme is to be conducted;
 - (c) a training officer is designated to administer the programme;
 - (d) ship's officers who are responsible for training and assessment know and understand their duties and responsibilities regarding training;
 - (e) during the required period of qualifying service, a candidate receives systematic practical training and experience in the tasks, duties and responsibilities relevant to the certificate desired, with due regard to the competencies specified in the training record book;
 - (f) assessments of a candidate are conducted, without undue delay, when a candidate is ready for assessment;
 - (g) the on-board training forms an integral part of the overall training plan;
 - (h) the programme of on-board training is managed and co-ordinated by the person managing the ship on which the qualifying service is to be performed; and
 - (i) a comprehensive record is kept of all training conducted.
- (2) Every person designated as a training officer pursuant to subregulation (1)(c) shall be responsible for:
- (a) the overall administration of the training programme;

- (b) monitoring candidates' progress throughout such programme; and
 - (c) giving guidance, when necessary, and ensuring that the training programme is conducted properly.
- (3) A master's responsibilities will be:
- (a) to provide the link between the ship's officers responsible for training and the training officer ashore;
 - (b) to designate, in writing, the ship's officers who are to be responsible for organizing and supervising on-board training for each voyage;
 - (c) to ensure continuity in the case of any change of ship's officers during voyages; and
 - (d) to ensure that all personnel concerned carry out effectively the on-board training programme.
- (4) Unless the master directs otherwise in the interests of the safe operation of the ship, every ship's officer designated pursuant to subregulation (3)(b) shall be responsible for:
- (a) organizing the programme of practical training at sea;
 - (b) ensuring, in a supervisory capacity, that training record books are properly maintained and that all other requirements are met; and
 - (c) ensuring, so far as practicable, that the time the candidate spends on board is as useful as possible in terms of training and experience, and is consistent with the objectives of the training programme and the progress of training.

PART 5 MANNING REQUIREMENTS

90 Application

- (1) Subject to subregulation (4) of this regulation, these regulations apply to every South African ship wherever it may be.
- (2) In addition, Regulation 92, 93, 94, 116, 117 and 118 applies to every foreign ship to which the Safety Convention, STCW Convention or STCW-F Convention applies, when in the Republic or its territorial waters.
- (3) A provision of these regulations does not apply to a South African ship in the waters of another State where the provision is inconsistent with a law of that State that, by its terms, applies to the ship when in the waters of that State.
- (4) These regulations do not apply to:
 - (a) vessels of less than 25GT;

- (b) any vessel of less than 100GT that is used solely for sport or recreation;
- (c) any vessel of 100GT or more that is classified in terms of the life-saving equipment regulations as a class XII yacht if there is employed on the vessel an adequate number and description of persons to ensure that the vessel is sufficiently and efficiently manned; and
- (d) Ships owned by the defence force of the Republic or any other country.

91 Responsibilities of owners and masters

- (1) The owner of every ship shall ensure that:
 - (a) no ship's officer takes charge of a navigational or engineering watch on the ship unless he or she holds appropriate valid certification entitling him or her to do so;
 - (b) no rating forms part of a navigational or engineering watch on the ship unless he or she holds appropriate valid certification entitling him or her to do so;
 - (c) the master and every ship's officer have appropriate experience of the type of ship on which he or she is employed;
 - (d) the master and every seafarer employed on the ship, before being allowed to assume his or her assigned duties, are familiarized with their specific duties and with all the ship's arrangements, installations, equipment, procedures and characteristics relevant to their routine and emergency duties;
 - (e) every rating employed on the ship and designated to have safety or pollution prevention duties holds documentary evidence of having—
 - (i) served in a capacity designated to have safety or pollution prevention duties for a period of at least 12 months during the preceding five years; and
 - (ii) successfully completed approved Personal Survival Techniques in accordance with Part 3 Division 5;
 - (f) the ship's crew can effectively co-ordinate activities in an emergency situation and in performing functions vital to safety or to the prevention or mitigation of pollution;
 - (g) all seafarers employed on fishing vessels shall have completed approved pre-sea training;
 - (h) all seafarers on vessels other than fishing vessels, shall have completed approved basic training;
 - (i) documentation and data relevant to the master and seafarers employed on the ship are maintained and readily available for inspection, including

documentation and data relevant to their experience, training, medical fitness and competency in assigned duties.

- (2) Without limiting the owner's obligations under subregulation (1), it is the duty of the master to ensure that the requirements of that subregulation are complied with in relation to the seafarers employed on the ship.
- (3) Nothing in subregulation (1) (a) to (f) prohibits the allocation of tasks for training under supervision or in case of *force majeure*.
- (4)
 - (a) The owner and the master of every ship shall ensure that, in addition to the ship's officers and other persons prescribed by these regulations or elsewhere in terms of the Act, there are employed as crew of the ship an adequate number and description of persons to ensure that the ship is sufficiently and efficiently manned.
 - (b) For the purposes of paragraph (a) and regulation 90(4)(c), a ship shall be deemed to be sufficiently and efficiently manned if, in the opinion of the proper officer, it has as crew suitably qualified persons to enable it to go to sea with due regard to the requirements of the life-saving equipment regulations, the collision regulations, the radio regulations, and any other safety provisions that may be applicable to the ship.
 - (c) The proper officer shall, when determining the adequacy of the crew in accordance with this subregulation, take the following into account:
 - (i) the complement normally carried by similar ships employed on similar voyages or operations;
 - (ii) the complement that the ship in question has recently carried on previous voyages or operations;
 - (iii) the complement adequate to ensure compliance with regulations 92 and 93; and
 - (iv) the nature of the service for which the ship is intended.
- (5) The Authority shall, as and when necessary, issue a marine notice specifying the number of persons to constitute the crew of a ship and the capacities in which those persons are to serve other than persons prescribed in these regulations or elsewhere in terms of the Act.

92 Watchkeeping standards

- (1) Owners, masters, and watchkeeping personnel shall observe the requirements and principles set out in Annexes 1 and 2, to ensure that a safe continuous watch, appropriate to the prevailing circumstances and conditions, is maintained in all ships at all times.

- (2) Without limiting subregulation (1), the master of every ship shall ensure that watchkeeping arrangements are adequate for maintaining a safe watch, taking into account the prevailing circumstances and conditions, and that, under the master's general direction—
- (a) officers in charge of the navigational watch are responsible for navigating the ship safely during their periods of duty, when they shall be physically present on the navigating bridge or in a directly associated location such as the chartroom or bridge control room at all times;
 - (b) radio operators are responsible for maintaining a continuous radio watch on appropriate frequencies during their periods of duty;
 - (c) officers in charge of the engineering watch, under the direction of the chief engineer officer, are immediately available and on call to attend the machinery spaces and, when required, are physically present in the machinery space during periods of duty; and
 - (d) an appropriate and effective watch is maintained for the purpose of safety at all times, while the ship is at anchor or moored and, if the ship is carrying hazardous cargo, the organisation of the watch takes full account of the nature, quantity, packing and stowage of the hazardous cargo and of any special conditions prevailing on board, afloat or ashore.

93 Hours of work: general duty of owners, masters and others

- (1) The master and owner shall take account of the danger posed by fatigue of seafarers, especially those whose duties involve the safe and secure operation of that ship. In preventing fatigue, owners shall take into account the guidelines provided by the Authority.
- (2) All persons who are assigned duty as officer in charge of a watch or as a rating forming part of a watch and those whose duties involve designated safety, prevention of pollution and security duties shall be provided with a rest period of not less than:
 - (a) a minimum of 10 hours of rest in any 24-hour period; and
 - (b) 77 hours in any 7-day period.
- (3) The hours of rest may be divided into no more than two periods, one of which shall be at least six hours in length, and the intervals between consecutive periods of rest shall not exceed 14 hours.
- (4) The requirements for rest periods laid down in subregulation (2) need not be maintained in the case of an emergency or in other overriding operational conditions. Musters, fire-fighting and lifeboat drills, and drills prescribed by national laws and regulations and by international instruments, shall be conducted in a manner that minimizes the disturbance of rest periods and does not induce fatigue.

- (5) The master and owner are required to post watch schedules where they are easily accessible. The schedules shall be established in a format specified by the Authority in one of the official languages of the Republic and in English.
- (6) If a seafarer is on call, such as when a machinery space is unattended, the seafarer shall have an adequate compensatory rest period if the normal period of rest is disturbed.
- (7) The master and owner shall require that records of daily hours of rest of seafarers be maintained in a format published by the Authority or approved format containing similar information, in the working language of the ship and a translation into English, to allow monitoring and verification of compliance with the provisions of this regulation. The seafarer shall receive a copy of the record pertaining to him or her, which shall be endorsed by the master or by a person authorized by the master and the seafarer.
- (8) Nothing in this regulation shall be deemed to impair the right of the master of a ship to require a seafarer to perform any hours of work necessary for the immediate safety of the ship, persons on board or cargo, or for the purpose of giving assistance to other ships or persons in distress at sea. Accordingly, the master may suspend the schedule of hours of rest and require a seafarer to perform any hours of work necessary until the normal situation has been restored. As soon as practicable after the normal situation has been restored, the master shall ensure that any seafarers who have performed work in a scheduled rest period are provided with an adequate period of rest.
- (9) The master or owners may allow exceptions from the required hours of rest in subregulation 2(b) provided that the rest period is not less than 70 hours in any 7-day period.
- (10) Exceptions from the weekly rest period provided for in subregulation 2 shall not be allowed for more than two consecutive weeks. The intervals between two periods of exceptions on board shall not be less than twice the duration of the exception.
- (11) The hours of rest provided for in subregulation 2 may be divided into no more than three periods, one of which shall be at least six hours in length and neither of the other two periods shall be less than one hour in length. The intervals between consecutive periods of rest shall not exceed 14 hours. Exceptions shall not extend beyond two 24-hour periods in any 7-day period.
- (12) The owner and/or master every ship shall provide a schedule of duties setting out, amongst others, the following:
 - (a) hours of work for each seafarer on watchkeeping or ship handling duties; and
 - (b) specifying minimum rest periods in accordance with this regulation.
- (13) The schedule of duties shall be kept onboard and be made available for all watchkeeping seafarers and those with duties and responsibility for safety and pollution prevention.

- (14) Records of hours of rest and any deviations from these requirements shall be kept onboard for minimum period of five years.
- (15) Every master and seafarer shall ensure that they are properly rested.
- (16) Any exceptions that the master makes against the hours as stated in subregulations (8), (9), (10) and (11) shall be recorded in the Official Log Book or deck log book stating the circumstances resulting in such exceptions.

94 Alcohol and drug abuse

- (1) The master and owner of the ship shall establish procedures for preventing alcohol abuse by masters, officers and other seafarers designated safety, security and marine environmental duties. Owners shall develop policies regarding the drug and alcohol testing.
- (2) Alcohol concentration for masters, officers and other seafarers while performing designated safety, security and marine environmental duties shall not have alcohol content above the following limits:
 - (a) a limit of not greater than 0.05% blood alcohol level and zero illicit narcotics in the blood; or
 - (b) 0.25 mg/l alcohol in the breath or a quantity of alcohol leading to such alcohol concentration.
- (3) Policies and procedures shall establish and distinguish planned and ad-hoc alcohol and illicit drug testing.
- (4) Planned drug and alcohol testing done in accordance with this regulation shall be recorded in the Official Log Book or deck log book. Where ad-hoc testing is conducted, full details of the circumstances for such a test shall be recorded in the Official Log Book or deck log book.

95 Determination of minimum number of persons employed on South African ships

- (1) Employment of officers and ratings onboard a South African ship shall be, as a minimum, in accordance with relevant regulation in Part 6.
- (2) This regulation does not limit the power of the Proper Officer to issue and determine suitable manning levels as authorised by regulation 91(4).
- (3) The Proper Officer may request that the owner and/or master of a ship which is engaged in operations to which Part 6 are deemed to be insufficient to conduct a risk assessment to establish minimum safe manning levels.
- (4) The owner and/or master may apply to the Proper Officer at the nearest port for the number of certificated officers and ratings to be determined in accordance with this subregulation. The Proper Officer may only issue such an alternative manning after:

- (a) The owner has applied in writing motivating the deviation from the manning levels provided in Part 6, and has provided a risk assessment. Should the application be for multiple vessels, such vessels shall be similar in size and operations; and
- (b) the Proper Officer, if in agreement with the application in sub-paragraph (a) shall—
 - (i) appoint a surveyor to review the risk assessment and make recommendations to him; and
 - (ii) if satisfied, issue a safe manning document with such alternative manning levels established in accordance with the risk assessment and recommendations of a surveyor.
- (5) The risk assessment referred to in subregulation (3) shall be conducted as prescribed by the Authority and remains valid until any one of the instances below:
 - (a) not more than five years from date of issue;
 - (b) not valid when the ownership or operations have been changed;
 - (c) if the ship's safety certificates issued in terms of the act have lapsed for a period of more than three months without notification to the Authority; and
 - (d) if the vessel is not maintained in a seaworthy state such that any inspection finds deficiencies of the following nature:
 - (i) regular non-compliance with minimum rest hours; and
 - (ii) poor maintenance of the ship.

96 Employment of persons holding foreign certificates

- (1) For the purposes of section 83(1) of the Act, the owner of a ship to which the STCW Convention applies shall not employ on the ship, as master or ship's officer, any person who holds a certificate issued by or on behalf of the government of another country, unless—
 - (a) that person's certificate has been endorsed in accordance with regulation 98; or
 - (b) in the absence of such an endorsement, the certificate was issued and is valid in accordance with the STCW Convention, the period of employment does not exceed three months and the owner makes application to the Authority for an endorsement in accordance with regulation 98 prior to that person joining a ship. Documentary proof of such application having been received by the authority shall be on board.
- (2) For the purposes of section 83(1) of the Act, the owner of a ship to which the STCW Convention does not apply shall not employ on the ship, as master or ship's officer,

- any person who holds a certificate of competency issued by or on behalf of the government of another country, unless the Authority has, under section 83(2) of the Act, authorized that person's employment on the ship.
- (3) Application for an authorization under section 83(2) of the Act shall be made by the owner of the ship and shall be directed to the proper officer nearest to the ship's intended port of departure. The application shall—
- (a) be made before the person assumes duty on the ship; and
 - (b) be accompanied by the person's original certificate or copy thereof (together with a certified translation into English where the certificate is in a language other than English), a medical examination report complying with the requirements specified by the Merchant Shipping (Medical and Eyesight) Regulations, 2004 as amended, or report from another party recognized by the Authority and attesting to the person's medical fitness and a valid eyesight test certificate.
 - (c) The Proper Officer may require the person to appear before an examiner, who shall satisfy himself or herself that the person is adequately qualified and that he or she has the ability to converse, issue and understand orders and written instructions in the English language.
- (4) An authorization granted under section 83(2) of the Act shall be in writing and shall specify the period, not exceeding six months, for which it is to remain in force.
- (5) The Authority may revoke an authorization granted under section 83(2) of the Act if—
- (a) the person in question shows, through any inability, that he or she is not adequately qualified or that he or she is not able to converse, issue and understand orders and written instructions in the English language;
 - (b) the person's certificate expires or is cancelled or suspended by or on behalf of the government under whose authority the certificate was originally issued;
 - (c) the person fails to comply with any condition on which the authorization was granted;
 - (d) a court of marine enquiry or a disciplinary hearing recommends the revocation of the authorisation; or
 - (e) the person is convicted of an offence in terms of the Act or any other law administered by the Authority.
- (6) For section 74(1)(b) of the Act, the following is recognised certification as a rating:
- (a) for ships to which the STCW Convention applies, valid appropriate certification issued in accordance with the STCW Convention by or on behalf of another Party to the Convention; and

- (b) for other ships, valid appropriate certification that the Authority is satisfied qualifies the holder to serve in the capacity stated in the certification.

97 Employment of persons holding foreign certificates on fishing vessels

- (1) A seafarer, holding a foreign certificate issued by a party to the STCW-F Convention, may not be employed on a South African fishing vessel while holding a certificate issued in accordance with the Convention unless recognised in accordance with regulation 98.
- (2) An employer who wishes to employ a seafarer holding a foreign certificate issued by a party to the STCW-F Convention as an officer or rating required by these regulations, shall apply to the Authority to have such candidate assessed by an examiner of the Authority.
- (3) Recognition of foreign certificates on fishing vessel, in accordance with regulation 98 shall be based only on theoretical training.
- (4) To qualify for a certificate as a skipper or officer on a South African fishing vessel, a candidate shall be assessed at level 3 in accordance with Regulation 17. An application for such assessment shall be in the form and manner specified by the Authority.

98 Recognition of foreign certificates

- (1) The holder of a certificate as master or ship's officer, being a certificate issued in terms of the STCW Convention by or on behalf of another party to the Convention, may apply to the Authority, in accordance with subregulation (2), for the certificate to be recognised under these regulations.
- (2) An application contemplated in subregulation (1) shall be accompanied by:
 - (a) a letter of motivation requesting recognition;
 - (b) a statement by the applicant, confirmed by or on behalf of another party to the STCW Convention, that his or her level of proficiency in English meets the relevant requirements of these regulations;
 - (c) a medical certificate issued by an approved medical practitioner or recognized by that party declaring that the medical fitness of the applicant complies with the medical standards set out in the Maritime Medical Standards Code;
 - (d) a certified copy of the applicant's original certificate;
 - (e) two passport-size colour photographs of the applicant; and
 - (f) documentary evidence that he or she has attained the level of knowledge of the Republic's maritime legislation as specified in the Code if the applicant is applying for recognition as master, chief mate, chief engineer officer or

second engineer officer. The assessment for documentary evidence may be written through the Authority or an accredited institution.

- (3) The Authority may issue an endorsement recognising an applicant's certificate, which endorsement shall have effect as an authorisation under section 83(1) of the Act, if it is satisfied that:
 - (a) the certificate is authentic and valid;
 - (b) the level of competence and knowledge evidenced by the certificate is not inferior to that required for the equivalent certificate issued under the Act;
 - (c) the applicant, if applying for an equivalency as master, chief mate, chief engineer officer or second engineer officer, has attained the level of knowledge of the Republic's maritime legislation required for the equivalent certificate issued under the Act; and
 - (d) prompt notification will be given to the Authority of any significant change in the arrangements for training and certification provided in compliance with the STCW Convention.
- (4) Every endorsement issued under subregulation (3) shall be a separate document and shall state, with reference to these regulations and the STCW Convention, the capacity in which the holder is entitled to serve.
- (5) For the purposes of this regulation, the Authority shall—
 - (a) not recognise by endorsement the certificate issued by or under the authority of another Party to the STCW Convention to a master, officer or radio operator unless the Authority:
 - (i) has confirmed, through an evaluation of that Party, which may include inspection of facilities and procedures that the requirements of the STCW Convention are fully complied with; and
 - (ii) has agreed an undertaking with the Party concerned that prompt notification will be given of any significant change in the arrangements for training and certification provided in compliance with the STCW Convention;
 - (b) not recognise certificates issued by or under the authority of a non- Party to the STCW Convention.
 - (c) not use as the basis for recognition by the Authority the certificates and endorsements issued under the administration of another Party to the STCW Convention.
- (6) The Authority may cancel an endorsement issued under subregulation (3) if:

- (a) the holder shows, through any inability, that he or she does not meet the level of competency or knowledge required for the equivalent certificate of competency, or that his or her level of proficiency in the English language does not meet the relevant requirements of the STCW Convention;
 - (b) the holder's certificate expires or is cancelled or suspended by or on behalf of the government under whose authority the certificate was originally issued;
 - (c) a court of marine enquiry or a disciplinary hearing recommends the cancellation of the endorsement; or
 - (d) the holder is convicted of an offence in terms of the Act or any other law administered by the Authority.
- (7) Where the Authority cancels an endorsement under subregulation (6), it shall inform the government under whose authority the certificate was originally issued of the cancellation.

PART 6 GENERAL MANNING LEVELS

99 Employment of certificated deck officers on ships other than fishing vessels

- (1) The owner and the master of every ship, other than a fishing vessel or a ship referred to in subregulation (2), shall ensure that there is employed on the ship in their appropriate capacities the number and description of appropriately certificated deck officers specified in the applicable item of the following table:

Item	Voyage/ Operation	Gross Tonnage (GT)	Capacity of employment	Appropriate minimum certification and number of persons to be employed	
				Certificate	Number
1.	Port Operations	< 200	Master	Skipper (port operations)	1
			Mate	Skipper (port operations) (c)	1
2.		≥ 200 but < 500	Master	Master (< 1600 GT port operations)	1
			Mate	Skipper (port operations) (c)	1
3.		≥ 500 but < 1600	Master	Master (< 1600GT port operations)	1
			Mate	Skipper (port operations)	1
4.		≥ 1600	Master	Master (port operations)	1
			Mate	Skipper (port operations)	1
5.	Near- coastal	< 200	Master	Master (< 200GT near-coastal)	1
			Mate	Coastal skipper ≥9m (a)	1
6.		≥ 200 but < 500	Master	Master (< 500GT near-coastal	1
			Mate	Mate (< 500GT near-coastal) /Master (< 200GT near-coastal)	1
			Watchkeeping Officer	Coastal skipper ≥9m (a)(b)	1
7.	Unlimited	< 200	Master	Master (< 200GT)	1
			Mate	Offshore skipper ≥ 9m (a)	1
8.		≥ 200 but	Master	Master (< 500GT)	1

Item	Voyage/ Operation	Gross Tonnage (GT) < 500	Capacity of employment	Appropriate minimum certification and number of persons to be employed	
				Certificate	Number
9.		< 500	Mate	Mate (< 500GT)	1
			Watchkeeping Officer	Master (< 200GT) / Master (< 200GT near-coastal)	1
			≥ 500 but < 3000	Master	Master (< 3000GT)
		Mate		Chief mate (< 3000GT)	1
		Watchkeeping Officer		Deck officer	1
		10.	≥ 3000	Master	Master
Mate	Chief mate			1	
Watchkeeping Officer	Deck officer			2	

Notes

(a) Certificate issued in terms of the Merchant Shipping (National Small Vessels Safety) Regulation, 2007, as amended

(b) Only on voyages of over 36 hours

(c) Only required where voyages/shifts are over 12 hours

(2) The owner and the Master of every ship of 25GT or more that:

- (a) is engaged in mining operations within waters under South African jurisdiction; and
- (b) so operates at anchor for two-thirds or more of the time spent at sea between port calls, shall ensure that there is employed on the ship in their appropriate capacities the number and description of appropriately certificated deck officers specified in the applicable item of the following table—

Item	Gross Tonnage (GT)	Capacity of employment	Appropriate minimum certification and number of persons to be employed	
			Certificate	Number
1.	< 200	Master	Master (< 200GT near-coastal) (b)	1
		Mate	Coastal skipper ≥9m (a)(e)	1
2.	≥ 200 but < 500	Master	Master (< 500GT near-coastal) (b)	1
		Mate	Mate (< 500GT near-coastal) (b)	1
3.	≥ 500 but < 3000	Master	Master (< 3000GT)(b)	1
		Mate	Chief mate (< 3000GT)(b)	1
		Watchkeeping Officer	Deck officer (b)	1
4.	≥ 3000	Master	Master (b)	1
		Mate	Chief mate(b)	1
		Watchkeeping Officer	Deck officer(b)	1
(a)	Issued in accordance with the Merchant Shipping (National Small Vessel Safety) Regulations, 2007			
(b)	For vessels engaged in mining operations, certificates could be endorsed with mining endorsement			
(c)	Required only on vessels with voyages extending over 12 hours			

100 Employment of certificated deck officers on fishing vessels

The owner and the Master of every fishing vessel shall ensure that there is employed on the vessel in their appropriate capacities the number and description of appropriately certificated deck officers specified in the applicable item of the following table:

Item	Area of operation	Size of Vessel	Capacity of employment	Appropriate minimum certification and number of persons to be employed	
				Certificate	Number
(1)	Limited waters	≥ 25GT but < 24m	Master	Skipper fishing(< 24m Limited waters)	1
			Mate	Coastal skipper ≥ 9m (A) or Deck officer fishing (< 24m)	1
≥ 24m		Master	Skipper fishing (≥ 24m Limited waters)	1	
		Mate	Deck officer fishing (≥ 24m)	1	
		Watchkeeping Officer	Deck officer fishing (< 24m)	1	
≥ 3000GT		Master	Skipper fishing (≥ 24m Limited waters)	1	
		Mate	Skipper fishing (< 24m Limited waters)	1	
		Watchkeeping Officer	Deck officer fishing (< 24m)	2	
(4)	Unlimited Waters	≥ 25GT but < 24m	Master	Skipper fishing (< 24m Unlimited waters)	1
			Mate	Deck officer fishing (< 24m)	1
			Watchkeeping Officer	Offshore skipper ≥ 9m (a)	1
≥ 24m but < 3000GT		Master	Skipper fishing (≥ 24m Unlimited waters)	1	
		Mate	Deck officer fishing (≥ 24m)	1	
		Watchkeeping Officer	Deck officer fishing (< 24m)	1	
≥ 3000GT		Master	Skipper fishing (≥ 24m Unlimited waters)	1	
		Mate	Skipper fishing (< 24m Unlimited waters)	1	
		Watchkeeping Officer	Deck officer fishing (< 24m)	2	
(a) Certificate issued in terms of the MS (National Small Vessels Safety) Regulation, 2007					

101 Employment of certificated engineer officers on ships other than fishing vessels

- (1) The owner and the Master of every ship, other than a fishing vessel, shall ensure that there is employed on the ship in their appropriate capacities the number and description of appropriately certificated engineer officers specified in the applicable item of the following tables.

Item	Voyage/ Operation	Registered propulsion power (kW)	Capacity of employment	Appropriate minimum certification and number of persons to be employed	
				Certification	Number
1	Port operations	< 350	Chief engineer	Chief engineer (< 750kW port Operations) or Marine motorman Grade 2	1
2		≥ 350 but < 750	Chief engineer	Chief engineer (<750kW Port Operations) or Marine motorman Grade 1	1
3		≥750 but < 1500	Chief engineer	Chief engineer(<1500 kW port operations) or Marine motorman Higher Grade	1
4		≥ 1500	Chief engineer	Chief engineer officer (port operations)	1
	Second engineer		Chief engineer(<1500 kW port operations) or Marine motorman Higher Grade	1	
5	Near-coastal	<350	Chief engineer	Marine motorman Grade 1	1
6		≥ 350 but < 500 and < 500 GT	Chief engineer	Marine motorman Grade 1	1
			Second engineer	Marine motorman Grade 2	1
7		≥ 350 but <1500 and ≥ 500 GT	Chief engineer	Marine motorman Higher Grade	1
			Second engineer	Marine motorman Grade 1	1
8		≥ 1500 but < 3000	Chief engineer	Chief engineer (< 3000 kW)	1
			Second engineer	Engineer officer	1
			Watchkeeping officer	Engineer officer or Marine motorman Higher Grade	1
9		≥ 3000	Chief engineer	Chief engineer	1
			Second engineer	Second engineer	1
			Watchkeeping officer	Engineer officer	1
10	< 750 but < 500 GT	Chief Engineer	Marine motorman Higher Grade	1	
		Second Engineer	Marine motorman Grade 1	1	
11	< 750	Chief engineer	Marine motorman Higher Grade	1	
		Second engineer	Marine motorman Grade 2	1	
12	> 750 but < 3000	Chief engineer	Chief engineer officer < 3000kw	1	
		Second engineer	Second engineer officer (< 3000kw)	1	
		Watchkeeping officer	Engineer officer	1	
13	≥ 3000	Chief engineer	Chief engineer officer (≥ 3000kw)	1	
		Second engineer	Second engineer officer (≥ 3000kw)	1	
		Watchkeeping officer	Engineer officer	2	

102 Employment of certificated engineer officers on fishing vessels

The owner and the Master of every fishing vessel shall ensure that there is employed on the vessel in their appropriate capacities the number and description of appropriately certificated engineer officers specified in the applicable item of the following table:

Item	Propulsion power of vessel (kW)	Capacity of employment	Appropriate minimum certification and number of persons to be employed	
			Certification	Number
1	< 350	Chief engineer	Marine motorman Grade 2	1
2	≥ 350 but < 750	Chief engineer	Marine motorman Grade 1	1
		Second engineer	Marine motorman Grade 2	1
3	≥ 750 but < 3000	Chief engineer	Chief engineer (<3000 kW fishing)	1
		Second engineer	Second engineer (fishing)	1
		Watchkeeping officer	Marine motorman Grade 1	1
4	≥ 3000	Chief engineer	Chief engineer (fishing)	1
		Second engineer	Chief engineer (<3000 kW fishing)	1
		Watchkeeping officer	Second engineer (fishing)	1

103 Employment of certificated radio operators

The owner and the master of every ship shall ensure that there is employed on the ship the number and description of appropriately certificated radio operators specified in the applicable item of the following table:

Item	Voyage/Operation	Tonnage/length of ship	Appropriate certification and number of persons to be employed	
			Certification	Number
1	Port Operations	$\geq 25\text{GT}$	Short range certificate	1
2	Near-Coastal.	$\geq 25\text{ but } < 300\text{GT}$	Long range certificate	2
3		$\geq 300\text{GT}$	GMDSS General Operator's Certificate	2
4	Fishing Operations within 40 nautical miles offshore.	$\geq 25\text{GT}$	Short range certificate	2
5	Fishing operations beyond 40 but within 200 nautical miles offshore.	$\geq 25\text{GT}$	Long range certificate	2
6	Fishing operations beyond 200 nautical miles offshore.	$\geq 25\text{ GT but } < 45\text{m}$	Long range certificate	2
7		$\geq 45\text{m}$	GMDSS General Operator's Certificate	2
8	Unlimited, all sea areas.	$\geq 25\text{GT but } < 300\text{GT}$	Long range certificate	2
9		$\geq 300\text{GT}$	GMDSS General Operator's Certificate	2

Provided that:

- (a) if a ship of 300GT or more, is engaged on a near-coastal voyage and is not fully equipped in accordance with GMDSS requirements, there shall be employed on the ship at least two radio operators who are appropriately certificated for the type of radio installation on the ship
- (b) if the ship is equipped in accordance with the GMDSS requirements of the radio regulations if at-sea electronic maintenance of the GMDSS installation is to be conducted to ensure availability, at least one radio operator on the ship shall hold a valid First- or Second-Class Radio Electronic Certificate or a recognised equivalent certificate;
- (c) if the ship is fitted with radio equipment capable of operating within the GMDSS (whether or not so fitted in compliance with statutory requirements), there shall be employed on the ship at least one radio operator who is the holder of a valid GMDSS General Operators Certificate, or a recognised equivalent certificate;

- (d) when the radio equipment on the ship is being used for general communications, other than distress, urgency or safety communications, such general communications shall not be conducted by the deck officer on watch.

104 Employment of certificated ratings on ships other than fishing vessels

The owner and the Master of every ship other than a fishing vessel shall ensure that there is employed on the ship in their appropriate capacities the number and description of appropriately certificated ratings specified in the applicable item of the table below:

Item	Type of ship	Voyage/ operations	Minimum certification and number to be employed			
			Ordinary seafarer deck / Able seafarer deck	Ordinary seafarer engine / Able seafarer engine	SCRB/ PST (a)	Efficient Cook
1	Passenger	Unlimited	Sufficient to man each 4 hour watch in a 12 hour period plus one	Sufficient to man each 4 hour watch in a 12 hour period with a rating	One for every survival craft	1
2		Near- coastal	Sufficient to man each 4 hour watch in a 12 hour period	Sufficient to man each 4 hour watch in a 12 hour period with a rating	One for every survival craft	(1) only required if voyages are over 48 hours
3		Port Operations	Sufficient to man each 6 hour watch in a 12 hour period, a minimum of two	Sufficient to man each 6 hour watch in a 12 hour period with a rating	One for every survival craft	-
4	Other	Unlimited	≥ 3000GT Sufficient to man each 4 hour watch in a 12 hour period plus one	Sufficient to man each 4 hour watch in a 12 hour period with a rating	-	1
5			< 3000GT Sufficient to man each 4 hour watch in a 12 hour period	Sufficient to man each 4 hour watch in a 12 hour period with a rating	-	1
6			< 500GT Sufficient to man each 6hour watch in a 12hour period	Sufficient to man each 6 hour watch in a 12 hour period with a rating	-	1
7			≥ 25GT but < 100GT 2 Ordinary seafarer deck	1 Ordinary seafarer engine		-
8		Near- coastal	< 500GT Sufficient to man each 6 hour watch in a 12 hour period	Sufficient to man each 6 hour watch in a 12 hour period with a rating		1
9			≥ 25GT but < 100GT 1 Ordinary seafarer deck	1 Ordinary Seafarer deck		
10		Port Operations	< 500GT Sufficient to man each 6 hour watch in a 12 hour period	Able seafarer engine		
11			≥ 500GT Sufficient to man each 6 hour watch in a 12 hour period plus one	Able seafarer engine		
(a) PST Certificate only applicable to near-coastal and port operations service for appropriate survival craft.						

Provided that:

- (a) where a combination of ratings qualified as ordinary seafarers and as able seafarers is employed in the deck department, at least half the combined number of ratings so employed shall be qualified as able seafarers;

- (b) where a combination of ratings qualified as ordinary seafarers engine and able seafarer engine is employed in the engine-room department, at least one of the ratings so employed shall be qualified as an able seafarer engine;
- (c) on passenger ships the prescribed number of ratings qualified as proficient in survival craft and rescue boats and as proficient in fast rescue boats shall be in addition to the number of ratings qualified as able seafarers and as able seafarer engines;
- (d) on ships having only life rafts as survival craft there may be employed, instead of the number of ratings qualified as proficient in survival craft and rescue boats, an equal number of ratings qualified as proficient in personal survival techniques only;
- (e) owners and masters (bearing in mind that the table below specifies minimum requirements only) shall have regard to the requirements of regulation 91(4) when determining the appropriate manning;
- (f) in respect of a ship engaged solely in port operations, and instead of meeting the requirements specified in the table below, application may be made to the proper officer at the ship's port of operation for the number of certificated ratings to be determined, with the necessary changes, in accordance with regulation 91(4);
- (g) on ships engaged solely in port operations, there may be employed, instead of the number of ratings qualified as able seafarer deck or able seafarer engine, an equal number of ratings holding the qualification as general purpose rating (port operations);
- (h) Vessels with propulsion power of less than 350kW do not require carrying an engine rating under this table. This regulation does not limit the power of the proper officer under regulation 91(4) of these regulations.

105 Employment of certificated ratings on fishing vessels

The owner and the Master of every fishing vessel shall ensure that there is employed on the vessel in their appropriate capacities the number and description of appropriately certificated ratings specified in the applicable item of the following table:

Item	Size of vessel	Minimum certification and number to be employed		
		Able seafarer deck (fishing) / Ordinary seafarer	SCRB/PST (a)	Efficient Cook
1.	≥ 25GT but < 24m	2	-	-
2.	≥ 24m	2	1	1
(a) As applicable to the survival craft carried onboard.				

Where a combination of ratings qualified as ordinary seafarer deck (fishing) and as able seafarer deck (fishing) is employed in the deck department, at least half the combined number of ratings so employed shall be qualified as able seafarer deck (fishing) except that for vessels < 24m this combination may be two ordinary seafarers until four years after the coming into force of these regulations.

PART 7 EMPLOYMENT OF SEAFARERS IN ACCORDANCE WITH OCCUPATIONAL SAFETY, SECURITY AND MEDICAL REQUIREMENTS

106 Employment of qualified personnel on tankers

- (1) The owner and the master of every oil or chemical tanker shall ensure that:
 - (a) every seafarer assigned specific duties and responsibilities related to cargo or cargo equipment on the ship shall hold a certificate of proficiency in basic training for oil and chemical cargo training;
 - (b) the master, chief engineer officer, chief mate, second engineer officer and every other seafarer with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo related operations on board an oil tanker shall hold a certificate of proficiency in advanced training for oil tanker cargo operations; and
 - (c) the master, chief engineer officer, chief mate, second engineer officer and every other seafarer with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo related operations on board a chemical tanker shall hold a certificate of proficiency in advanced training for chemical tanker cargo operations;
- (2) The owner and the master of every gas tanker shall ensure that:
 - (a) every seafarer assigned specific duties and responsibilities related to cargo or cargo equipment on the ship shall hold a certificate of proficiency in basic training for gas cargo training; and
 - (b) the master, chief engineer officer, chief mate, second engineer officer and every other seafarer with immediate responsibility for loading, discharging, care in transit, handling of cargo, tank cleaning or other cargo related operations on board an gas tanker shall hold a certificate of proficiency in advanced training for gas tanker cargo operations.

107 Employment of qualified personnel with security training

- (1) The owner and master of a seagoing ship of 500GT or more or passenger ship on international voyages shall ensure that all personnel employed on board the ship have received training on security-related training.

- (2) The owner or master of a seagoing ship of 500GT or more or a passenger ship on international voyages shall ensure that all personnel with security duties or responsibilities have received training for persons with designated security duties.
- (3) The owner or master of a seagoing ship of 500GT or more or a passenger ship on international voyages shall ensure that one of the officers is designated as a ship security officer.

108 Employment of qualified personnel passenger ships

- (1) The owner and the master of every passenger ship shall ensure that the master and every seafarer employed on the ship holds an appropriate certificate required under regulation 76(4) and (5) of these regulations. The requirements of this subregulation apply to passenger ships of Class IIA, V and VI as designated by the Lifesaving equipment Regulations, 1968.
- (2) The owner and the master of every passenger ship shall ensure that the master, officers and crew with responsibility for the passengers for the safety of passenger in an emergency situation shall hold appropriate certificate required by regulation 76(6) of these regulations.
- (3) The master, and officers and every person assigned immediate responsibility for embarking and disembarking passenger, loading, discharging and securing of cargo, or closing hull operations on passenger ships shall hold appropriate certificate in accordance with regulation 76(6).

109 Employment of qualified electro-technical officers and ratings

- (1) The owner and the master of every ship proceeding to sea shall ensure that:
 - (a) ships with installations in excess of 1000Volts shall conduct a risk assessment to define the number of suitably qualified electro-technical officer;
 - (b) ships with installations in excess of 1000Volts shall have a suitably qualified electro-technical rating in addition to the electro-technical officer provided that this requirement may be exempted by the Authority;
 - (c) every electro-technical officer serving on a seagoing ship powered by main propulsion machinery of 750kW or more shall hold a certificate of competency;
 - (d) every electro-technical rating serving on a seagoing ship powered by main propulsion machinery of 750kW or more shall hold a certificate of proficiency; and
 - (e) the Authority may approve a suitably qualified person other than an electro-technical officer or rating to perform certain functions of an electro-technical officer or rating.

110 Employment of qualified medical personnel

- (1) The owner and the master of every ship on an unlimited voyage that carries 100 or more persons shall ensure that at least one medical doctor, registered with the relevant body in the Republic, is employed on the ship.
- (2) The owner and the master of every sea-going ship shall ensure that:
 - (a) every person designated to take charge of medical care on the ship, in the absence of a qualified medical practitioner, holds a valid medical care certificate issued in accordance with the Code; and
 - (b) every person designated to provide medical first aid on the ship holds a valid medical first aid certificate issued in accordance with the Code.
- (3) Every person who is designated the duties referred to in subregulation (2) shall undertake approved refresher training at intervals not exceeding five years.

111 Employment of qualified fire-fighting personnel

- (1) The owner and the master of every ship shall ensure that every person designated as a member of a fire-fighting party on the ship holds—
 - (a) a valid fire-fighting certificate issued in accordance with the Code, or an approved equivalent certification; and
 - (b) in the case of a ship of less than 100GT, a valid fire-fighting (small vessels) certificate issued in accordance with the Code, or an approved equivalent qualification.
- (2) The owner and the master of every ship to which these regulations apply shall ensure that every person designated to control fire-fighting operations on the ship holds a valid advanced fire-fighting certificate issued in accordance with the Code.
- (3) Every person who is designated the duties referred to in subregulation (1)(a) and (2) shall be required to demonstrate continued professional competence by attending approved refresher training at intervals not exceeding five years.

112 Employment of qualified personnel on ships equipped with survival craft or rescue boats

- (1) The owner and master of every ship that is equipped with one or more survival craft or rescue boats shall ensure that there is employed a sufficient number of persons, to take charge of the survival craft or rescue boats, who hold a valid certificate of proficiency in survival craft and rescue boats issued in accordance with regulation 70 of these regulations or an approved equivalent.

- (2) Every person who is designated the duties referred to in subregulation (1) shall undertake approved refresher training at intervals not exceeding five years.

113 Employment of qualified personnel on ships equipped with a fast rescue boat

- (1) The owner and master of every ship that is equipped with one or more fast rescue boats shall ensure that there are employed on the ship at least two persons per boat who hold a valid certificate of proficiency in fast rescue boats issued in accordance with regulation 72 of these regulations or an approved equivalent.
- (2) Every person who is designated the duties referred to in subregulation (1) shall demonstrate continued professional competence by serving in that capacity for at least 12 months in the previous 5 years or if this criteria is not met, undertake approved training and meet the standards of competence as specified in the Code.

PART 8 SUPPLEMENTAL

114 Exemptions

- (1) The Authority may, if in its opinion no danger would result to persons, property or the environment, grant exemption, on such terms (if any) as it may specify, from any of the provisions of these regulations (as may be specified in the exemption) for classes of cases or individual cases.
- (2) An exemption permitting a person to serve in a capacity for which he or she is not certificated:
 - (a) may be granted only if the person is certificated to serve in the next lower capacity. Provided that if the next lower capacity is an uncertificated capacity, exemption may be granted only if the person's knowledge and experience, in the opinion of the Authority, are appropriate for the capacity to be filled;
 - (b) shall not be granted in respect of:
 - (i) the capacity of master of a passenger ship; or
 - (ii) the capacities of master or chief engineer of any ship to which the STCW Convention applies, except in the case of *force majeure* and then only for the shortest possible time; and
 - (iii) shall, in all cases, cease to have effect on the earlier of the following two dates:
 - (aa) the date of expiry (if any) in terms of the exemption; or
 - (bb) the date on which the period of six months after the grant of exemption expires.

- (3) The Authority may alter or cancel any exemption granted under this regulation.

115 Equivalence of certificates and endorsements

- (1) Subject to subregulation (2), each certificate or endorsement specified in a column of an item in the table below is taken to be equivalent to the certificate or endorsement, as the case may be, specified in the other columns of that item.
- (2) If the certificate or endorsement specified in column 3 of an item in the table is subject to additional qualification requirements in terms of these regulations, documentary evidence of compliance with those requirements, or so much thereof as the Authority requires, is to be produced within the time and in the manner that the Authority directs.

Item	Column 1 Title of certificate issued before commencement of repealed regulations	Column 2 Equivalent certificate or endorsement under repealed regulations	Column 3 Equivalent certificate or endorsement under repealed regulations	Column 4 Equivalent certificate or endorsement under these regulations
1	Master of a foreign-going ship	Deck Officer Class 1	Master	Master
2	—	Deck Officer Class 2 endorsed Master (Limited Trade)	Chief Mate endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 3000GT on unlimited voyages 	Chief Mate endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 3000GT on unlimited voyages
3	Chief Navigating Officer of a foreign-going ship	Deck Officer Class 2 endorsed Master (Short Sea Trade)	Chief Mate endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 500GT on near-coastal voyages 	Chief Mate endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 500GT on near-coastal voyages
4	—	—	Master (Coastal) endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 3000GT on near coastal voyages 	Master (< 500GT near-coastal) endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 3000GT on near coastal voyages
5	—	Deck Officer Class 2	Chief Mate	Chief Mate
6	—	Deck Officer Class 3 endorsed Master (Limited Trade)	Deck Officer endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 500GT on unlimited voyages • Chief Mate of a ship of less than 3000GT on unlimited voyages 	Chief Mate (< 3000GT) endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 500GT on unlimited voyages
7	—	Deck Officer Class 3 endorsed Master (Short Sea Trade)	Deck Officer endorsed: <ul style="list-style-type: none"> • — Master of a ship of less than 500GT on near-coastal voyages • — Chief Mate of a ship of less than 3000GT on unlimited voyages 	Chief Mate (< 3000GT) endorsed: <ul style="list-style-type: none"> • Master of a ship of less than 500GT on unlimited voyages

8	Second Navigating Officer of a foreign-going ship	Deck Officer Class 3	Deck Officer	Deck Officer
9	—	Deck Officer Class 4 endorsed Master (Limited Trade)	Deck Officer endorsed: • <i>Master of a ship of less than 500GT on unlimited voyages</i>	Deck Officer endorsed: • Master (< 500GT)
10	Master of a coasting ship of 100 GT or more	Deck Officer Class 4 endorsed Master (Short Sea Trade)	Deck Officer endorsed: • <i>Master of a ship of less than 500GT on near-coastal voyages</i>	Deck Officer endorsed • Master (< 500GT near-coastal)
11	—	Deck Officer Class 4 endorsed Master (Port Operation)	Deck Officer endorsed: • <i>Master of a ship of any tonnage operating within a port operations area</i>	Deck Officer endorsed: • Master (Port Operations)
12	—	Deck Officer Class 4 endorsed Port Operation Service	Master (Port Operations)	Master (Port Operations)
13	—	—	—	Master (< 1600GT Port Operations)
14	—	—	—	Master (< 500GT)
15	—	—	—	Mate (< 500GT)
16	—	Deck Officer Class 5 endorsed Master (Short Sea Trade)	Mate (Coastal) endorsed: — <i>Master of a ship of less than 500GT on near-coastal voyages</i>	Master (< 500GT near-coastal)
17	—	Deck Officer Class 5 endorsed Master (Port Operation)	Mate (Coastal) endorsed: — <i>Master of a ship of any tonnage operating within a port operations area</i>	Mate (< 500GT near-coastal) endorsed: • Master (Port Operations)
18	—	Deck Officer Class 5 endorsed Port Operation Service	Master (Port Operations)	Master (Port Operations)
19	Navigating Officer of a coasting ship of 100 GT or more	Deck Officer Class 5	Mate (Coastal)	Mate (< 500GT near-coastal)
20	—	Deck Officer Class 6 (Unlimited Trade)	Skipper (Unlimited)	Skipper (< 200GT)
21	—	Deck Officer Class 6 (Short Sea Trade)	Skipper (Coastal)	Skipper (< 200GT near-coastal)
22	—	Deck Officer Class 6 (Restricted Trade)	Skipper (Port Operations)	Skipper (< 200GT Port Operations)
23	—	—	Fisherman Grade 2 (with High Seas Command Endorsement)	Skipper fishing (≥ 24m Unlimited Waters)
24	—	—	Fisherman Grade 3 (with High Seas Command Endorsement)	Skipper fishing (< 24m unlimited Waters) endorsed: • <i>Skipper of a fishing vessel of < 30m on unlimited waters.</i>
25	—	—	Fisherman Grade 4 (Skipper- with High Seas Command Endorsement)	Skipper fishing (< 24m Unlimited)

26	Skipper of a fishing, sealing or shore-based whaling boat of 100 GT or more	Fisherman Grade 2	Fisherman Grade 2	Skipper fishing (\geq 24m Limited Waters)
27	Mate of a fishing, sealing or shore-based whaling boat of 100 GT or more	Fisherman Grade 3	Fisherman Grade 3	Skipper fishing ($<$ 24m Limited Waters) endorsed: <ul style="list-style-type: none"> • <i>Skipper of a fishing vessel of $<$ 30m on limited waters.</i>
28			Fisherman Grade 4 (Skipper) (With High seas command endorsement)	Skipper fishing ($<$ 24m Unlimited Waters)
29	Boatswain of a fishing, sealing or shore-based whaling boat of 100 GT or more	Fisherman Grade 4 (Skipper)	Fisherman Grade 4 (Skipper)	Skipper ($<$ 24m Limited Waters)
30	Skipper of a coasting ship or a fishing, sealing or shore-based whaling boat of less than 100 GT	Fisherman Grade 4 (Skipper)	Fisherman Grade 4 (Skipper)	
31	Mate of a coasting ship or a fishing, sealing or shore-based whaling boat of less than 100 GT	Fisherman Grade 4 (Watchkeeper)	Fisherman Grade 4 (Watchkeeper)	Deck Officer fishing (\geq 24m)
32	—			Deck Officer fishing ($<$ 24m)
33	Chief Engineer-Officer of a foreign-going ship	Marine Engineer-Officer Class 1	Chief Engineer Officer (\geq 3 000 kW)	Chief Engineer Officer
34	Second Engineer-Officer of a foreign-going ship	Marine Engineer-Officer Class 2	Second Engineer Officer (\geq 3000kW) endorsed: — <i>Chief Engineer Officer of a ship of less than 3000kW propulsion power</i>	Second Engineer Officer (\geq 3000 kW) <ul style="list-style-type: none"> • <i>Endorsed Chief engineer officer of a ship less than 3000kW</i>
35	—	Marine Engineer-Officer Class 3 with Service Endorsement	Second Engineer Officer ($<$ 3000kW) endorsed: — <i>Chief Engineer Officer of a ship of less than 750kW propulsion power</i> — <i>Chief Engineer Officer of a ship of any kilowatt propulsion power operating within a port operations area</i>	Second engineer officer ($<$ 3000kW) <ul style="list-style-type: none"> • <i>Endorsed chief engineer officer of a ship less than 750kW propulsion power;</i> • <i>chief engineer officer of a ship of any kilowatt power operating within a port operations area</i>
36	Chief Engineer-Officer of a coasting ship	Marine Engineer-Officer Class 3	(a) Second Engineer Officer ($<$ 3000kW) endorsed: — <i>Chief Engineer Officer of a ship of any kilowatt propulsion power operating within a port operations area</i> (b) Chief Engineer Officer (Port Operations)	Second engineer officer ($<$ 3000kW) <ul style="list-style-type: none"> • <i>Chief engineer officer of a ship of any kilowatt propulsion power operating within a port operations area;</i> • <i>Chief engineer officer (port operations)</i>

37	Second Engineer-Officer of a coasting ship	Marine Engineer-Officer Class 4	(a) Engineer Officer endorsed: — <i>Chief Engineer Officer of a ship of less than 1500kW propulsion power operating within a port operations area</i> (b) Second Engineer Officer (Port Operations)	Engineer officer endorsed <ul style="list-style-type: none"> • <i>Chief engineer officer of a ship of less than 1500kW propulsion power operating within a port operations area;</i> • <i>Second engineer officer (port operations)</i>
38	—	Marine Motorman Higher Grade	Marine Motorman Higher Grade	Marine Motorman Higher grade
39	Marine Engineman	Marine Motorman Grade 1	Marine Motorman Grade 1	Marine Motorman grade 1
40	Assistant Marine Engineman, any brake horsepower	Marine Motorman Grade 2	Marine Motorman Grade 2	Marine Motorman Grade 2
41				Chief Engineer (Fishing)
42				Chief Engineer (< 3000kW Fishing)
43				Second Engineer (fishing)
44	Assistant Marine Engineman, under 150 brake horsepower	Marine Motorman Grade 3	Marine Motorman Grade 3	
45	Able Seafarer	Efficient Deck Rating	Able Seaman	Able Seafarer Deck
46	—	—	Able Seaman (Fishing)	Able Seafarer Deck (Fishing)
47			Able seaman (port operations)	Able Seafarer deck (port operations)
48	—	—	Ordinary Seaman	Ordinary Seafarer deck
49			Ordinary Seaman (port operations)	
50	Lifeboatman	Proficiency in Survival Craft	Proficiency in Survival Craft	Proficiency in Survival Craft
51	—	Efficient Engine-room Rating	Oiler	Able Seafarer Engine
52			Wiper	Ordinary seafarer engine
53			Oiler (Port Operations)	Able Seafarer Engine (port operations)
54			Wiper (port operations)	Ordinary seafarer engine
55	—	Efficient Cook	Efficient Cook	Efficient Cook
56	—	Proficiency in Survival Craft (Local)	Proficiency in Liferrafts	Personal survival techniques
57	—	Efficient General Purpose Rating	Efficient General Purpose Rating (Port Operations)	General Purpose Rating (Port Operations)

- (3) Where the holder of a certificate of competency issued under the Act before the commencement of these regulations has served in a certificated capacity for at least 12 months in the preceding five years but is prohibited from continued employment in that capacity owing to the tonnage, propulsion power or area of operation of the ship exceeding the applicable tonnage, propulsion power or area of operation limitation, the Authority may endorse the certificate, or the equivalent certificate in terms of this regulation, as the case may be, so as to entitle the holder to continued employment in the capacity concerned on a ship having an appropriately greater tonnage, propulsion power or area of operation.

116 Safe manning document

- (1) The owner of every ship shall ensure that:
 - (a) a safe manning document is in force in respect of the ship and the manning of the ship;
 - (b) the safe manning document is kept on board the ship at all times; and
 - (c) the manning of the ship is maintained at all times to at least the levels specified in the safe manning document.
- (2) The Safe Manning Document shall be valid:
 - (a) for a period of one year from date of issue;
 - (b) for a ship required to carry a Cargo Ship Safety Equipment Certificate or Passenger Ship Safety Certificate, valid for the period of validity of that certificate;
 - (c) for a document issued in accordance with regulation 95—
 - (i) shall be valid for a period of five years;
 - (ii) until the vessel changes ownership and operation; or
 - (iii) until cancelled by the Authority.
- (3) The master of every ship shall ensure that the ship does not go to sea unless there is on board and in force in respect of the ship a valid safe manning document and the manning of the ship complies with that document.

117 Carriage of documents

Without limiting regulation 4, the owner and the master of every ship shall ensure that there are carried at all times on board the ship all original certificates and other documents issued pursuant to the Act, the STCW Convention or STCW-F Convention, as the case may be, showing the qualification of the master and any member of the crew to perform functions which they are required to perform aboard ship in the course of their designated duties.

118 Offences, penalties and defences

- (1) Every owner commits an offence who contravenes regulation 91(1) or (4), 93(1), 116 or 117.
- (2) Every employer, being an employer who in terms of regulation 93 has become subject to the duties of the owner under that regulation, who contravenes regulation 93 commits an offence.

- (3) Every master commits an offence who contravenes regulation 93(12), (13), (14), (15), (16) 92(2), (4), (6), 94(2) or (3).
- (4) Every seafarer commits an offence who contravenes regulation 92, 93(16) or 94(4)
- (5) A person who commits an offence in terms of subregulation (1), (2) or (3) is liable on conviction to a fine or to imprisonment for a period not exceeding 12 months.
- (6) A person who commits an offence in terms of subregulation (4) is liable on conviction to a fine or to imprisonment for a period not exceeding six months.
- (7) In proceedings for an offence in terms of this regulation it is a defence to prove that the accused took reasonable precautions and exercised due diligence to avoid committing the offence.
- (8) In proceedings for an offence in terms of this regulation consisting of a failure to comply with a duty or requirement to do something so far as is reasonably practicable, it shall be for the accused to prove that it was not reasonably practicable to do more than what was in fact done to satisfy the duty or requirement.

PART 9 REPEAL OF REGULATIONS AND SAVINGS, TRANSITIONAL ARRANGEMENTS, AND TITLE AND COMMENCEMENT

119 Repeal of regulations

- (1) The Merchant Shipping (Safe Manning) Regulations, 1999, published by Government Notice No. R. 1548 of 30 December 1999, as amended, is repealed.
- (2) The Merchant Shipping (Training and Certification) Regulations, 1999, published by Government notice n No. R. 1547 of 30 December 1999, as amended, is repealed.
- (3) Subject to regulation 110, the Ship's Officers' Medical Training Regulations, 1992, published by Government Notice No. R 2666 of 25 September 1992, as amended, is repealed.
- (4) Examination Regulations For Certificates Of Competency For Fisherman, 1993, published by Government Notice No. R 2317 of 01 December 1993, as amended, is repealed.
- (5) Examination Regulations for Certificate of Competency as Marine Motorman, 1993, published by government notice no. 2314 of 01 December 1993, as amended, is repealed.

120 Transitional arrangements

- (1) Until 1 January 2017, the Authority may continue to issue, recognise and endorse certificates in accordance with the provisions which applied immediately prior to 1 January 2012 in respect of those seafarers who commenced approved seagoing

service, an approved education and training programme or an approved training course before 1 July 2013.

- (2) Until 1 January 2017, the Authority may continue to revalidate certificates and endorsements in accordance with the provisions which applied immediately prior to 1 January 2012.
- (3) Masters and/or owners of fishing vessels not required to employ certificated ratings onboard before the commencement of these regulations shall be required to employ certificated ratings onboard two years after these regulations come into force.
- (4) Any certificate issued under the Act, before promulgation of these regulations, shall continue to be valid until the later of the following instances:
 - (a) For certificates issued under the Examination Regulation for Certificates of Competency for Fisherman, 1993 and Examination Regulations for certificates of competency as Marine Motormen, 1993—
 - (i) 24 months from the date of these regulations coming into force; or
 - (ii) five years after the issue of a certificate;
 - (b) For certificates (except special grade certificates) issued in terms of the Merchant Shipping (Training and Certification) Regulation, 1999 and Ships Officer Medical Training Regulations, 1992—
 - (i) a date of expiry which is endorsed to it;
 - (ii) five years from the date of issue of certificates; or
 - (iii) 12 months from the date of these regulations coming into force.
- (5) Any certificate as Efficient General Purpose Rating (Port Operations) shall continue to be valid until the later of the following dates:
 - (i) 12 months from the date of these regulations coming into force; or
 - (ii) five years after the date of issue of the certificate
 - (iii) thereafter, to be issued a GPR certificate of proficiency, a candidate shall have completed, during the required sea service or port operations service, an approved onboard training record book (able seafarer deck and able seafarer engine); and
 - (iv) have completed approved training and meet the standards of competence specified in the Code.
- (6) Any restricted Radiotelephone Operators Certificates issued in terms of the Merchant Shipping Act 57 of 1951 may continue to be used the purpose for which they were issued until replaced by the long and short range certificate.

121 Title and commencement

These regulations are called the Merchant Shipping (Safe Manning, Training and Certification) Regulations, 2013, and come into operation on the day of publication..

ANNEX 1

WATCHKEEPING PRINCIPLES AND ARRANGEMENTS FOR SHIPS OTHER THAN FISHING VESSELS

Part 1 Voyage planning

1 General

The intended voyage shall be planned in advance, taking into account all pertinent information, and any course laid down shall be checked before the voyage begins.

The chief engineer officer shall, in consultation with the master, determine in advance the needs of the intended voyage, taking into account the requirements for fuel, water, lubricants, chemicals, expendable and other spare parts, tools, supplies and any other requirements.

2 Planning prior to each voyage

Before each voyage, the master of every ship shall ensure that the intended route from the port of departure to the first port of call is planned using adequate and appropriate charts and other nautical publications necessary for the intended voyage, containing accurate, complete and up-to-date information regarding those navigational limitations and hazards that are of a permanent or predictable nature and that are relevant to the safe navigation of the ship.

3 Verification and display of planned route

When the route planning is verified taking into account all pertinent information, the planned route shall be clearly displayed on appropriate charts and shall be continuously available to the officer in charge of the watch, who shall verify each course to be followed before using it during the voyage.

4 Deviation from planned route

If a decision is made, during a voyage, to change the next port of call of the planned route, or if it is necessary for the ship to deviate substantially from the planned route for other reasons, then an amended route shall be planned before deviating substantially from the route originally planned.

Part 2 Watchkeeping principles in general

Watches shall be carried out based on the following bridge and engine-room resource management principles:

- (1) proper arrangements for watchkeeping personnel shall be ensured in accordance with the situations;
- (2) any limitation in qualifications or fitness of individuals shall be taken into account when deploying watchkeeping personnel;

- (3) understanding of watchkeeping personnel regarding their individual roles, responsibility and team roles shall be established;
- (4) the master, chief engineer officer and officer in charge of watch duties shall maintain a proper watch, making the most effective use of the resources available, such as information, installations/ equipment and other personnel;
- (5) watchkeeping personnel shall understand functions and operation of installations/equipment, and be familiar with handling them;
- (6) watchkeeping personnel shall understand information and how to respond to information from each;
- (7) information from the stations/installations/equipment shall be appropriately shared by all the watchkeeping personnel;
- (8) watchkeeping personnel shall maintain an exchange of appropriate communication in any situation; and
- (9) watchkeeping personnel shall notify the master/chief engineer officer/officer in charge of watch duties without any hesitation when in any doubt as to what action to take in the interest of safety.

Part 3 Watchkeeping at sea

Division 1 Principles applying to watchkeeping generally

1 General

- (1) Owners, masters, chief engineer officers and watchkeeping personnel shall observe the following principles to ensure that safe watches are maintained at all times.
- (2) The master of every ship shall ensure that watchkeeping arrangements are adequate for maintaining a safe navigational watch. Under the master's general direction, the officers of the navigational watch are responsible for navigating the ship safely during their periods of duty, when they will be particularly concerned with avoiding collision and stranding.
- (3) The chief engineer officer of every ship shall, in consultation with the master, ensure that watchkeeping arrangements are adequate to maintain a safe engineering watch.

2 Protection of marine environment

The master, officers and ratings shall be aware of the serious effects of operational and accidental pollution of the marine environment and shall take all possible precautions to prevent such pollution, particularly within the framework of relevant international and national regulations

Division 2 Principles to be observed in keeping a navigational watch

1 General

The officer in charge of the navigational watch is the master's representative and is primarily responsible at all times for the safe navigation of the ship and for complying with the collision regulations.

2 Look-out

- (1) A proper look-out shall be maintained at all times in compliance with rule 5 of the annex to the collision regulations, and shall serve the purpose of:
 - (a) maintaining a continuous state of vigilance by sight and hearing as well as by all other available means, with regard to any significant change in the operating environment;
 - (b) fully appraising the situation and the risk of collision, stranding and other dangers to navigation; and
 - (c) detecting ships or aircraft in distress, shipwrecked persons, wrecks, debris and other hazards to safe navigation.
- (2) The look-out must be able to give full attention to the keeping of a proper look-out and no other duties shall be undertaken or assigned that could interfere with that task.
- (3) The duties of the look-out and helmsperson are separate and the helmsperson shall not be considered to be the look-out while steering, except in small ships where an unobstructed all-round view is provided at the steering position and there is no impairment of night vision or other impediment to the keeping of a proper look-out. The officer in charge of the navigational watch may be the sole look-out in daylight provided that on each such occasion;
 - (a) the situation has been carefully assessed and it has been established without doubt that it is safe to do so;
 - (b) full account has been taken of all relevant factors, including, but not limited to:
 - (i) state of weather;
 - (ii) visibility;
 - (iii) traffic density;
 - (iv) proximity of dangers to navigation; and
 - (v) the attention necessary when navigating in or near traffic separation schemes; and
 - (a) assistance is immediately available to be summoned to the bridge when any change in the situation so requires.

- (4) In determining that the composition of the navigational watch is adequate to ensure that a proper look-out can continuously be maintained, the master shall take into account all relevant factors, including those described in this annex, as well as the following factors:
- (a) visibility, and state of weather and sea;
 - (b) traffic density, and other activities occurring in the area in which the ship is navigating;
 - (c) the attention necessary when navigating in or near traffic separation schemes or other routeing measures;
 - (d) the additional workload caused by the nature of the ship's functions, immediate operating requirements and anticipated manoeuvres;
 - (e) the fitness for duty of any crew members on call who are assigned as members of the watch;
 - (f) knowledge of and confidence in the professional competence of the ship's officers and crew;
 - (g) the experience of each officer of the navigational watch, and the familiarity of that officer with the ship's equipment, procedures, and manoeuvring capability;
 - (h) activities taking place on board the ship at any particular time, including radio communication activities, and the availability of assistance to be summoned immediately to the bridge when necessary;
 - (i) the operational status of bridge instrumentation and controls, including alarm systems;
 - (j) rudder and propeller control and ship manoeuvring characteristics;
 - (k) the size of the ship and the field of vision available from the conning position;
 - (l) the configuration of the bridge, to the extent that the configuration might inhibit a member of the watch from detecting by sight or hearing any external development;
 - (m) any other relevant standard, procedure or guidance relating to watchkeeping arrangements and fitness for duty that has been specified in a marine notice.

3 Watch arrangements

When deciding the composition of the watch on the bridge, which may include appropriately qualified ratings, the following factors, *inter alia*, shall be taken into account:

- (1) at no time shall the bridge be left unattended;
- (2) weather conditions, visibility and whether there is daylight or darkness;

- (3) proximity of navigational hazards that may make it necessary for the officer in charge of the watch to carry out additional navigational duties;
- (4) use and operational condition of navigational aids such as radar or electronic position-indicating devices and any other equipment affecting the safe navigation of the ship;
- (5) whether the ship is fitted with automatic steering;
- (6) whether there are radio duties to be performed;
- (7) unmanned machinery space (UMS) controls, alarms and indicators provided on the bridge, procedures for their use and limitations;
- (8) any unusual demands on the navigational watch that may arise as a result of special operational circumstances.

4 Taking over the watch

- (1) The officer in charge of the navigational watch shall not hand over the watch to the relieving officer if there is reason to believe that the latter is not capable of carrying out the watchkeeping duties effectively, in which case the master shall be notified.
- (2) The relieving officer shall ensure that the members of the relieving watch are fully capable of performing their duties, particularly as regards their adjustment to night vision. Relieving officers shall not take over the watch until their vision is fully adjusted to the light conditions.
- (3) Before taking over the watch, relieving officers shall satisfy themselves as to the ship's estimated or true position and confirm its intended track, course and speed, and UMS controls as appropriate and shall note any dangers to navigation expected to be encountered during their watch.
- (4) Relieving officers shall personally satisfy themselves regarding:
 - (a) the standing orders and other special instructions of the master relating to navigation of the ship;
 - (b) the position, course, speed and draught of the ship;
 - (c) prevailing and predicted tides, currents, weather, visibility and the effect of these factors upon course and speed;
 - (d) procedures for the use of main engines to manoeuvre when the main engines are on bridge control; and
 - (e) the navigational situation, including but not limited to
 - (f) the operational condition of all navigational and safety equipment being used or likely to be used during the watch;
 - (g) the errors of gyro- and magnetic compasses;
 - (h) presence and movement of ships in sight or known to be in the vicinity;

- (i) the conditions and hazards likely to be encountered during the watch; and
 - (j) the possible effects of heel, trim, water density and squat on under-keel clearance.
- (5) If at any time the officer in charge of the navigational watch is to be relieved when a manoeuvre or other action to avoid any hazard is taking place, the relief of that officer shall be deferred until such action has been completed.

5 Performing the navigational watch

- (1) The officer in charge of the navigational watch shall:
 - (a) keep the watch on the bridge;
 - (b) in no circumstances leave the bridge until properly relieved;
 - (c) continue to be responsible for the safe navigation of the ship, despite the presence of the Master on the bridge, until informed specifically that the Master has assumed that responsibility and this is mutually understood; and
 - (d) notify the Master when in any doubt about what action to take in the interest of safety.
- (2) During the watch, the course steered, position and speed shall be checked at sufficiently frequent intervals, using any available navigational aids necessary, to ensure that the ship follows the planned course.
- (3) The officer in charge of the navigational watch shall have full knowledge of the location and operation of all safety and navigational equipment on board the ship and shall be aware and take account of the operating limitations of the equipment.
- (4) The officer in charge of the navigational watch shall not be assigned or undertake any duties that would interfere with the safe navigation of the ship.
- (5) When using radar, the officer in charge of the navigational watch shall bear in mind the necessity to comply at all times with the provisions on the use of radar contained in the collision regulations.
- (6) In cases of need, the officer in charge of the navigational watch shall not hesitate to use the helm, engines and sound signalling apparatus. However, timely notice of intended variations of engine speed shall be given where possible or effective use made of UMS engine controls provided on the bridge in accordance with the applicable procedures.
- (7) Officers of the navigational watch shall know the handling characteristics of their ship, including its stopping distances, and should appreciate that other ships may have different handling characteristics.
- (8) A proper record shall be kept during the watch of the movements and activities relating to the navigation of the ship.

- (9) It is of special importance that at all times the officer in charge of the navigational watch ensures that a proper look-out is maintained. In a ship with a separate chartroom, the officer in charge of the navigational watch may visit the chartroom, when essential, for a short period for the necessary performance of navigational duties, but shall first ensure that it is safe to do so and that proper look-out is maintained.
- (10) Operational tests of shipboard navigational equipment shall be carried out at sea as frequently as practicable and as circumstances permit, in particular before hazardous conditions affecting navigation are expected. Whenever appropriate, these tests shall be recorded. Tests shall also be carried out before port arrival and departure.
- (11) The officer in charge of the navigational watch shall make regular checks to ensure that:
 - (a) the person steering the ship, or the automatic pilot, is steering the correct course;
 - (b) the standard compass error is determined at least once a watch and, when possible, after any major alteration of course; the standard and gyro-compasses are frequently compared and repeaters are synchronized with their master compass;
 - (c) the automatic pilot is tested manually at least once a watch;
 - (d) the navigation and signal lights and other navigational equipment are functioning properly;
 - (e) the radio equipment available in the bridge is functioning properly in accordance with item 19 of this annex; and
 - (f) the UMS controls, alarms and indicators are functioning properly.
- (12) The officer in charge of the navigational watch shall bear in mind the necessity to comply at all times with the requirements in force of the Safety Convention. The officer shall take into account:
 - (a) the need to station a person to steer the ship and to put the steering into manual control in good time to allow any potentially hazardous situation to be dealt with in a safe manner; and
 - (b) that with a ship under automatic steering it is highly dangerous to allow a situation to develop to the point where the officer in charge of the navigational watch is without assistance and has to break the continuity of the look-out in order to take emergency action.
- (13) Officers of the navigational watch shall be thoroughly familiar with the use of all electronic navigational aids carried, including their capabilities and limitations, and shall use each of these aids when appropriate and shall bear in mind that the echo sounder is a valuable navigational aid.

- (14) The officer in charge of the navigational watch shall use the radar whenever restricted visibility is encountered or expected, and at all times in congested waters, having due regard to its limitations.
- (15) The officer in charge of the navigational watch shall ensure that range scales employed are changed at sufficiently frequent intervals so that echoes are detected as early as possible. It shall be borne in mind that small or poor echoes may escape detection.
- (16) Whenever radar is in use, the officer in charge of the navigational watch shall select an appropriate range scale and observe the display carefully, and shall ensure that plotting or systematic analysis begins in ample time.
- (17) The officer in charge of the navigational watch shall notify the master immediately:
 - (a) if restricted visibility is encountered or expected;
 - (b) if the traffic conditions or the movements of other ships are causing concern;
 - (c) if difficulty is experienced in maintaining course;
 - (d) on failure to sight land, a navigation mark or to obtain soundings by the expected time;
 - (e) if, unexpectedly, a land or a navigation mark is sighted or a change in soundings occurs;
 - (f) on breakdown of the engines, propulsion machinery remote control, steering gear or any essential navigational equipment, alarm or indicator;
 - (g) if the radio equipment malfunctions;
 - (h) in heavy weather, if in any doubt about the possibility of weather damage;
 - (i) if the ship meets any hazard to navigation, such as ice or a derelict; and
 - (j) in any other emergency or if in any doubt.
- (18) Despite the requirement to notify the master immediately in the foregoing circumstances, the officer in charge of the navigational watch shall in addition not hesitate to take immediate action for the safety of the ship, where circumstances so require.
- (19) The officer in charge of the navigational watch shall give watchkeeping personnel all appropriate instructions and information that will ensure the keeping of a safe watch, including a proper look-out.

6 Watchkeeping under different conditions and in different areas

(1) *Clear weather*

- (a) The officer in charge of the navigational watch shall take frequent and accurate compass bearings of approaching ships as a means of early detection

of risk of collision and bear in mind that such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large ship or a tow or when approaching a ship at close range. The officer shall also take early and positive action in compliance with the applicable collision regulations, and subsequently check that the action is having the desired effect.

- (b) In clear weather, whenever possible, the officer in charge of the navigational watch shall carry out radar practice.

(2) *Restricted visibility*

- (a) When restricted visibility is encountered or expected, the first responsibility of the officer in charge of the navigational watch is to comply with the relevant rules in the collision regulations, with particular regard to the sounding of fog signals, proceeding at a safe speed and having the engines ready for immediate manoeuvre. In addition, the officer shall:

- (i) inform the master;
- (ii) post a proper look-out;
- (iii) exhibit navigation lights; and
- (iv) operate and use the radar.

(3) *In hours of darkness*

The master and the officer in charge of the navigational watch, when arranging look-out duty, shall have due regard to the bridge equipment and navigational aids available for use, their limitations, and procedures and safeguards implemented.

(4) *Coastal and congested waters*

- (a) The largest scale chart on board, suitable for the area and corrected with the latest available information, shall be used. Fixes shall be taken at frequent intervals, and shall be carried out by more than one method whenever circumstances allow. When using ECDIS, appropriate usage code (scale) electronic navigational charts shall be used and the ship's position shall be checked by an independent means of position fixing at appropriate intervals.
- (b) The officer in charge of the navigational watch shall positively identify all relevant navigational marks.

(5) *Navigation with pilot on board*

- (a) Despite the duties and obligations of pilots, their presence on board does not relieve the master or officer in charge of the navigational watch from their duties and obligations for the safety of the ship. The master and the pilot shall exchange information regarding navigation procedures, local conditions and the ship's characteristics. The master and/or the officer in charge of the

navigational watch shall co-operate closely with the pilot and maintain an accurate check on the ship's position and movement.

- (b) If in any doubt about the pilot's actions or intentions, the officer in charge of the navigational watch shall seek clarification from the pilot and, if doubt still exists, shall notify the master immediately and take whatever action is necessary before the master arrives.

(6) *Ship at anchor*

If the master considers it necessary, a continuous navigational watch shall be maintained at anchor. While at anchor, the officer in charge of the navigational watch shall —

- (a) determine and plot the ship's position on the appropriate chart as soon as practicable;
- (b) when circumstances permit, check at sufficiently frequent intervals whether the ship is remaining securely at anchor by taking bearings of fixed navigation marks or readily identifiable shore objects;
- (c) ensure that proper look-out is maintained;
- (d) ensure that inspection rounds of the ship are made periodically;
- (e) observe meteorological and tidal conditions and the state of the sea;
- (f) notify the master and undertake all necessary measures if the ship drags anchor;
- (g) ensure that the state of readiness of the main engines and other machinery is in accordance with the master's instructions;
- (h) if visibility deteriorates, notify the master;
- (i) ensure that the ship exhibits the appropriate lights and shapes and that appropriate sound signals are made in accordance with all applicable regulations; and
- (j) take measures to protect the environment from pollution by the ship and comply with applicable pollution regulations.

Division 3 Principles to be observed in keeping an engineering watch

1 General

- (1) The term *engineering watch* as used in this annex means either a person or a group of personnel comprising the watch or a period of responsibility for an officer during which the physical presence in machinery spaces of that officer may or may not be required.

- (2) The officer in charge of the engineering watch is the chief engineer officer's representative and is primarily responsible at all times for the safe and efficient operation and upkeep of machinery affecting the safety of the ship and is responsible for the inspection, operation and testing, as required, of all machinery and equipment under the responsibility of the engineering watch.

2 Watch arrangements

- (1) The composition of the engineering watch shall at all times be adequate to ensure the safe operation of all machinery affecting the operation of the ship, in either automated or manual mode, and be appropriate to the prevailing circumstances and conditions.
- (2) When deciding the composition of the engineering watch, which may include appropriately qualified ratings, the following criteria, *inter alia*, shall be taken into account:
 - (a) the type of ship and the type and condition of the machinery;
 - (b) the adequate supervision, at all times, of machinery affecting the safe operation of the ship;
 - (c) any special modes of operation dictated by conditions such as weather, ice, contaminated water, shallow water, emergency conditions, damage containment or pollution abatement;
 - (d) the qualifications and experience of the engineering watch;
 - (e) the safety of life, ship, cargo and port, and protection of the environment;
 - (f) the observance of international and national regulations;
 - (g) maintaining the normal operations of the ship.

3 Taking over the watch

- (1) The officer in charge of the engineering watch shall not hand over the watch to the relieving officer if there is reason to believe that the latter is obviously not capable of carrying out the watchkeeping duties effectively, in which case the chief engineer officer shall be notified.
- (2) The relieving officer of the engineering watch shall ensure that the members of the relieving engineering watch are apparently fully capable of performing their duties effectively.
- (3) Before taking over the engineering watch, relieving officers shall satisfy themselves about at least the following:
 - (a) the standing orders and special instructions of the chief engineer officer relating to the operation of the ship's systems and machinery;
 - (b) the nature of all work being performed on machinery and systems, the personnel involved and potential hazards;

- (c) the level and, where applicable, the condition of water or residues in bilges, ballast tanks, slop tanks, reserve tanks, fresh water tanks, sewage tanks and any special requirements for use or disposal of tank contents;
- (d) the condition and level of fuel in the reserve tanks, settling tank, day tank and other fuel storage facilities;
- (e) any special requirements relating to sanitary system disposals;
- (f) the condition and mode of operation of the various main and auxiliary systems, including the electrical power distribution system;
- (g) where applicable, the condition of monitoring and control console equipment, and which equipment is being operated manually;
- (h) where applicable, the condition and mode of operation of automatic boiler controls such as flame safeguard control systems, limit control systems, combustion control systems, fuel-supply control systems and other equipment related to the operation of steam boilers;
- (i) any potentially adverse conditions resulting from bad weather, ice, or contaminated or shallow water;
- (j) any special modes of operation dictated by equipment failure or adverse ship conditions;
- (k) the reports of engine-room ratings relating to their assigned duties;
- (l) the availability of fire-fighting appliances;
- (m) the state of completion of the engine-room log.

4 Performing the engineering watch

- (1) The officer in charge of the engineering watch shall ensure that the established watchkeeping arrangements are maintained and that, under direction, engine-room ratings, if forming part of the engineering watch, assist in the safe and efficient operation of the propulsion machinery and auxiliary equipment.
- (2) The officer in charge of the engineering watch shall continue to be responsible for machinery-space operations, despite the presence of the chief engineer officer in the machinery spaces, until specifically informed that the chief engineer officer has assumed that responsibility and this is mutually understood.
- (3) All members of the engineering watch shall be familiar with their assigned watchkeeping duties. In addition, every member shall, with respect to the ship in which they are serving, have knowledge of:
 - (a) the use of appropriate internal communication systems;
 - (b) the escape routes from machinery spaces;

- (c) the engine-room alarm systems and be able to distinguish between the various alarms, with special reference to the fire- extinguishing media alarm; and
 - (d) the number, location and types of fire-fighting equipment and damage-control gear in the machinery spaces, and their use and the various safety precautions to be observed.
- (4) Any machinery not functioning properly, expected to malfunction or requiring special service shall be noted along with any action already taken. Plans shall be made for any further action if required.
 - (5) When the machinery spaces are in the manned condition, the officer in charge of the engineering watch shall at all times be readily capable of operating the propulsion equipment in response to needs for changes in direction or speed.
 - (6) When the machinery spaces are in the periodically unmanned condition, the designated duty officer in charge of the engineering watch shall be immediately available and on call to attend the machinery spaces.
 - (7) All bridge orders shall be promptly executed. Changes in direction or speed of the main propulsion units shall be recorded, except where the Authority has determined that the size or characteristic of a particular ship make such recording impracticable. The officer in charge of the engineering watch shall ensure that the main propulsion unit controls, when in the manual mode of operation, are continuously attended under stand-by or manoeuvring conditions.
 - (8) Due attention shall be paid to the ongoing maintenance and support of all machinery, including mechanical, electrical, electronic, hydraulic and pneumatic systems, their control apparatus and associated safety equipment, all accommodation service systems equipment and the recording of stores and spare gear usage.
 - (9) chief engineer officer shall ensure that the officer in charge of the engineering watch is informed of all preventive maintenance, damage control, or repair operations to be performed during the engineering watch. The officer in charge of the engineering watch shall be responsible for the isolation, bypassing and adjustment of all machinery under the responsibility of the engineering watch that is to be worked on, and shall record all work carried out.
 - (10) When the engine-room is put in a stand-by condition, the officer in charge of the engineering watch shall ensure that all machinery and equipment that may be used during manoeuvring is in a state of immediate readiness and that an adequate reserve of power is available for steering gear and other requirements.
 - (11) Officers in charge of an engineering watch shall not be assigned or undertake any duties that would interfere with their supervisory duties in respect of the main propulsion system and ancillary equipment. They shall keep the main propulsion plant and auxiliary systems under constant supervision until properly relieved, and shall periodically inspect the machinery in their charge. They shall also ensure that adequate rounds of the machinery and steering-gear spaces are made for the purpose of

observing and reporting equipment malfunction or breakdown, performing or directing routine adjustments, required upkeep and any other necessary tasks.

- (12) Officers in charge of an engineering watch shall direct any other member of the engineering watch to inform them of potentially hazardous conditions that may adversely affect the machinery or jeopardize the safety of life or of the ship.
- (13) The officer in charge of the engineering watch shall ensure that the machinery space watch is supervised, and shall arrange for substitute personnel in the event of the incapacity of any engineering watch personnel. The engineering watch shall not leave the machinery spaces unsupervised in a manner that would prevent the manual operation of the engine-room plant or throttles.
- (14) The officer in charge of the engineering watch shall take the action necessary to contain the effects of damage resulting from equipment breakdown, fire, flooding, rupture, collision, stranding, or other cause.
- (15) Before going off duty, the officer in charge of the engineering watch shall ensure that all vents related to the main and auxiliary machinery that have occurred during the engineering watch are suitably recorded.
- (16) The officer in charge of the engineering watch shall co-operate with any engineer in charge of maintenance work during all preventive maintenance, damage control or repairs. This shall include but not necessarily be limited to:
 - (a) isolating and bypassing machinery to be worked on;
 - (b) adjusting the remaining plant to function adequately and safely during the maintenance period;
 - (c) recording, in the engine-room log or other suitable document, the equipment worked on and the personnel involved, and which safety steps have been taken and by whom, for the benefit of relieving officers and for record purposes; and
 - (d) testing and putting into service, when necessary, the repaired machinery or equipment.
- (17) The officer in charge of the engineering watch shall ensure that any engine-room ratings that perform maintenance duties are available to assist in the manual operation of machinery in the event of automatic equipment failure.
- (18) The officer in charge of the engineering watch shall bear in mind that changes in speed, resulting from machinery malfunction, or any loss of steering, may imperil the safety of the ship and life at sea. The bridge shall be notified immediately in the event of fire and of any impending action in machinery spaces that may cause reduction in the ship's speed, imminent steering failure, stoppage of the ship's propulsion system or any alteration in the generation of electric power or similar threat to safety. This notification, where possible, shall be given before changes are made to allow the bridge the maximum available time to take whatever action is possible to avoid a potential marine casualty.

- (19) The officer in charge of the engineering watch shall notify the chief engineer officer without delay:
- (a) when engine damage or a malfunction occurs that may be such as to endanger the safe operation of the ship;
 - (b) when any malfunction occurs that, it is believed, may cause damage or breakdown of propulsion machinery, auxiliary machinery or monitoring and governing systems; and
 - (c) in any emergency or if in any doubt about what decision or measures to take.
- (20) Despite the requirement to notify the chief engineer officer in the foregoing circumstances, the officer in charge of the engineering watch shall in addition not hesitate to take immediate action for the safety of the ship, its machinery and crew, where circumstances so require.
- (21) The officer in charge of the engineering watch shall give the watchkeeping personnel all appropriate instructions and information that will ensure the keeping of a safe engineering watch. Routine machinery upkeep, performed as incidental tasks as a part of keeping a safe watch, shall be set up as an integral part of the watch routine. Detailed repair maintenance involving repairs to electrical, mechanical, hydraulic, pneumatic or applicable electronic equipment throughout the ship shall be performed with the cognizance of the officer in charge of the engineering watch and chief engineer officer. These repairs shall be recorded.

5 Engineering watchkeeping under different conditions and in different areas

(1) Restricted visibility

The officer in charge of the engineering watch shall ensure that permanent air or steam pressure is available for sound signals and that at all times bridge orders relating to changes in speed or direction of operation are immediately implemented and, in addition, that auxiliary machinery used for manoeuvring is readily available.

(2) Coastal and congested waters

The officer in charge of the engineering watch shall ensure that all machinery involved with the manoeuvring of the ship can immediately be placed in the manual mode of operation when notified that the ship is in congested waters. The officer in charge of the engineering watch shall also ensure that an adequate reserve of power is available for steering and other manoeuvring requirements. Emergency steering and other auxiliary equipment shall be ready for immediate operation.

(3) Ship at anchor

- (a) At an unsheltered anchorage the chief engineer officer shall consult with the master whether or not to maintain the same engineering watch as when under way.

- (b) When a ship is at anchor in an open roadstead or any other virtually "at-sea" condition, the officer in charge of the engineering watch shall ensure that:
 - (i) an efficient engineering watch is kept;
 - (ii) periodic inspection is made of all operating and stand-by machinery;
 - (iii) main and auxiliary machinery is maintained in a state of readiness in accordance with orders from the bridge;
 - (iv) measures are taken to protect the environment from pollution by the ship, and that applicable pollution-prevention regulations are complied with; and
 - (v) all damage-control and fire-fighting systems are in readiness.

Division 4 Principles to be observed in keeping a radio watch

1 General

Masters and radio watchkeeping personnel shall comply with the following provisions to ensure that an adequate safety radio watch is maintained while the ship is at sea. In complying with this annex, account shall be taken of regulation 16 and the radio regulations.

2 Watch arrangements

In deciding the arrangements for the radio watch, the master of every ship shall:

- (1) ensure that the radio watch is maintained in accordance with the relevant provisions of the radio regulations.
- (2) ensure that the primary duties for radio watchkeeping are not adversely affected by attending to radio traffic not relevant to the safe movement of the ship and safety of navigation; and
- (3) take into account the radio equipment fitted on board and its operational status.

3 Performing the radio watch

- (1) The radio operator performing radio watchkeeping duties shall:
 - (a) ensure that watch is maintained on the frequencies specified in the radio regulations; and
 - (b) while on duty, regularly check the operation of the radio equipment and its sources of energy and report to the master any observed failure of this equipment.
- (2) The requirements of the radio regulations relating to the keeping of a radiotelegraph or radio log, as appropriate, shall be complied with.

- (3) The maintenance of radio records, in compliance with the requirements of the radio regulations, is the responsibility of the radio operator designated as having primary responsibility for radio communications during distress incidents. The following shall be recorded, together with the times at which they occur:
 - (a) a summary of distress, urgency and safety radio communications;
 - (b) important incidents relating to the radio service;
 - (c) where appropriate, the position of the ship at least once per day;
 - (d) a summary of the condition of the radio equipment, including its sources of energy.
- (4) The radio records shall be kept at the distress communications operating position, and shall be made available for inspection by the master, a surveyor, or any duly authorised officer carrying out port State control.

Part 4 Watchkeeping in port

Division 1 Principles applying to all watchkeeping

1 General

On any ship safely moored or safely at anchor under normal circumstances in port, the Master shall arrange for an appropriate and effective watch to be maintained for the purpose of safety. Special requirements may be necessary for special types of ships' propulsion systems or ancillary equipment and for ships carrying hazardous, dangerous, toxic or highly flammable materials or other special types of cargo.

2 Watch arrangements

- (1) Arrangements for keeping a deck watch when the ship is in port shall at all times be adequate to:
 - (a) ensure the safety of life, of the ship, the port and the environment, and the safe operation of all machinery related to cargo operations;
 - (b) observe international and national regulations; and
 - (c) maintain order and the normal routine of the ship.
- (2) The Master shall decide the composition and duration of the deck watch depending on the conditions of mooring, type of ship and character of duties.
- (3) If the Master considers it necessary, a qualified officer shall be in charge of the deck watch.

- (4) The necessary equipment shall be so arranged as to provide for efficient watchkeeping.
- (5) The chief engineer officer, in consultation with the Master, shall ensure that engineering watchkeeping arrangements are adequate to maintain a safe engineering watch while in port. When deciding the composition of the engineering watch, which may include appropriate engine-room ratings, the following points are among those to be taken into account:
 - (a) on all ships of 3000kW propulsion power or more there shall always be an officer in charge of the engineering watch;
 - (b) on ships of less than 3000kW propulsion power there may be, at the Master's discretion and in consultation with the chief engineer officer, no officer in charge of the engineering watch; and
 - (c) officers, while in charge of an engineering watch, shall not be assigned or undertake any task or duty that would interfere with their supervisory duty in respect of the ship's machinery system.

3 Taking over the watch

- (1) Officers in charge of the deck or engineering watch shall not hand over the watch to their relieving officer if they have any reason to believe that the latter is obviously not capable of carrying out watchkeeping duties effectively, in which case the master or chief engineer shall be notified accordingly. Relieving officers of the deck or engineering watch shall ensure that all members of their watch are apparently fully capable of performing their duties effectively.
- (2) If, at the moment of handing over the deck or engineering watch, an important operation is being performed it shall be concluded by the officer being relieved, except when ordered otherwise by the Master or chief engineer officer.

4 Taking over the deck watch

- (1) Before taking over the deck watch, the relieving officer shall be informed about the following by the officer in charge of the deck watch:
 - (a) the depth of the water at the berth; the ship's draught; the level and time of high and low waters; the securing of the moorings, the arrangement of anchors and the scope of the anchor chain, and other mooring features important to the safety of the ship; the state of main engines and their availability for emergency use;
 - (b) all work to be performed on board the ship; the nature, amount and disposition of cargo loaded or remaining, and any residue on board after unloading the ship;
 - (c) the level of water in bilges and ballast tanks;
 - (d) the signals or lights being sounded or exhibited;

- (e) the number of crew members required to be on board and the presence of any other persons on board;
 - (f) the state of fire-fighting appliances;
 - (g) any special port regulations;
 - (h) the master's standing and special orders;
 - (i) the lines of communication available between the ship and shore personnel, including port authorities, in the event of an emergency arising or assistance being required;
 - (j) any other circumstances of importance to the safety of the ship, its crew, cargo or protection of the environment from pollution;
 - (k) the procedures for notifying the appropriate authority of any environmental pollution resulting from ship activities.
- (2) Relieving officers, before assuming charge of the deck watch, shall ensure that:
- (a) the securing of moorings and anchor chain is adequate;
 - (b) the appropriate signals or lights are properly exhibited or sounded;
 - (c) safety measures and fire protection regulations are being maintained;
 - (d) they are aware of the nature of any hazardous or dangerous cargo being loaded or discharged and the appropriate action to be taken in the event of any spillage or fire;
 - (e) no external conditions or circumstances imperil the ship and that it does not imperil others; and
 - (f) they are aware of any ballasting or de-ballasting operations in progress and, where applicable, the current status of anti-heeling pumps and systems.

5 Taking over the engineering watch

- (1) Before taking over the engineering watch, the relieving officer shall be informed about the following by the officer in charge of the engineering watch:
- (a) the standing orders of the day, any special orders relating to the ship operations, maintenance functions, repairs to the ship's machinery or control equipment;
 - (b) the nature of all work being performed on machinery and systems on board ship, personnel involved and potential hazards;
 - (c) the level and condition, where applicable, of water or residue in bilges, ballast tanks, slop tanks, sewage tanks, reserve tanks and special requirements for the use or disposal of tank contents;

- (d) any special requirements relating to sanitary system disposals;
 - (e) the condition and state of readiness of portable fire- extinguishing equipment and fixed fire-extinguishing installations and fire-detection systems;
 - (f) authorised repair personnel on board engaged in engineering activities, their work locations and repair functions and other authorised persons on board and the required crew;
 - (g) any port regulations pertaining to ship effluents, fire-fighting requirements and ship readiness, particularly during potential bad weather conditions;
 - (h) the lines of communication available between the ship and shore personnel, including port authorities, in the event of an emergency arising or assistance being required;
 - (i) any other circumstances of importance to the safety of the
 - (j) ship, its crew, cargo or the protection of the environment from pollution;
 - (k) the procedures for notifying the appropriate authority of any environmental pollution resulting from engineering activities.
- (2) Relieving officers, before assuming charge of the engineering watch, shall satisfy themselves that they are fully informed by the officer being relieved, as outlined above, and:
- (a) be familiar with existing and potential sources of power, heat and lighting and their distribution;
 - (b) know the availability and condition of ship's fuel, lubricants and all water supplies; and
 - (c) be ready to prepare the ship and its machinery, as far as is possible, for stand-by or emergency conditions as required.

6 Performing the deck watch

The officer in charge of the deck watch shall:

- (1) make rounds to inspect the ship at appropriate intervals;
- (2) pay particular attention to
 - (a) the condition and securing of the gangway, anchor chain and moorings, especially at the turn of the tide and in berths with a large rise and fall, if necessary, taking measures to ensure that they are in normal working condition;
 - (b) the draught, under-keel clearance and the general state of the ship, to avoid dangerous listing or trim during cargo handling or ballasting;
 - (c) the weather and sea state;

- (d) the observance of all regulations concerning safety and fire protection;
 - (e) the water level in bilges and tanks;
 - (f) all persons on board and their location, especially those in remote or enclosed spaces; and
 - (g) the exhibition and sounding, where appropriate, of lights and signals;
- (3) in bad weather, or on receiving a storm warning, take the necessary measures to protect the ship, persons on board and cargo;
 - (4) take every precaution to prevent pollution of the environment by the ship;
 - (5) in an emergency threatening the safety of the ship, raise the alarm, inform the master, take all possible measures to prevent any damage to the ship, its cargo and persons on board, and, if necessary, request assistance from the shore authorities or neighbouring ships;
 - (6) be aware of the ship's stability condition so that, in the event of fire, the shore fire-fighting authority may be advised of the approximate quantity of water that can be pumped on board without endangering the ship;
 - (7) offer assistance to ships or persons in distress;
 - (8) take necessary precautions to prevent accidents or damage when propellers are to be turned; and
 - (9) enter in the appropriate log-book all important events affecting the ship.

7 Performing the engineering watch

- (1) Officers in charge of the engineering watch shall pay particular attention to:
 - (a) the observance of all orders, special operating procedures and regulations concerning hazardous conditions and their prevention in all areas in their charge;
 - (b) the instrumentation and control systems, monitoring of all power supplies, components and systems in operation;
 - (c) the techniques, methods and procedures necessary to prevent violation of the pollution regulations of the local authorities; and
 - (d) the state of the bilges.
- (2) Officers in charge of the engineering watch shall:
 - (a) in emergencies, raise the alarm when in their opinion the situation so demands, and take all possible measures to prevent damage to the ship, persons on board and cargo;

- (b) be aware of the deck officer's needs relating to the equipment required in the loading or unloading of the cargo and the additional requirements of the ballast and other ship stability control systems;
- (c) make frequent rounds of inspection to determine possible equipment malfunction or failure, and take immediate remedial action to ensure the safety of the ship, of cargo operations, of the port and the environment;
- (d) ensure that the necessary precautions are taken, within their area of responsibility, to prevent accidents or damage to the various electrical, electronic, hydraulic, pneumatic and mechanical systems of the ship; and
- (e) ensure that all important events affecting the operation, adjustment or repair of the ship's machinery are satisfactorily recorded.

Division 2 - Watch in port on ships carrying hazardous cargo

1 General

- (1) The Master of every ship carrying cargo that is hazardous, whether explosive, flammable, toxic, health-threatening or environment- polluting, shall ensure that safe watchkeeping arrangements are maintained. On ships carrying hazardous cargo in bulk, this will be achieved by the ready availability on board of a duly qualified officer or officers, and ratings where appropriate, even when the ship is safely moored or safely at anchor in port.
- (2) On ships carrying hazardous cargo other than in bulk, the Master shall take full account of the nature, quantity, packing and stowage of the hazardous cargo and of any special conditions on board, afloat and ashore.

2 Cargo watch

Officers with the responsibility for the planning and conduct of cargo operations shall ensure that such operations are conducted safely through the control of the specific risks, including when non-ship's personnel are involved.

ANNEX 2

WATCHKEEPING PRINCIPLES AND ARRANGEMENTS FOR FISHING VESSELS

Part 1 Voyage planning

1 General

- (1) The intended voyage shall, as far as possible, be planned in advance taking into account all pertinent information, and any course laid down shall be checked before the voyage begins.
- (2) The chief engineer officer shall, in consultation with the master, determine in advance the needs of the intended voyage, taking into account the requirements for fuel, water, lubricants, chemicals, expendable and other spare parts, tools, supplies and any other requirements.

Part 2 Watchkeeping at sea

Division 1- Principles applying to watchkeeping generally

1 General

- (1) The following principles shall be observed to ensure that safe watches are maintained at all times.
- (2) The Master of every fishing vessel shall ensure that watchkeeping arrangements are adequate for maintaining a safe navigational watch. Under the Master's general direction, the officers of the watch are responsible for navigating the vessel safely during their periods of duty, when they will be particularly concerned with avoiding collision and stranding.
- (3) The chief engineer officer of every fishing vessel shall, in consultation with the Master, ensure that watchkeeping arrangements are adequate to maintain a safe engineering watch.
- (4) The watch system shall be such that the efficiency of watchkeeping personnel is not impaired by fatigue. Duties shall be so organized that the first watch at the commencement of a voyage and the subsequent relieving watches are sufficiently rested and otherwise fit for duty.

2 Protection of marine environment

The Master, officers and ratings shall be aware of the serious effects of operational and accidental pollution of the marine environment and shall take all possible precautions to

prevent such pollution, particularly within the framework of relevant international and national regulations.

Principles to be observed in keeping a navigational watch

1 General

The officer in charge of the navigational watch is the master's representative and is primarily responsible at all times for the safe navigation of the vessel and for complying with the collision regulations.

2 En route to or from fishing grounds

(1) Watch arrangements

- (a) The composition of the navigational watch shall at all times be adequate and appropriate to the prevailing circumstances and conditions, and shall take into account the need for maintaining a proper look-out.
- (b) When deciding the composition of the navigational watch, the following factors, *inter alia*, shall be taken into account:
 - (i) at no time is the wheelhouse to be left unattended;
 - (ii) weather conditions, visibility and whether there is daylight or darkness;
 - (iii) proximity of navigational hazards that may make it necessary for the officer in charge of the watch to carry out additional navigational duties;
 - (iv) use and operational condition of navigational aids such as radar or electronic position-indicating devices and of any other equipment affecting the safe navigation of the vessel;
 - (v) whether the vessel is fitted with automatic steering;
 - (vi) any unusual demands on the navigational watch that may arise as a result of special operational circumstances.

(2) Navigation

- (a) During the watch, course steered, position and speed shall be checked at sufficiently frequent intervals, using any available navigational aids necessary to ensure that the vessel follows the planned course.
- (b) The officer in charge of the navigational watch shall have full knowledge of the location and operation of all safety and navigational equipment on board the vessel, and shall be aware and take account of the operating limitations of such equipment.

- (c) The officer in charge of a navigational watch shall not be assigned or undertake any duties that would interfere with the safe navigation of the vessel.

(3) *Navigational equipment*

- (a) The officer in charge of the navigational watch shall make the most effective use of all navigational equipment at the officer's disposal.
- (b) When using radar, the officer in charge of the navigational watch shall bear in mind the necessity to comply at all times with the provisions on the use of radar contained in the collision regulations.
- (c) In cases of need, the officer of the navigational watch shall not hesitate to use the helm, engines, and sound and light signalling apparatus.

(4) *Navigational duties and responsibilities*

- (a) The officer in charge of the navigational watch shall:
 - (i) keep watch in the wheel house;
 - (ii) in no circumstances leave the wheelhouse until properly relieved;
 - (iii) continue to be responsible for the safe navigation of the vessel despite the presence of the master in the wheelhouse, until informed specifically that the master has assumed that responsibility and this is mutually understood;
 - (iv) notify the master when in any doubt as to what action to take in the interest of safety; and
 - (v) not hand over the watch to a relieving officer if there is reason to believe that the latter is not capable of carrying out the watchkeeping duties effectively, in which case the Master shall be notified.
- (b) On taking over the navigational watch, the relieving officer shall confirm and be satisfied about the vessel's estimated or true position and confirm its intended track, course and speed, and shall note any dangers to navigation expected to be encountered during the watch and any traffic in the immediate vicinity.
- (c) Whenever practicable, a proper record shall be kept of the movements and activities during the navigational watch relating to the navigation of the vessel.

(5) *Look-out*

- (a) A proper look-out shall be maintained in compliance with rule 5 of annex to the collision regulations. It shall serve the purpose of:
 - (i) maintaining a continuous state of vigilance by sight and hearing as well as by all other available means, with regard to any significant changes in the operating environment;

- (ii) fully appraising the situation and the risk of collision, stranding and other dangers to navigation; and
 - (iii) detecting ships or aircraft in distress, shipwrecked persons, wrecks and debris.
- (b) In determining that the composition of the navigational watch is adequate to ensure that a proper look-out can continuously be maintained, the master shall take into account all relevant factors, including those described under item 5.1 of this annex, as well as the following factors:
- (i) visibility, and state of weather and sea;
 - (ii) traffic density, and other activities occurring in the area in which the vessel is navigating;
 - (iii) the attention necessary when navigating in or near traffic separation schemes and other routeing measures;
 - (iv) the additional workload caused by the nature of the vessel's functions, immediate operating requirements and anticipated manoeuvres;
 - (v) rudder and propeller control and vessel manoeuvring characteristics;
 - (vi) the fitness for duty of any crew members on call who may be assigned as members of the watch;
 - (vii) knowledge of and confidence in the professional competence of the vessel's officers and crew;
 - (viii) the experience of the officer of the navigational watch and the familiarity of that officer with the vessel's equipment, procedures, and manoeuvring capability;
 - (ix) activities taking place on board the vessel at any particular time, and the availability of assistance to be summoned immediately to the wheelhouse when necessary;
 - (x) the operational status of instrumentation in the wheelhouse and controls, including alarm systems;
 - (xi) the size of the vessel and the field of vision available from the conning position;
 - (xii) the configuration of the wheelhouse, to the extent the configuration might inhibit a member of the watch from detecting by sight or hearing any external developments;
 - (xiii) any relevant standards, procedures and guidelines relating to watchkeeping arrangements and fitness for duty that have been specified in a marine notice.

(6) *Weather conditions*

The officer in charge of the navigational watch shall take relevant measures and notify the master when adverse changes in weather could affect the safety of the vessel, including conditions leading to ice accretion.

3 Navigation with pilot on board

The presence of a pilot on board does not relieve the master or officer in charge of the navigational watch from their duties and obligations for the safety of the vessel. The master and the pilot shall exchange information regarding navigation procedures, local conditions and the vessel's characteristics. The master and the officer in charge of the navigational watch shall co-operate closely with the pilot and maintain an accurate check of the vessel's position and movement.

4 Vessels engaged in fishing or searching for fish

- (1) In addition to the principles in item 5 of this annex, the following factors shall be taken into account and properly acted upon by the officer in charge of the navigational watch:
 - (a) other vessels engaged in fishing and their gear, own vessel's manoeuvring characteristics, particularly its stopping distance and the diameter of turning circle at sailing speed and with the fishing gear overboard;
 - (b) safety of the crew on deck;
 - (c) adverse effects on the safety of the vessel and its crew through reduction of stability and freeboard caused by exceptional forces resulting from fishing operations, catch handling and stowage, and unusual sea and weather conditions;
 - (d) the proximity of offshore structures, with special regard to any safety zones;
 - (e) wrecks and other underwater obstacles that could be hazardous for fishing gear.
- (2) When stowing the catch, attention shall be given to the essential requirements for adequate freeboard, adequate stability and watertight integrity at all times during the voyage to the landing port, taking into account consumption of fuel and stores, risk of adverse weather conditions and, especially in winter, risk of ice accretion on or above exposed decks in areas where ice accretion is likely to occur.

5 Vessel at anchor

The Master shall ensure, with a view to the safety of the vessel and the crew, that a proper watch is maintained at all times from the wheelhouse or deck on fishing vessels at anchor.

6 Performing the navigational watch

- (1) The officer in charge of the navigational watch shall:
 - (a) keep the watch on the bridge;
 - (b) in no circumstances leave the bridge until properly relieved;
 - (c) continue to be responsible for the safe navigation of the ship, despite the presence of the Master on the bridge, until informed specifically that the Master has assumed that responsibility and this is mutually understood; and
- (2) During the watch, the course steered, position and speed shall be checked at sufficiently frequent intervals, using any available navigational aids necessary, to ensure that the ship follows the planned course.
- (3) The officer in charge of the navigational watch shall have full knowledge of the location and operation of all safety and navigational equipment on board the ship and shall be aware and take account of the operating limitations of the equipment.
- (4) The officer in charge of the navigational watch shall not be assigned or undertake any duties that would interfere with the safe navigation of the ship.
- (5) When using radar, the officer in charge of the navigational watch shall bear in mind the necessity to comply at all times with the provisions on the use of radar contained in the collision regulations.
- (6) In cases of need, the officer in charge of the navigational watch shall not hesitate to use the helm, engines and sound signalling apparatus. However, timely notice of intended variations of engine speed shall be given where possible or effective use made of UMS engine controls provided on the bridge in accordance with the applicable procedures.
- (7) Officers of the navigational watch shall know the handling characteristics of their ship, including its stopping distances, and should appreciate that other ships may have different handling characteristics.
- (8) A proper record shall be kept during the watch of the movements and activities relating to the navigation of the ship.
- (9) It is of special importance that at all times the officer in charge of the navigational watch ensures that a proper look-out is maintained. In a ship with a separate chartroom, the officer in charge of the navigational watch may visit the chartroom, when essential, for a short period for the necessary performance of navigational duties, but shall first ensure that it is safe to do so and that proper look-out is maintained.
- (10) Operational tests of shipboard navigational equipment shall be carried out at sea as frequently as practicable and as circumstances permit, in particular before hazardous conditions affecting navigation are expected. Whenever appropriate, these tests shall be recorded. Tests shall also be carried out before port arrival and departure.

- (11) The officer in charge of the navigational watch shall make regular checks to ensure that:
 - (a) the person steering the ship, or the automatic pilot, is steering the correct course;
 - (b) the standard and gyro-compasses are frequently compared and repeaters are synchronized with their master compass;
 - (c) the automatic pilot is tested manually at least once a watch;
 - (d) the navigation and signal lights and other navigational equipment are functioning properly; and
- (12) the radio equipment available in the bridge is functioning properly in accordance with the radio regulations; and
- (13) The officer in charge of the navigational watch shall take into account that with a ship under automatic steering, it is highly dangerous to allow a situation to develop to the point where the officer in charge of the navigational watch is without assistance and has to break the continuity of the look-out in order to take emergency action.
- (14) Officers of the navigational watch shall be thoroughly familiar with the use of all electronic navigational aids carried, including their capabilities and limitations, and shall use each of these aids when appropriate and shall bear in mind that the echo sounder is a valuable navigational aid.
- (15) The officer in charge of the navigational watch shall use the radar whenever restricted visibility is encountered or expected, and at all times in congested waters, having due regard to its limitations.
- (16) The officer in charge of the navigational watch shall ensure that range scales employed are changed at sufficiently frequent intervals so that echoes are detected as early as possible. It shall be borne in mind that small or poor echoes may escape detection.
- (17) Whenever radar is in use, the officer in charge of the navigational watch shall select an appropriate range scale and observe the display carefully, and shall ensure that plotting or systematic analysis begins in ample time.
- (18) The officer in charge of the navigational watch shall notify the Master immediately:
 - (a) if restricted visibility is encountered or expected;
 - (b) if the traffic conditions or the movements of other ships are causing concern;
 - (c) if difficulty is experienced in maintaining course;
 - (d) on failure to sight land, a navigation mark or to obtain soundings by the expected time;
 - (e) if, unexpectedly, a land or a navigation mark is sighted or a change in soundings occurs;

- (f) on breakdown of the engines, propulsion machinery remote control, steering gear or any essential navigational equipment, alarm or indicator;
 - (g) if the radio equipment malfunctions;
 - (h) in heavy weather, if in any doubt about the possibility of weather damage;
 - (i) if the ship meets any hazard to navigation, such as ice or a derelict; and
 - (j) in any other emergency or if in any doubt.
- (19) Despite the requirement to notify the Master immediately in the foregoing circumstances, the officer in charge of the navigational watch shall in addition not hesitate to take immediate action for the safety of the ship, where circumstances so require.
- (20) The officer in charge of the navigational watch shall give watchkeeping personnel all appropriate instructions and information that will ensure the keeping of a safe watch, including a proper look-out.

7 Watchkeeping under different conditions and in different areas

(1) *Clear weather*

- (a) The officer in charge of the navigational watch shall take frequent and accurate compass bearings of approaching ships as a means of early detection of risk of collision and bear in mind that such risk may sometimes exist even when an appreciable bearing change is evident, particularly when approaching a very large ship or a tow or when approaching a ship at close range. The officer shall also take early and positive action in compliance with the applicable collision regulations, and subsequently check that the action is having the desired effect.
- (b) In clear weather, whenever possible, the officer in charge of the navigational watch shall carry out radar practice.

(2) *Ship at anchor*

If the Master considers it necessary, a continuous navigational watch shall be maintained at anchor. While at anchor, the officer in charge of the navigational watch shall:

- (a) determine and plot the ship's position on the appropriate chart as soon as practicable;
- (b) when circumstances permit, check at sufficiently frequent intervals whether the ship is remaining securely at anchor by taking bearings of fixed navigation marks or readily identifiable shore objects;
- (c) ensure that proper look-out is maintained;
- (d) ensure that inspection rounds of the ship are made periodically;

- (e) observe meteorological and tidal conditions and the state of the sea;
- (f) notify the master and undertake all necessary measures if the ship drags anchor;
- (g) ensure that the state of readiness of the main engines and other machinery is in accordance with the master's instructions;
- (h) if visibility deteriorates, notify the Master;
- (i) ensure that the ship exhibits the appropriate lights and shapes and that appropriate sound signals are made in accordance with all applicable regulations;
- (j) take measures to protect the environment from pollution by the ship and comply with applicable pollution regulations.

Principles to be observed in keeping an engineering watch

1 General

- (1) The term *engineering watch* as used in this annex means either a person or a group of personnel comprising the watch or a period of responsibility for an officer during which the physical presence in machinery spaces of that officer may or may not be required.
- (2) The officer in charge of the engineering watch is the chief engineer officer's representative and is primarily responsible at all times for the safe and efficient operation and upkeep of machinery affecting the safety of the vessel and is responsible for the inspection, operation and testing, as required, of all machinery and equipment under the responsibility of the engineering watch.

2 Watch arrangements

- (1) The composition of the engineering watch shall at all times be adequate and appropriate to the prevailing circumstances and conditions and shall take into account the need to ensure the safe operation of all machinery affecting the operation of the vessel.
- (2) When deciding the composition of the engineering watch, the following criteria, *inter alia*, shall be taken into account:
 - (a) the type of vessel and the type and condition of the machinery;
 - (b) the adequate supervision, at all times, of machinery affecting the safe operation of the vessel;
 - (c) any special modes of operation dictated by conditions such as weather, ice, contaminated water, shallow water, emergency conditions, damage containment or pollution abatement;

- (d) the qualifications and experience of the engineering watch;
- (e) the safety of life, ship, cargo and port and protection of the environment;
- (f) the observance of relevant international and national regulations;
- (g) maintaining the normal operations of the vessel.

3 Taking over the watch

- (1) The officer in charge of the engineering watch shall not hand over the watch to the relieving officer if there is reason to believe that the latter is obviously not capable of carrying out the watchkeeping duties effectively, in which case, the chief engineer officer shall be notified.
- (2) The relieving officer of the engineering watch shall ensure that the members of the relieving engineering watch are apparently fully capable of performing their duties effectively.
- (3) Before taking over the engineering watch, relieving officers shall satisfy themselves about at least the following:
 - (a) the standing orders and special instructions of the chief engineer officer relating to the operation of the vessel's systems and machinery;
 - (b) the nature of all work being performed on machinery and systems, the personnel involved and potential hazards;
 - (c) the level and, where applicable, the condition of water or residues in bilges, ballast tanks, slop tanks, reserve tanks, fresh water tanks, sewage tanks and any special requirements for use or disposal of tank contents;
 - (d) the condition and level of fuel in reserve tanks, settling tank, day tank and other fuel storage facilities;
 - (e) any special requirements relating to sanitary system disposals;
 - (f) the condition and mode of operation of the various main and auxiliary systems, including the electrical power distribution system;
 - (g) where applicable, the condition of monitoring and control console equipment, and which equipment is being operated manually;
 - (h) where applicable, the condition and mode of operation of automatic boiler controls such as flame safeguard control systems, limit control systems, combustion control systems, fuel-supply control systems and other equipment related to the operation of steam boilers;
 - (i) any potentially adverse conditions resulting from bad weather, ice, or contaminated or shallow water;

- (j) any special modes of operation dictated by equipment failure or adverse vessel conditions;
- (k) the availability of fire-fighting appliances;
- (l) the state of completion of the engine-room log.

4 Performing the engineering watch

- (1) The officer in charge of the engineering watch shall ensure that the established watchkeeping arrangements are maintained and that, under direction, other personnel, if forming part of the engineering watch, assist in the safe and efficient operation of the vessel's propulsion machinery and auxiliary equipment.
- (2) The officer in charge of the engineering watch shall continue to be responsible for machinery-space operations despite the presence of the chief engineer officer in the machinery spaces, until specifically informed that the chief engineer officer has assumed that responsibility and this is mutually understood.
- (3) All members of the engineering watch shall be familiar with their assigned watchkeeping duties. In addition, every member shall, with respect to the vessel in which they are serving, have knowledge of:
 - (a) the use of appropriate internal communication systems;
 - (b) the escape routes from machinery spaces;
 - (c) the engine-room alarm systems and be able to distinguish between the various alarms, with special reference to the fire- extinguishing media alarm; and
 - (d) the number, location and types of fire-fighting equipment and damage-control gear in the machinery spaces, and their use and the various safe precautions to be observed.
- (4) Any machinery not functioning properly, expected to malfunction or requiring special service shall be noted along with any action already taken. Plans shall be made for any further action if required.
- (5) When machinery spaces are in the manned condition, the officer in charge of the engineering watch shall at all times be readily capable of operating the propulsion equipment in response to needs for changes in direction or speed.
- (6) When machinery spaces are in the periodically unmanned condition, the designated duty officer in charge of the engineering watch shall be immediately available and on call to attend the machinery spaces.
- (7) The officer in charge of the engineering watch shall ensure that the main propulsion unit controls, when in the manual mode of operation, are continuously attended under stand-by or manoeuvring conditions.
- (8) When the engine-room is put in a stand-by condition, the officer in charge of the engineering watch shall ensure that all machinery and equipment that may be used

during manoeuvring is in a state of immediate readiness and that an adequate reserve of power is available for steering gear and other requirements.

- (9) Officers in charge of an engineering watch shall direct any other member of the engineering watch to inform them of potentially hazardous conditions that may adversely affect the machinery or jeopardise the safety of life or of the vessel.
- (10) Before going off duty, the officer in charge of the engineering watch shall ensure that all events related to the main and auxiliary machinery that have occurred during the engineering watch are suitably recorded.
- (11) The officer in charge of the engineering watch shall bear in mind that changes in speed, resulting from machinery malfunction, or any loss of steering, may imperil the safety of the ship and life at sea. The bridge shall be notified immediately in the event of fire and of any impending action in machinery spaces that may cause reduction in the vessel's speed, imminent steering failure, stoppage of the vessel's propulsion system or any alteration in the generation of electric power or similar threat to safety. This notification, where possible, shall be given before changes are made to allow the bridge the maximum available time to take whatever action is possible to avoid a potential marine casualty.
- (12) The officer in charge of the engineering watch shall notify the chief engineer officer without delay:
 - (a) when engine damage or a malfunction occurs that may be such as to endanger the safe operation of the vessel;
 - (b) when any malfunction occurs that, it is believed, may cause damage or breakdown of propulsion machinery, auxiliary machinery or monitoring and governing systems; and
 - (c) in any emergency or if in any doubt about what decision or measures to take.
- (13) Despite the requirement to notify the chief engineer officer in the foregoing circumstances, the officer in charge of the engineering watch shall not hesitate to take immediate action for the safety of the vessel, its machinery and crew where circumstances require.

5 Restricted visibility

The officer in charge of the engineering watch shall ensure that permanent air or steam pressure is available for sound signals and that at all times bridge orders relating to changes in speed or direction of operation are immediately implemented and, in addition, that auxiliary machinery used for manoeuvring is readily available.

6 Vessel at anchor

- (1) At an unsheltered anchorage the chief engineer officer shall consult with the master whether or not to maintain the same engineering watch as when under way.

- (2) When a vessel is at anchor in an open roadstead or any other virtually "at-sea" condition, the officer in charge of the engineering watch shall ensure that:
- (a) an efficient engineering watch is kept;
 - (b) periodic inspection is made of all operating and stand-by machinery;
 - (c) main and auxiliary machinery is maintained in a state of readiness in accordance with orders from the bridge;
 - (d) measures are taken to protect the environment from pollution by the vessel, and that applicable pollution-prevention regulations are complied with; and
 - (e) all damage-control and fire-fighting systems are in readiness.

Division 4 Principles to be observed in keeping a radio watch

1 General

The Master shall ensure that an adequate radio watch is maintained while the vessel is at sea, on appropriate frequencies, taking into account the requirements of the radio regulations.

Printed by and obtainable from the Government Printer, Bosman Street, Private Bag X85, Pretoria, 0001
Publications: Tel: (012) 334-4508, 334-4509, 334-4510
Advertisements: Tel: (012) 334-4673, 334-4674, 334-4504
Subscriptions: Tel: (012) 334-4735, 334-4736, 334-4737
Cape Town Branch: Tel: (021) 465-7531

Gedruk deur en verkrygbaar by die Staatsdrukker, Bosmanstraat, Privaatsak X85, Pretoria, 0001
Publikasies: Tel: (012) 334-4508, 334-4509, 334-4510
Advertensies: Tel: (012) 334-4673, 334-4674, 334-4504
Subskripsies: Tel: (012) 334-4735, 334-4736, 334-4737
Kaapstad-tak: Tel: (021) 465-7531