



MARINE DEPARTMENT  
GOVERNMENT OF THE HONG KONG  
SPECIAL ADMINISTRATIVE REGION

---

**Certificates of Proficiency  
for Able Seafarers' Determinations**

**(2016 Edition)**

---

Made under Section 9(3) of the  
Merchant Shipping (Seafarers) (Certificates of Proficiency for Able Seafarers) Regulation  
(Cap.478AI)

---

**Marine Department**  
**The Hong Kong Special Administrative Region**

First Edition 2016

MERCHANT SHIPPING (SEAFARERS) ORDINANCE  
(CHAPTER 478)

**Certificates of Proficiency  
for Able Seafarers' Determinations**

**(2016 Edition)**

Made under Section 9(3) of the  
Merchant Shipping (Seafarers) (Certificates of Proficiency for Able Seafarers) Regulation  
(Cap.478AI)

## TABLE OF CONTENTS

	<u>Page</u>
<u>Section 1</u> - Commencement, Interpretation and General Requirements	1
Commencement	1
Interpretation	1
General Requirements	1
Transitional Provisions	2
<u>Section 2</u> - Certificates of Proficiency, General Provisions	3
Certificates of Proficiency for Able Seafarers	3
Application	3
Enquiries	3
Particulars of Sea Service	4
Use of Information	4
Fraud or Misrepresentation	4
Attempted Bribery	5
Quality Standards	5
Issue of Certificates	5
Fees	5
Issue of Replacement Certificate	5
<u>Section 3</u> - Sea Service	7
General	7
<u>Section 4</u> - Qualifying Requirements	8
Certificate of Proficiency for Able Seafarers Deck	8
Certificate of Proficiency for Able Seafarers Engine	10
Medical Fitness Certificate	12
<u>Section 5</u> - On Board Training	13
On Board Training Record Book	13
<u>APPENDIX</u>	
Appendix I - Standards of Competence of Ratings as Able Seafarer Deck	18
Appendix II - Standards of Competence of Ratings as Able Seafarer Engine	22

## SECTION 1

### COMMENCEMENT, INTERPRETATION & GENERAL REQUIREMENTS

#### 1.1 Commencement

- 1.1.1 The Certificates of Proficiency for Able Seafarers' Determinations (the Determinations) are made by the Seafarers' Authority (hereafter referred to as "the Authority") under powers granted by the Merchant Shipping (Seafarers) (Certificates of Proficiency for Able Seafarers) Regulation (Cap.478AI) and are the first edition that shall be effected on 1 December 2016.

#### 1.2 Interpretation

- 1.2.1 In the Determinations, unless the context otherwise requires:

**"approved"** means approved or recognized by the Director of Marine;

**"Authority"** means the Seafarers' Authority established by section 4(1) of the Merchant Shipping (Seafarers) Ordinance, Cap.478. For the purposes of the Determinations, Director of Marine is the Authority;

**"Convention"** means the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, 1978, as from time to time revised or amended by any revision or amendment to any provision of such Convention that applies to Hong Kong;

**"Director"** means the Director of Marine;

**"rating"** means a seafarer other than –

- (a) the master;
- (b) an officer; or
- (c) a seafarer not directly connected with the normal manning of the ship;

**"registered person"** means a person whose name is entered in the register kept pursuant to section 7 of the Merchant Shipping (Seafarers) Ordinance, Cap.478;

**"STCW Code"** means the Seafarers' Training, Certification and Watchkeeping Code published by the International Maritime Organization, as from time to time revised or amended by any revision or amendment to any provision of such Code that applies to Hong Kong.

#### 1.3 General Requirements

- 1.3.1 The subsequent sections of the Determinations set out the training and qualification requirements for able seafarers and the conditions to be satisfied by any person to qualify for a certificate of proficiency for able seafarers, the manner in which the attainment of such standards or the satisfaction of such conditions is to be established,

- the procedure for the application and issue of a certificate of proficiency for able seafarers.
- 1.3.2 Any person who feels aggrieved by any decision of the Authority to refuse to issue a certificate of proficiency may appeal against the decision to the Administrative Appeals Board within 30 days of being informed of such decision.
- 1.3.3 The Director may, at his discretion, permit exemption from any or all of the provisions of the Determinations.

#### **1.4 Transitional Provisions**

- 1.4.1 During the transitional period, a contravention of section 4 or 6 does not constitute an offence under section 15 of the Merchant Shipping (Seafarers) (Certificates of Proficiency for Able Seafarers) Regulation (Cap.478AI).
- 1.4.2 In this section –  
**transitional period** means the period beginning on 1 December 2016 and ending on 31 December 2016.

## **SECTION 2**

### **CERTIFICATES OF PROFICIENCY**

#### **GENERAL PROVISIONS**

#### **2.1 Certificates of Proficiency for Able Seafarers**

2.1.1 Certificate of Proficiency means any of the following certificates issued under the Merchant Shipping (Seafarers) (Certificates of Proficiency for Able Seafarers) Regulation (Cap.478AI) –

- (a) Certificate of Proficiency for Able Seafarers Deck; and
- (b) Certificate of Proficiency for Able Seafarers Engine.

#### **2.2 Application**

2.2.1 The applicant for a certificate of proficiency must complete an application form which may be obtained from the Marine Department, Seafarers' Certification Section, or by post from:

Marine Department  
Seafarers' Certification Section  
3/F Harbour Building  
38 Pier Road  
Central  
Hong Kong

The application form could also be downloaded from the Marine Department's website (<http://www.mardep.gov.hk/en/forms/home.html>).

2.2.2 Applicants should return the completed application form to the Seafarers' Certification Section together with the documents as stated in the application form.

2.2.3 The application must be accompanied by any evidence as may be necessary to establish that the requirements and conditions for the issue of the certificate being applied for have been satisfied.

2.2.4 It is important that the correct procedure for application is followed as discharges may have to be forwarded for verification which can take time, and in the absence of such verification the application cannot be processed.

#### **2.3 Enquiries**

2.3.1 Applicants may make enquiries about their application and when doing so, should ensure that the point on which information is sought is clearly stated. Enquiries should be addressed to:

Seafarers' Certification Section  
Marine Department

3/F Harbour Building  
38 Pier Road  
Central  
Hong Kong

Tel. No. : (852) 2852 4368  
Fax No. : (852) 2541 6754  
E-mail : [sscrt@mardep.gov.hk](mailto:sscrt@mardep.gov.hk)

## **2.4 Particulars of Sea Service**

- 2.4.1 An applicant's eligibility for a certificate of proficiency will depend, amongst other factors, on the amount of sea service performed and upon the seagoing ranks in which the applicant has served. It is, therefore, imperative that the particulars which applicants enter on the application form are accurately stated.
- 2.4.2 The amount of sea service set down in the Determinations for the Certificate of Proficiency for Able Seafarers is the **absolute minimum** that can be accepted. Unless applicants can prove the full amount they will not be issued with a certificate.

## **2.5 Use of Information**

- 2.5.1 Information required by the application form will be used by Marine Department for the process of application for and issue of certificate. This information may be divulged to other departments and agencies authorised to process the information for the mentioned purposes. Limited personal data of successful applicant may be used via the Marine Department's website for verification of the issued certificate of proficiency by any third parties.
- 2.5.2 Supply of information is obligatory. An applicant should ensure that all the information filled in the application form is accurate. Failure to do so may, besides subject to paragraph 2.6, result in an unsuccessful application.
- 2.5.3 For making correction and access to personal data after submission of application form, an applicant may contact the following officer:

Officer-in-charge  
Marine Department  
Seafarers' Certification Section  
3/F Harbour Building  
38 Pier Road  
Central  
Hong Kong

## **2.6 Fraud or Misrepresentation**

- 2.6.1 Applicants are reminded that the Merchant Shipping (Seafarers) (Certificates of Proficiency for Able Seafarers) Regulation (Cap.478AI) provides that any person who, in connection with an application for the issue of a certificate of proficiency:



- (a) makes a false pretence; or
- (b) supplies false information,

knowing it to be false, or not believing it to be true, commits an offence and is liable, amongst other things, to a fine and to imprisonment.

## **2.7 Attempted Bribery**

- 2.7.1 Any applicant who offers an advantage to any officer of the Marine Department shall be guilty of an offence under the Prevention of Bribery Ordinance and shall be liable on summary conviction to a fine and to imprisonment. Such an applicant will not be issued with a certificate for such a period as may be decided by the Director.

## **2.8 Quality Standards**

- 2.8.1 The education and training courses which an applicant attends to satisfy the training requirements for the issue of a certificate of proficiency shall generally follow a quality standards system or an alternative system acceptable to the Director. A list of the approved training courses can be found at the Marine Department's website ([http://www.mardep.gov.hk/en/pub\\_services/exam.html](http://www.mardep.gov.hk/en/pub_services/exam.html)).

## **2.9 Issue of Certificates**

- 2.9.1 Applicants who are successful in meeting all the requirements for the issue of a certificate of proficiency being applied for, will be issued with a certificate of proficiency. When the certificate is ready it will be forwarded by post to the applicant's address as given on the application form, unless the applicant wishes to make other arrangements.
- 2.9.2 To avoid unnecessary delays in the issue of certificates, it is important that applicants should inform the Marine Department promptly of any change to the address given on the application form.

## **2.10 Fees**

- 2.10.1 Applicants for the certificate of proficiency will be required to pay the prescribe fee (presently the fee is NIL) before any steps are taken to verify their eligibility for the issue of the certificate.

## **2.11 Issue of Replacement Certificate**

- 2.11.1 If a certificate of proficiency is lost, destroyed, damaged or defaced, the holder may apply to the Seafarers' Certification Section for a replacement certificate. A fee will be charged (presently the fee is HK\$ 155) for the replacement certificate unless the holder can show that the certificate was lost as a result of shipwreck or fire on board ship. An applicant for a replacement certificate will be required to make a declaration to the Officer-in-charge of the Seafarers' Certification Section regarding the circumstances

in which the certificate was lost. Upon the issue of a copy certificate, the certificate that was lost, destroyed, damaged or defaced ceases to be valid.

## **SECTION 3**

### **SEA SERVICE**

#### **3.1 General**

- 3.1.1 This section specifies provisions relating to qualifying sea service.
- 3.1.2 Except where otherwise specified, the qualifying sea service required for any certificate of proficiency is the service performed in ships which proceed to sea and which are actively engaged in commercial trading.
- 3.1.3 Qualifying sea service means time spent on board ship reckoned from the date of engagement to the date of discharge. Subject to verification, as and when necessary, certificates of discharge will be accepted as proof of sea service.
- 3.1.4 Proof of sea service for applicants serving on Hong Kong registered ships can be verified by the Mercantile Marine Office of Marine Department. Sea service on other ships must be confirmed by the Master(s) of the ship(s) concerned, or by the Consul or other recognized authority of the flag State. However, such confirmation will not necessarily be deemed sufficient.
- 3.1.5 Calculations of voyage length for the purpose of establishing sea service should be made in calendar months and days. When it happens that an applicant has signed off and signed on again on the same day, that day may only be counted once. To calculate total sea service, the length of each voyage should be added together in months and days. The total of days should then be divided by 30 to give months, and residual days. The months should then be added as the total months.

## SECTION 4

### QUALIFYING REQUIREMENTS

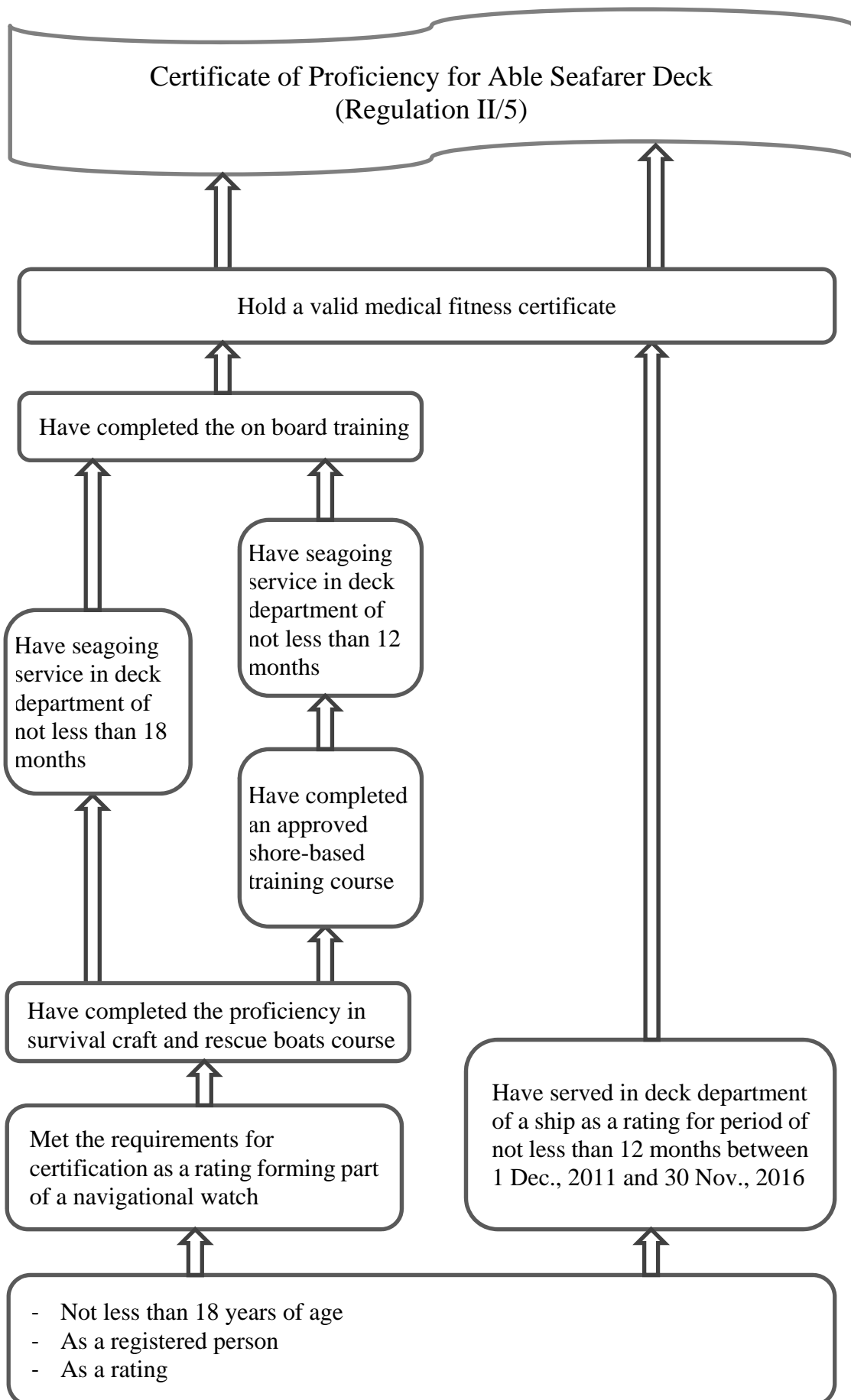
#### **4.1 Certificate of Proficiency for Able Seafarers Deck**

4.1.1 To qualify for the issue of a Certificate of Proficiency for Able Seafarers Deck in Hong Kong, an applicant must:

- (a) be a registered person;
- (b) be a rating;
- (c) be not less than 18 years of age; and
- (d) (I) (i) have completed the on board training record for the issue of a Certificate of Proficiency for Able Seafarers Deck;
- (ii) have met the requirements for certification as a rating forming part of a navigational watch;
- (iii) have completed approved proficiency in survival craft and rescue boats course or equivalent;
- (iv) while qualified to serve as a rating forming part of a navigational watch, have approved seagoing service in the deck department of:
  - \* not less than 18 months, or
  - \* not less than 12 months and have completed approved training;and
- (v) have met the standard of competence specified in section A-II/5 of the STCW Code (standard of competence is shown in the Appendix I);

or

- (II) have worked in the deck department of a ship as a rating to carry out any functions on board as specified in table A-II/5 of the STCW Code for an aggregate period of not less than 12 months within the period beginning on 1 December 2011 and ending on 30 November 2016.



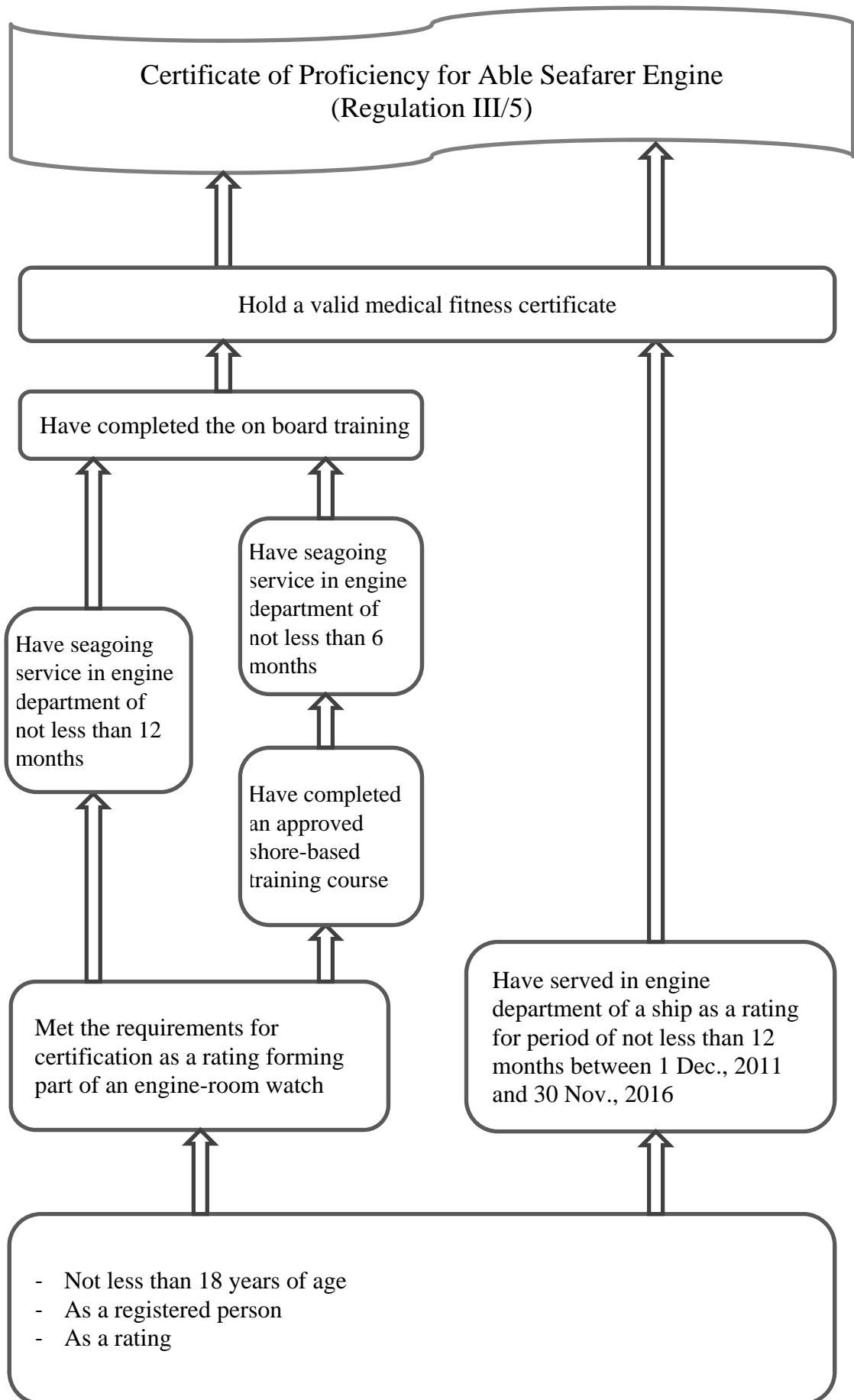
## 4.2 Certificate of Proficiency for Able Seafarers Engine

4.2.1 To qualify for the issue of a Certificate of Proficiency for Able Seafarers Engine in Hong Kong, an applicant must:

- (a) be a registered person;
- (b) be a rating;
- (c) be not less than 18 years of age; and
- (d) (I) (i) have completed the on board training record for the issue of a Certificate of Proficiency for Able Seafarers Engine;
- (ii) have met the requirements for certification as a rating forming part of a watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room;
- (iii) while qualified to serve as a rating forming part of an engineering watch, have approved seagoing service in the engine department of:
  - \* not less than 12 months, or
  - \* not less than 6 months and have completed approved training;and
- (iv) have met the standard of competence specified in section A-III/5 of the STCW Code (standard of competence is shown in the Appendix II);

or

- (II) have worked in the engine department of a ship as a rating to carry out any functions on board as specified in table A-III/5 of the STCW Code for an aggregate period of not less than 12 months within the period beginning on 1 December 2011 and ending on 30 November 2016.



### **4.3 Medical Fitness Certificate**

- 4.3.1 Proof of medical fitness is an essential requirement for the issue of any certificate of proficiency. Medical fitness may be proven by the production of a certificate of medical fitness issued not more than two years beforehand by an approved medical practitioner.
- 4.3.2 Applicants in Hong Kong may obtain from the Mercantile Marine Office a list of medical practitioners who are approved by the Director to issue medical fitness certificates. The list could also be downloaded from the Marine Department's website ([http://www.mardep.gov.hk/en/pub\\_services/home.html](http://www.mardep.gov.hk/en/pub_services/home.html)).



## SECTION 5

### ON BOARD TRAINING

#### **5.1 On Board Training Record Book**

- 5.1.1 Conditions stated in paragraph 4.1.1(d)(I)(i) and 4.2.1(d)(I)(i) requires rating to complete an on board training and is documented in an approved training record book. On board training programme including all the elements listed in paragraph 5.1.3 for deck ratings, or in paragraph 5.1.4 for engine room ratings, and the record of the training conducted in accordance with such programme are acceptable to the Director as the approved ones. Such training record book can be one prepared by seafarer's companies or training institutes as well as one published by maritime organizations.
- 5.1.2 A rating with his on board training falls short of the required training elements will be required to compensate by additional seagoing service, training courses or assessment as determined by the Director.
- 5.1.3 With respect to the paragraph 2.4 of Regulation II/5 of the STCW Convention, the supervised on board training should at least cover the following elements:
- (a) Safety and Shipboard Familiarization
    - (i) Watchkeeping procedures and arrangements
    - (ii) Safety and emergency procedure
    - (iii) Environmental protection
  - (b) Contribute to a safe navigational watch
    - (i) Ability to understand order and to communicate with the officer of the watch in matters relevant to watchkeeping duties
    - (ii) Procedures for the relief, maintenance and handover of a watch
    - (iii) Information required to maintain a safe watch
  - (c) Contribute to berthing, anchoring and other mooring operations
    - (i) Working knowledge of the mooring system and related procedures, including the capacities, safe working loads, and breaking strengths of mooring equipment including mooring wires, synthetic and fibre lines, winches, anchor windlasses, capstans, bitts, chocks and bollards
    - (ii) Working knowledge of the mooring system procedures and order of events for making fast and letting go mooring and tug lines and wires including towing lines
    - (iii) Working knowledge of the mooring system procedures and order of events for the use of anchors in various operations
    - (iv) Working knowledge of the procedure and order of events associated with mooring to a buoy or buoys
  - (d) Contribute to the handling of cargo and stores
    - (i) Knowledge of procedures for safe handling, stowage and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids
    - (ii) Basic knowledge of and precautions to observe in connection with particular types of cargo and identification of IMDG labelling
  - (e) Contribute to the safe operation of deck equipment and machinery
    - (i) Knowledge of deck equipment, including function and uses of valves and pumps, hoists, cranes, booms, and related equipment

- (ii) Knowledge of deck equipment, including function and uses of winches, windlasses, capstans and related equipment
  - (iii) Knowledge of deck equipment, including hatches, watertight doors, ports, and related equipment
  - (iv) Knowledge of deck equipment, including fibre and wire ropes, cables and chains, including their construction, use, markings, maintenance and proper stowage
  - (v) Knowledge of deck equipment, including ability to use and understand basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists
  - (vi) Knowledge of deck equipment, including ability to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies
  - (vii) Knowledge of procedures and ability to rig and unrig bosun's chairs and staging
  - (viii) Knowledge of procedures and ability to rig and unrig pilot ladders, hoists, rat-guards and gangways
  - (ix) Knowledge of procedures and ability to use marlin spike seamanship skills, including the proper use of knots, splices and stoppers
  - (x) Use and handling of deck and cargo handling gear and equipment including access arrangements, hatches and hatch covers, ramps, side/bow/stern doors or elevators
  - (xi) Use and handling of deck and cargo handling gear and equipment including pipeline systems – bilge and ballast suctions and wells
  - (xii) Use and handling of deck and cargo handling gear and equipment including cranes, derricks, winches
  - (xiii) Knowledge of hoisting and dipping flags and the main single flag signals. (A, B, G, H, O, P, Q)
- (f) Apply occupational health and safety precautions
- (i) Working knowledge of safe working practices and personal shipboard safety including working aloft
  - (ii) Working knowledge of safe working practices and personal shipboard safety including working over the side
  - (iii) Working knowledge of safe working practices and personal shipboard safety including working in enclosed spaces
  - (iv) Working knowledge of safe working practices and personal shipboard safety including permit to work systems
  - (v) Working knowledge of safe working practices and personal shipboard safety including line handling (e.g. mooring operations)
  - (vi) Working knowledge of safe working practices and personal shipboard safety including lifting techniques and methods of preventing back injury
  - (vii) Working knowledge of safe working practices and personal shipboard safety including electrical safety
  - (viii) Working knowledge of safe working practices and personal shipboard safety including mechanical safety
  - (ix) Working knowledge of safe working practices and personal shipboard safety including chemical and biohazard safety
  - (x) Working knowledge of safe working practices and personal shipboard safety including personal safety equipment
- (g) Apply precautions and contribute to the prevention of pollution of the marine environment

- (i) Knowledge of the precautions to be taken to prevent pollution of the marine environment
- (ii) Knowledge of the use and operation of anti-pollution equipment
- (iii) Knowledge of the approved methods for disposal of marine pollutants
- (h) Operate survival craft and rescue boats
  - (i) Knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment
  - (ii) Knowledge of survival at sea techniques
- (i) Contribute to shipboard maintenance and repair
  - (i) Knowledge of surface preparation techniques
  - (ii) Ability to use painting, lubrication and cleaning materials and equipment
  - (iii) Ability to understand and execute routine maintenance and repair procedures
  - (iv) Understanding manufacturer's safety guidelines and shipboard instructions
  - (v) Knowledge of safe disposal of waste materials
  - (vi) Knowledge of the application, maintenance and use of hand and power tools

5.1.4 With respect to the paragraph 2.4 of Regulation III/5 of the STCW Convention, the supervised on board training should at least cover the following elements:

- (a) Safety and Shipboard Familiarization
  - (i) Watchkeeping procedures and arrangements
  - (ii) Safety and emergency procedure
  - (iii) Environmental protection
- (b) Contribute to a safe engineering watch
  - (i) Ability to understand order and to communicate with the officer of the watch in matters relevant to watchkeeping duties
  - (ii) Procedures for the relief, maintenance and handover of a watch
  - (iii) Information required to maintain a safe watch
- (c) Contribute to the monitoring and controlling of an engine room watch
  - (i) Basic knowledge of the function and operation of main propulsion and auxiliary machinery
  - (ii) Basic understanding of main propulsion and auxiliary machinery control pressures, temperatures and levels
- (d) Contribute to fuelling and oil transfer operations
  - (i) Knowledge of the function and operation of fuel system and oil transfer operations, including preparations for fuelling and transfer operations
  - (ii) Knowledge of the function and operation of fuel system and oil transfer operations, including procedures for connecting and disconnecting fuelling and transfer hoses
  - (iii) Knowledge of the function and operation of fuel system and oil transfer operations, including procedures relating to incidents that may arise during fuelling or transferring operation
  - (iv) Knowledge of the function and operation of fuel system and oil transfer operations, including securing from fuelling and transfer operations
  - (v) Knowledge of the function and operation of fuel system and oil transfer operations, including ability to correctly measure and report tank levels
- (e) Contribute to bilge and ballast operations

- (i) Knowledge of the safe function, operation and maintenance of the bilge and ballast systems, including reporting incidents associated with transfer operations
- (ii) Knowledge of the safe function, operation and maintenance of the bilge and ballast systems, including ability to correctly measure and report tank levels
- (f) Contribute to the operation of equipment and machinery
  - (i) Safe operation of equipment, including valves and pumps
  - (ii) Safe operation of equipment, including hoists and lifting equipment
  - (iii) Safe operation of equipment, including hatches, watertight doors, ports and related equipment
  - (iv) Ability to use and understand basic crane, winch and hoist signals
- (g) Safe use of electrical equipment
  - (i) Safe use and operation of electrical equipment, including safety precautions before commencing work or repair
  - (ii) Safe use and operation of electrical equipment, including isolation procedures
  - (iii) Safe use and operation of electrical equipment, including emergency procedures
  - (iv) Safe use and operation of electrical equipment, including different voltages on board
  - (v) Knowledge of the causes of electric shock and precautions to be observed to prevent shock
- (h) Contribute to shipboard maintenance and repair
  - (i) Knowledge of surface preparation techniques
  - (ii) Ability to use painting, lubrication and cleaning materials and equipment
  - (iii) Knowledge of safe disposal of waste materials
  - (iv) Ability to understand and execute routine maintenance and repair procedures
  - (v) Understanding manufacturer's safety guidelines and shipboard instructions
  - (vi) Knowledge of the application, maintenance and use of hand and power tools and measuring instruments and machine tools
  - (vii) Knowledge of metalwork
- (i) Contribute to the handling of stores
  - (i) Knowledge of procedures for safe handling, stowage and securing of stores
- (j) Apply precautions and contribute to the prevention of pollution of the marine environment
  - (i) Knowledge of the precautions to be taken to prevent pollution of the marine environment
  - (ii) Knowledge of the use and operation of anti-pollution equipment
  - (iii) Knowledge of the approved methods for disposal of marine pollutants
- (k) Apply occupational health and safety procedures
  - (i) Working knowledge of safe working practices and personal shipboard safety, including electrical safety
  - (ii) Working knowledge of safe working practices and personal shipboard safety, including lockout/tag-out
  - (iii) Working knowledge of safe working practices and personal shipboard safety, including mechanical safety

- (iv) Working knowledge of safe working practices and personal shipboard safety, including permit to work systems
- (v) Working knowledge of safe working practices and personal shipboard safety, including working aloft
- (vi) Working knowledge of safe working practices and personal shipboard safety, including working in enclosed spaces
- (vii) Working knowledge of safe working practices and personal shipboard safety, including lifting techniques and methods of preventing back injury
- (viii) Working knowledge of safe working practices and personal shipboard safety, including chemical and biohazard safety
- (ix) Working knowledge of safe working practices and personal shipboard safety, including personal safety equipment

5.1.5 The training record book should also contain the following information:

- (a) Personal information of the candidate for certification, such as name, date of birth, residential address, seaman discharge book no. etc.
- (b) Company(ies) information which the candidate has been served such as company name, company address, service period for the particular training programme etc.
- (c) Ship(s) information which the candidate has been served such as ship's name, IMO Number, ship's type, ship's major particulars, engine particulars, lifesaving and fire-fighting equipment, cargo gears, navigational equipment etc.

**APPENDIX I**

**STANDARDS OF COMPETENCE OF RATINGS AS ABLE SEAFARER DECK**

Function (1): Navigation at the Support Level

Competence (i): Contribute to a safe navigational watch

<b>Content of Assessment</b>	<b>Criteria for Satisfactory Assessment</b>
<p>Ability to understand orders and to communicate with the officer of the watch on matters relevant to watchkeeping duties</p> <p>Procedures for the relief, maintenance and handover of a watch</p> <p>Information required to maintain a safe watch</p>	<p>Communications are clear and concise</p> <p>Maintenance, handover and relief of the watch is in conformity with acceptable practices and procedures</p>

Competence (ii): Contribute to berthing anchoring and other mooring operations

<b>Content of Assessment</b>	<b>Criteria for Satisfactory Assessment</b>
<p>Working knowledge of the mooring system and related procedures, including:</p> <p>.1 the function of mooring and tug lines and how each line functions as part of an overall system</p> <p>.2 the capacities, safe working loads, and breaking strengths of mooring equipment, including mooring wires, synthetic and fibre lines, winches, anchor windlasses, capstans, bits, chocks and bollards</p> <p>.3 the procedures and order of events for making fast and letting go mooring and tug lines and wires, including towing lines .4 the procedures and order of events for the use of anchors in various operations</p> <p>Working knowledge of the procedures and order of events associated with mooring to a buoy or buoys</p>	<p>Operations are carried out in accordance with established safety practices and equipment operating instructions</p>

Function (2): Cargo Handling and Stowage at the Support Level

Competence (i): Contribute to the handling of cargo and stores

<b>Content of Assessment</b>	<b>Criteria for Satisfactory Assessment</b>
<p>Knowledge of procedures for safe handling, stowage and securing of cargoes and stores, including dangerous, hazardous and harmful substances and liquids</p> <p>Basic knowledge of and precautions to observe in connection with particular types of cargo and</p>	<p>Cargo and stores operations are carried out in accordance with established safety procedures and equipment operating instructions</p> <p>The handling of dangerous, hazardous and harmful cargoes or stores complies with established safety</p>

identification of IMDG labelling	practices
----------------------------------	-----------

Function (3): Controlling the Operation of the Ship and Care for Persons On Board at the Support Level

Competence (i): Contribute to the safe operation of deck equipment and machinery

Content of Assessment	Criteria for Satisfactory Assessment
<p>Knowledge of deck equipment, including:</p> <ul style="list-style-type: none"> <li>.1 function and uses of valves and pumps, hoists, cranes, booms, and related equipment</li> <li>.2 function and uses of winches, windlasses, capstans and related equipment</li> <li>.3 hatches, watertight doors, ports, and related equipment</li> <li>.4 fibre and wire ropes, cables and chains, including their construction, use, markings, maintenance and proper stowage</li> <li>.5 ability to use and understand basic signals for the operation of equipment, including winches, windlasses, cranes, and hoists</li> <li>.6 ability to operate anchoring equipment under various conditions, such as anchoring, weighing anchor, securing for sea, and in emergencies</li> </ul> <p>Knowledge of the following procedures and ability to:</p> <ul style="list-style-type: none"> <li>.1 rig and unrig bosun's chairs and staging</li> <li>.2 rig and unrig pilot ladders, hoists, rat guards and gangways</li> <li>.3 use marlin spike seamanship skills, including the proper use of knots, splices and stoppers</li> </ul> <p>Use and handling of deck and cargo handling gear and equipment:</p> <ul style="list-style-type: none"> <li>.1 access arrangements, hatches and hatch covers, ramps, side/bow/stern doors or elevators</li> <li>.2 pipeline systems – bilge and ballast suction and wells</li> <li>.3 cranes, derricks, winches</li> </ul> <p>Knowledge of hoisting and dipping flags and the main single-flag signals. (A, B, G, H, O, P, Q)</p>	<p>Operations are carried out in accordance with established safety practices and equipment operating instructions</p> <p>Communications within the operator's area of responsibility are consistently successful</p> <p>Equipment operation is safely carried out in accordance with established procedures</p> <p>Demonstrate the proper methods for rigging and unrigging in accordance with safe industry practice</p> <p>Demonstrate the proper creation and use of knots, splices, stoppers, whippings, servings as well as proper canvas handling</p> <p>Demonstrate the proper use of blocks and tackle</p> <p>Demonstrate the proper methods for handling lines, wires, cables and</p>

	chains
--	--------

Competence (ii): Apply occupational health and safety precautions

Content of Assessment	Criteria for Satisfactory Assessment
Working knowledge of safe working practices and personal shipboard safety including: <ul style="list-style-type: none"> <li>.1 working aloft</li> <li>.2 working over the side</li> <li>.3 working in enclosed spaces</li> <li>.4 permit to work systems</li> <li>.5 line handling</li> <li>.6 lifting techniques and methods of preventing back injury</li> <li>.7 electrical safety</li> <li>.8 mechanical safety</li> <li>.9 chemical and biohazard safety</li> <li>.10 personal safety equipment</li> </ul>	Procedures designed to safeguard personnel and the ship are observed at all times  Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times

Competence (iii): Apply precautions and contribute to the prevention of pollution of the marine environment

Content of Assessment	Criteria for Satisfactory Assessment
Knowledge of the precautions to be taken to prevent pollution of the marine environment  Knowledge of the use and operation of antipollution equipment  Knowledge of the approved methods for disposal of marine pollutants	Procedures designed to safeguard the marine environment are observed at all times

Competence (iv): Operate survival craft and rescue boats

Content of Assessment	Criteria for Satisfactory Assessment
Knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment  Knowledge of survival at sea techniques	Actions in responding to abandon ship and survival situations are appropriate to the prevailing circumstances and conditions and comply with accepted safety practices and standards

Function (4): Maintenance and Repair at the Support Level

Competence (i): Contribute shipboard maintenance and repair



<b>Content of Assessment</b>	<b>Criteria for Satisfactory Assessment</b>
<p>Ability to use painting, lubrication and cleaning materials and equipment</p> <p>Ability to understand and execute routine maintenance and repair procedures</p> <p>Knowledge of surface preparation techniques</p> <p>Understanding manufacturer's safety guidelines and shipboard instructions</p> <p>Knowledge of safe disposal of waste materials</p> <p>Knowledge of the application, maintenance and use of hand and power tools</p>	<p>Maintenance and repair activities are carried out in accordance with technical, safety and procedural specifications</p>

## APPENDIX II

### STANDARDS OF COMPETENCE OF RATINGS AS ABLE SEAFARER ENGINE

Function (1): Marine Engineering at the Support Level

Competence (i): Contribute to a safe engineering watch

Content of Assessment	Criteria for Satisfactory Assessment
Ability to understand orders and to communicate with the officer of the watch on matters relevant to watchkeeping duties	Communications are clear and concise
Procedures for the relief, maintenance and handover of a watch	Maintenance, handover and relief of the watch is in conformity with acceptable practices and procedures
Information required to maintain a safe watch	

Competence (ii): Contribute to the monitoring and controlling of an engine-room watch

Content of Assessment	Criteria for Satisfactory Assessment
Basic knowledge of the function and operation of main propulsion and auxiliary machinery	The frequency and extent of monitoring of main propulsion and auxiliary machinery conforms with accepted principles and procedures
Basic understanding of main propulsion and auxiliary machinery control pressures, temperatures and levels	Deviations from the norm are identified
	Unsafe conditions or potential hazards are promptly recognized, reported and rectified before work continues

Competence (iii): Contribute to fuelling and oil transfer operations

Content of Assessment	Criteria for Satisfactory Assessment
Knowledge of the function and operation of fuel system and oil transfer operations, including:	Transfer operations are carried out in accordance with established safety practices and equipment operating instructions
.1 preparations for fuelling and transfer operations	
.2 procedures for connecting and disconnecting fuelling and transfer hoses	The handling of dangerous, hazardous and harmful liquids complies with established safety practices
.3 procedures relating to incidents that may arise during fuelling or transferring operation	Communications within the operator's area of responsibility are consistently successful
.4 securing from fuelling and transfer operations	
.5 ability to correctly measure and report tank levels	

Competence (iv): Contribute to bilge and ballast operations

Content of Assessment	Criteria for Satisfactory Assessment
-----------------------	--------------------------------------

<p>Knowledge of the safe function, operation and maintenance of the bilge and ballast systems, including:</p> <p>.1 reporting incidents associated with transfer operations</p> <p>.2 ability to correctly measure and report tank levels</p>	<p>Operations and maintenance are carried out in accordance with established safety practices and equipment operating instructions and pollution of the marine environment is avoided</p> <p>Communications within the operator's area of responsibility are consistently successful</p>
---	--

Competence (v): Contribute to the operation of equipment and machinery

<b>Content of Assessment</b>	<b>Criteria for Satisfactory Assessment</b>
<p>Safe operation of equipment, including:</p> <p>.1 valves and pumps</p> <p>.2 hoists and lifting equipment</p> <p>.3 hatches, watertight doors, ports and related equipment</p> <p>Ability to use and understand basic crane, winch and hoist signals</p>	<p>Operations are carried out in accordance with established safety practices and equipment operating instructions</p> <p>Communications within the operator's area of responsibility are consistently successful</p>

Function (2): Electrical, Electronic and Control Engineering at the Support Level

Competence (i): Safe use of electrical equipment

<b>Content of Assessment</b>	<b>Criteria for Satisfactory Assessment</b>
<p>Safe use and operation of electrical equipment, including:</p> <p>.1 safety precautions before commencing work or repair</p> <p>.2 isolation procedures</p> <p>.3 emergency procedures</p> <p>.4 different voltages on board</p> <p>Knowledge of the causes of electric shock and precautions to be observed to prevent shock</p>	<p>Recognizes and reports electrical hazards and unsafe equipment</p> <p>Understands safe voltages for hand-held equipment</p> <p>Understands risks associated with high-voltage equipment and onboard work</p>

Function (3): Maintenance and Repair at the Support Level

Competence (i): Contribute to shipboard maintenance and repair

<b>Content of Assessment</b>	<b>Criteria for Satisfactory Assessment</b>
<p>Ability to use painting, lubrication and cleaning materials and equipment</p> <p>Ability to understand and execute routine</p>	<p>Maintenance activities are carried out in accordance with technical, safety and procedural specifications</p>

maintenance and repair procedures Knowledge of surface preparation techniques Knowledge of safe disposal of waste materials Understanding manufacturer's safety guidelines and shipboard instructions Knowledge of the application, maintenance and use of hand and power tools and measuring instruments and machine tools Knowledge of metalwork	Selection and use of equipment and tools is appropriate
---	---

Function (4): Controlling the Operation of the Ship and Care for Persons On Board at the Support Level

Competence (i): Contribute to the handling of stores

Content of Assessment	Criteria for Satisfactory Assessment
Knowledge of procedures for safe handling, stowage and securing of stores	Stores operations are carried out in accordance with established safety practices and equipment operating instructions  The handling of dangerous, hazardous and harmful stores complies with established safety practices  Communications within the operator's area of responsibility are consistently successful

Competence (ii): Apply precautions and contribute to the prevention of pollution of the marine environment

Content of Assessment	Criteria for Satisfactory Assessment
Knowledge of the precautions to be taken to prevent pollution of the marine environment Knowledge of use and operation of anti-pollution equipment Knowledge of approved methods for disposal of marine pollutants	Procedures designed to safeguard the marine environment are observed at all times

Competence (iii): Apply occupational health and safety procedures

Content of Assessment	Criteria for Satisfactory Assessment
Working knowledge of safe working practices and personal shipboard safety, including: .1 electrical safety	Procedures designed to safeguard personnel and the ship are observed at all times

<ul style="list-style-type: none"><li>.2 lockout/tag-out</li><li>.3 mechanical safety</li><li>.4 permit to work systems</li><li>.5 working aloft</li><li>.6 working in enclosed spaces</li><li>.7 lifting techniques and methods of preventing back injury</li><li>.8 chemical and biohazard safety</li><li>.9 personal safety equipment</li></ul>	<p>Safe working practices are observed and appropriate safety and protective equipment is correctly used at all times</p>
--	---