

**Republic of the Philippines**  
**Department of Transportation and Communications**  
**MARITIME INDUSTRY AUTHORITY**  
**STCW OFFICE**

**STCW Circular No. 2014-11**

**TO: ALL SEAFARERS, MARITIME INDUSTRY STAKEHOLDERS, MARITIME HIGHER EDUCATION INSTITUTIONS, MARITIME TRAINING INSTITUTIONS, PORT STATE CONTROL, AND OTHER ENTITIES AND INDIVIDUALS CONCERNED**

**SUBJECT: MANDATORY MINIMUM REQUIREMENTS FOR EXAMINATION, ASSESSMENT, LICENSING AND CERTIFICATION OF SECOND ENGINEER OFFICERS (2E) ON SHIPS OF 750 kW PROPULSION POWER OR MORE**

Pursuant to Republic Act 10635 and its Implementing Rules and Regulations (IRR), the 1978 International Convention on Standards of Training, Certification and Watchkeeping (STCW), as amended, the following rules shall be adopted:

**1. OBJECTIVES**

- 1.1 To prescribe standards and procedures in full compliance with the requirements of STCW Chapter III for mandatory minimum requirements for examination, assessment and certification of Second Engineer Officer (2E) on a seagoing ship of 750 kW propulsion power or more; and
- 1.2 To streamline the examination, assessment, licensing and certification processes by ensuring that all candidates for Second Engineer Officer (2E) are adequately equipped and are in full compliance with the requirements of STCW, as amended.

**2. COVERAGE**

This Circular shall apply to all candidates for certification as Second Engineer Officer (2E) on ships of 750 kW propulsion power or more.

**3. DEFINITION OF TERMS**

For the purpose of this Circular, in addition to the terms defined under STCW Circular No. 2014-01, the following terms shall be defined as follows:

- 3.1 "Chief Engineer Officer" (CE) means the senior engineer officer responsible for the mechanical propulsion and the operation and maintenance of the mechanical and electrical installations of the ship;
- 3.2 "Second Engineer Officer" (2E) means the engineer officer next in rank to the chief engineer officer and upon whom the 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;

- 3.3 "Officer in Charge of an Engineering Watch" (OIC-EW) means an engineer officer in the operational level who has direct control over the performance of all functions within the designated area of responsibility in accordance with proper procedures and under the direction of the chief engineer officer or second engineer officer for that responsibility;
- 3.4 "Candidate" means any seafarer who intends to undergo assessment of competence to qualify for certification as Second Engineer Officer;
- 3.3 "Approved training record book" means the training record book (TRB) of Management Level - Engineer Officer, for a candidate for certification as Second Engineer Officer, approved by the Administration;
- 3.4 "Approved education and training program" means the Bachelor of Science in Marine Engineering Program, under supervision of the Commission on Higher Education (CHED), or a training program approved by the Administration for the purpose of qualification and certification under STCW;
- 3.5 "Re-sit" means taking the theoretical examination or practical assessment for the same competence, due to previous failure;
- 3.6 "Ancillary Proficiencies" for Second Engineer Officer, means:
  - .1 Basic Training;
  - .2 Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats;
  - .3 Advanced Fire Fighting; and
  - .4 Medical First Aid;
- 3.7 "Category-A" means a candidate with approved education and training for Management Level – Engine Officer that commenced on 01 April 2014 onwards (under MARINA MC 2014-01), in compliance with the STCW 2010 Amendments, but requires updating training;
- 3.8 "Category-B" means a candidate with approved education and training for Management Level – Engine Officer that commenced prior to 01 April 2014 onwards, in compliance with the STCW 1995 Amendments;
- 3.9 "Category-C" means a candidate without the approved education and training for Management Level – Engine Officer;
- 3.10 "Class I" means a Second Engineer Officer who is qualified and certificated for seagoing ships of Unlimited Propulsion Power, under the STCW Convention;
- 3.11 "Class II" means a Second Engineer Officer who is qualified and certificated for seagoing ships not exceeding 3,000 kW propulsion power, under the STCW Convention;

- 3.12 "Management Level Course - Deck" (MLCE) means the approved training program designed to be compliant with the required education and training for Management Level – Engineer Officer under the STCW, as amended;
- 3.13 "MLCE Category-A Updating Training" (MLCE-AUT) means the approved training program for a Category-A candidate, in order to be fully compliant with the required education and training for Management Level – Engine Officer under the STCW 2010 Amendments;
- 3.14 "MLCE Category-B Updating Training" (MLCE-BUT) means the approved training program for a Category-B candidate, in order to be fully compliant with the required education and training for Management Level – Engine Officer under the STCW 2010 Amendments;
- 3.15 "Continuing Professional Education for Second Engineer Officer" (CPE-2E) means the approved educational program for a candidate seeking renewal of MARINA License only, but with no intention of seeking revalidation of COC under the STCW Convention;
- 3.16 "Examination and Assessment Division" (EAD) means the Division under the STCW Office of MARINA, tasked to properly and efficiently implement examination and assessment standards and procedures in full compliance with the STCW, as amended, to ensure the qualifications of seafarers for the purpose of certification by the Administration;
- 3.17 "Seafarers' Certification System" (SCS) refers to the MARINA Seafarer's Certification System, where all the relevant data and documentary evidence relating to the issuance of the seafarer's STCW Certificates (COC, COP, COE) are systematically organized, and where all approved providers of such data and documentary evidence shall be enrolled in order for the Administration to validate the authenticity of such;
- 3.18 "MARINA License" means the professional seafarer's identity card issued by MARINA to Filipino professional mariners;
- 3.19 "Month" means a period of 30 days; hence a period of 12 months is 360 days.

#### **4. GENERAL REQUIREMENTS FOR ISSUANCE OF LICENSE AND CERTIFICATE OF COMPETENCY (C.O.C.) FOR SECOND ENGINEER OFFICER (2E) ON SHIPS OF 750 kW PROPULSION POWER OR MORE**

- 4.1 Every candidate for assessment of competence as Second Engineer Officer shall meet the standard of competence by passing the following:
  - .1 Theoretical examination (Annex 1, for Class I or Class II (with \*));
  - .2 Practical assessment (Annex 2); and
  - .3 Assessment of competence in Ancillary Proficiencies under Section A-VI/1.2, Section A-VI/2, Paragraphs 1 to 4, Section A-VI/3, Paragraphs 1 to 4, and Section A-VI/4, Paragraphs 1 to 3 of the STCW Code, by completing:
    - .1 Basic Training;

- .2 Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats;
  - .3 Advanced Fire Fighting; and
  - .4 Medical First Aid.
- 4.2 The candidate for theoretical examination as Second Engineer Officer on ships of 750 kW propulsion power or more shall satisfy the requirements for certification under STCW, Regulations III/2 and III/3, as appropriate (see Annex 1).
- 4.3 The candidate for certification shall also submit:
- .1 Proof of successful completion of the approved MLCE, or its approved alternative(s);
  - .2 Proof of approved seagoing service, the latest of which is not beyond 5 years ago, for a period of:
    - .1 For Class I:
      - .1 Not less than 12 months as OIC-EW on ships of 750 kW propulsion power or more;
    - .2 For Class II, while a holder of valid COC as OIC-EW on ships of 750 kW propulsion power or more:
      - .1 Not less than 12 months as OIC-EW or assistant engineer officer (any engineer officer position lower than 2E) on ships of 750 kW propulsion power or more; or
      - .2 Not less than 36 months as OIC-EW or assistant engineer officer (any engineer officer position lower than 2E) on ships between 100 kW and 750 kW propulsion power;
- 4.4 The candidate may complete the above requirements separately, independently, and in any order, but each element, including the Medical Certificate, shall be valid at the time of application for COC as Second Engineer Officer;

## **5. THEORETICAL EXAMINATION**

### **5.1 SPECIFIC REQUIREMENTS FOR APPLICATION**

Every candidate for examination as Second Engineer Officer (2E) on ships of 750 kW propulsion power or more shall submit:

- .1 Birth Certificate showing that the candidate is not less than 20 years of age;
- .2 Approved seagoing service, for a period of:
  - .1 For Class I:
    - .1 Not less than 12 months as OIC-EW on ships of 750 kW propulsion power or more;
  - .2 For Class II, while a holder of valid COC as OIC-EW on ships of 750 kW propulsion power or more:
    - .1 Not less than 12 months as OIC-EW or assistant engineer officer (any engineer officer position lower than 2E) on ships of 750 kW propulsion power or more; or

- .2 Not less than 36 months as OIC-EW or assistant engineer officer (any engineer officer position lower than 2E) on ships between 100 kW and 750 kW propulsion power; and
- .3 In addition, the following requirements must be submitted under the following circumstances:
  - .1 If the approved seagoing service for Class I or Class II is beyond 5 years ago, proof of passing the theoretical examination for OIC-EW 750kW and above (based on STCW Circular 2014-09, Annex 1), compliant with the STCW 2010 Amendments, under Regulations III/2.2.1 and III/3.2.1;
  - .4 The above approved seagoing service may not be substituted with other types of approved service, as those equivalents may be allowed only for Revalidation of Certificate of Competency, under Section 12 of this Circular.
- .3 Approved Training Record Book (TRB) as proof of in-service experience that meets the requirements of specific Knowledge, Understanding and Proficiency (KUP) under certain competences, under Section A-III/2 of the STCW Code, while a holder of the COC for OIC-EW 750kW and above, as alternative to specific modules in the MLCE;
- .4 Valid Medical Certificate, which shall not be more than 2 years from the date of issuance, from DOH-accredited medical clinic/hospital with QSS in place, in accordance with Regulation I/9 of the STCW Convention;
- .5 Proof of successful completion of the approved MLCE, or its approved alternative(s); and
- .6 In relation to the alternative(s) under Paragraph 5.1.5 where the candidate claims partial completion of the management level education and training under the approved BSMarE, Transcript of Records (TOR) with S.O. Number, from an accredited MHEI, clearly showing the proof of partial completion of the approved education and training program that meets the standard of competence specified in Section A-III/2 of the STCW Code, or as otherwise approved by the Administration.

## 5.2 PROCEDURES FOR THEORETICAL EXAMINATION

The candidate shall:

### 5.2.1 Prior to taking the examination:

- .1 submit all the Specific Requirements under Section 5.1 to:
  - .1 STCW online system for uploading documents (except the TRB), as soon as MARINA has enabled the system; or if not yet enabled:
  - .2 the Examination and Assessment Division (EAD) of STCW Office of MARINA in Manila, or
  - .3 EAD's counterpart in any MARINA Regional Office that conducts theoretical examination;

- .2 secure an online appointment number, date and time, then proceed to EAD on the appointment schedule, with all the original documents, including the TRB;
- .3 after verification of validity and authenticity of Specific Requirements, complete the form "Application for Theoretical Examination as Second Engineer Officer";
- .4 indicate the particular competences that he intends to be examined on;
- .5 pay the corresponding examination fee, which shall be a fixed amount each time the candidate sits for the examination, whether taken in full, partially, or re-sit;
- .6 register in the Seafarers' Certification System;
- .7 secure a schedule from the EAD; and
- .8 proceed to the examination at the scheduled venue and time;

#### 5.2.2 During the examination:

- .1 report to the examination venue at least 30 minutes prior to schedule;
- .2 follow the instructions of the authorized MARINA personnel;
- .3 take the examination only for the competences indicated;
- .4 complete the examination in every competence indicated within the time allowed;
- .5 not leave the examination premises until after taking the examination, as scheduled;

#### 5.2.3 After taking the examination:

- .1 secure his ratings in the various competences;
- .2 note the competence(s) with a failing mark, or with insufficient mark (for Class I), if any; and
- .3 schedule for re-sit, if necessary; or
- .4 schedule other competences not yet taken, if necessary;

### 5.3 REQUIREMENTS FOR SUCCESSFUL PASSING OF THE THEORETICAL EXAMINATION

For successfully passing and completing the theoretical examination, the following shall be complied with:

- .1 The candidate shall pass all the competences within a period not exceeding 2 years (24 months) (see Annex 1 – Class I or Class II);
- .2 If the candidate fails to complete all the competences within the 2-year period, those that received a "PASSED" mark beyond 2 years shall expire, and shall be re-examined accordingly;
- .3 The candidate may choose as many competences as he intends to take in one sitting;
- .4 However, a candidate who fails in 3 or more competences in one sitting shall not be allowed to apply for re-sit within a 1-month period ("The 3-1 Rule");
- .5 A candidate who fails in a particular competence for 3 times, shall not be allowed to apply for re-sit in such competence, until upon showing proof of:



- .1 approved seagoing service for a period of not less than 3 months, with a certification from the ship's chief engineer officer that the candidate has undergone on board experience relating to that particular competence ("The 3-3 Rule"); or
- .2 successful completion of an approved training or refresher program relating to that particular competence, taken after the third failure;

## **6. PRACTICAL ASSESSMENT OF COMPETENCE**

### **6.1 SPECIFIC REQUIREMENTS FOR APPLICATION**

- .1 Every candidate for practical assessment of competence as Second Engineer Officer (2E) on ships of 750 kW propulsion power or more shall submit the following to the approved assessment institution, the following approved education and training:
  - .1 If Category-A, proof of successful completion of MLCE and MLCE-AUT; or
  - .2 If Category-B, proof of successful completion of MLCE and MLCE-BUT; or
  - .3 MLCE fully-compliant version to STCW 2010 Amendments;;
- .2 The different Functions of the approved education and training referred to in Paragraph 6.1 above may be taken in different MTIs;
- .3 Every candidate shall be pre-registered in the SCS for the practical assessment to be valid.

### **6.2 PROCEDURES FOR PRACTICAL ASSESSMENT OF COMPETENCE**

Every candidate for practical assessment of competence shall demonstrate competence by presenting the following (see Annex 2):

- .1 Under Function 1 (Marine engineering at the management level), proof of passing the assessment of competence on the following areas, after successful completion of approved training in Function 1 of MLCE (or equivalent of IMO Model Course 7.02):
  - .1 Manage the operation of propulsion plant machinery;
  - .2 Plan and schedule operations;
  - .3 Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery;
  - .4 Manage fuel, lubrication, and ballast operations;
- .2 Under Function 2 (Electrical, electronic and control engineering at the management level), proof of passing the assessment of competence on the following areas, after successful completion of approved training in Function 2 of MLCE (or equivalent of IMO Model Course 7.02):

- .1 Manage operation of electrical and electronic control equipment;
- .2 Manage troubleshooting, restoration of electrical and electronic control equipment to operating condition;
- .3 Under Function 3 (Maintenance and repair at the management level), proof of passing the assessment of competence on the following areas, after successful completion of approved training in Function 3 of MLCE (or equivalent of IMO Model Course 7.02):
  - .1 Detect and identify the cause of machinery malfunctions and correct faults;
- .4 Under Function 4 (Controlling the operation of the ship and care for persons at the management level), proof of passing the assessment of competence on the following areas, after successful completion of approved training in Function 4 of MLCE (or equivalent of IMO Model Course 7.02):
  - .1 Control trim, stability and stress;
  - .2 Use of leadership and managerial skill.

### **6.3 REQUIREMENTS FOR SUCCESSFUL PASSING OF THE PRACTICAL ASSESSMENT OF COMPETENCE**

For successfully passing and completing the practical assessment of competence, the following shall be complied with (see Annex 2):

- .1 The candidate shall pass all the required competences within a period not exceeding 2 years (24 months);
- .2 If the candidate fails to complete all the competences within the 2-year period, those that have received a "PASSED" mark beyond 2 years shall expire, and shall be re-assessed accordingly;
- .3 The candidate may be assessed, immediately following completion of the required approved education and training program outlined above;
- .4 A candidate who fails may re-sit for the assessment of competence in any competence immediately, if necessary;
- .5 A candidate who fails in the same competence 3 times, shall not be allowed to re-sit for such competence, until upon showing proof of approved seagoing service for a period of not less than 3 months, with a certification from the ship's master that the candidate has undergone on board experience relating to that particular competence ("The 3-3 Rule"), or approved training or refresher program relating to that particular competence;

## **7. ASSESSMENT OF COMPETENCE IN ANCILLARY PROFICIENCIES**

7.1 The assessment of competence in Ancillary Proficiencies under Section A-VI/1.2, Section A-VI/2, Paragraphs 1 to 4, Section A-VI/3, Paragraphs 1 to 4, and Section A-VI/4, Paragraphs 1 to 6 of the STCW Code, covers the following:

- .1 Basic Training;



- .2 Proficiency in Survival Craft and Rescue Boats other than Fast Rescue Boats;
  - .3 Advanced Fire Fighting; and
  - .4 Medical First Aid.
- 7.2 The proof of successful assessment of competence shall be provided to the Administration for proper recording;
- 7.3 Certificates of Proficiency on the above Ancillary Proficiencies may be revalidated to conform to the 5-year period of validity of the COC for Second Engineer Officer being applied for. Otherwise, the COC shall be valid only up to the period of validity of any of the COP's that shall be expiring first.

## **8. DOCUMENTS ISSUED BY THE ADMINISTRATION**

- 8.1 For a candidate who has completed all the requirements under Section 4 of this Circular:
  - .1 MARINA License for 2E on ships of Unlimited Power (Professional ID);
  - .2 Certificate of Competency for 2E on ships of:
    - .1 Unlimited Power (Class I), or
    - .2 Up to 3,000 kW Propulsion Power (Class II); and
  - .3 Certificate of Endorsement relating to the issuance of the COC (under STCW).
- 8.2 For a candidate with a valid PRC license, but without COC:
  - .1 MARINA License for 2E on ships of Unlimited Power (Professional ID);
- 8.3 For a candidate with a valid PRC license and COC:
  - .1 MARINA License for 2E on ships of Unlimited Power (Professional ID);
  - .2 Certificate of Competency for 2E on ships of:
    - .1 Unlimited Power (Class I), or
    - .2 Up to 3,000 kW Propulsion Power (Class II); and
  - .3 Certificate of Endorsement relating to the issuance of the COC (under STCW).
- 8.4 For a candidate with an expired PRC license, but without COC:
  - .1 MARINA License for 2E on ships of Unlimited Power (Professional ID), subject to applicable penalties;
- 8.5 For a candidate with an expired COC:
  - .1 Certificate of Competency for 2E on ships of:
    - .1 Unlimited Power (Class I), or
    - .2 Up to 3,000 kW Propulsion Power (Class II); and
  - .2 Certificate of Endorsement relating to the issuance of the COC (under STCW).

## **9. VALIDITY OF LICENSE AND CERTIFICATES**

9.1 MARINA License: 5 years from the date of issuance;

9.2 COC:

- .1 Fully compliant with STCW 2010 Amendments: 5 years from date of issuance, or until the validity of COP under Section 4.1.4 with shortest period of validity, but not later than the validity of MARINA License.
- .2 Fully compliant with STCW 1995 Amendments (including partially compliant with STCW 2010 Amendments), until 31 December 2016.

9.3 COE: same period of validity as the COC.

## **10. RENEWAL OF MARINA LICENSE**

10.1 The MARINA License shall be renewed at the same time as the revalidation of the COC;

10.2 However, a candidate seeking renewal of MARINA License only, without the intention of seeking revalidation of COC, shall undergo the approved CPE-2E, except if the candidate:

- .1 has approved seagoing service of not less than 12 months in the last 5 years, or 3 months in the last 6 months; or
- .2 has approved service in the STCW Administration for a period of not less than not less than 6 months in the last 5 years, or 3 months in the last 6 months; or
- .3 has experience as accredited Instructor, Supervisor or Assessor for an aggregate period of not less than 6 months in the last 5 years, or 3 months in the last 6 months in an approved training program in an MTI, or approved education and training program in an MHEI.

## **11. REVALIDATION OF CERTIFICATE OF COMPETENCY (COC) AS SECOND ENGINEER OFFICER**

11.1 At intervals not exceeding 5 years, a holder of a valid COC shall revalidate it by proving continued professional competence which can be established by:

- .1 approved seagoing service, performing functions appropriate to Second Engineer Officer, for a period of at least:
  - .1 12 months in total during the preceding 5 years, or
  - .2 3 months in total during the preceding 6 months immediately prior to revalidating; or
- .2 having performed functions considered to be equivalent to the seagoing service required in Paragraph 11.1.1.1, where 2 days of in-service

experience ashore is equivalent to 1 day of seagoing service (2 to 1 ratio) by:

- .1 Service in the Administration, specific to STCW-related tasks;
  - .2 Service as active Naval or Coast Guard Officer in the Philippines, under the Guidance in Section B-IX of the STCW Code;
  - .3 Actual days of service as an Accredited Instructor, Supervisor or Assessor of Competence in an Approved Training Program (ATP) in an MTI;
  - .4 Actual days of service as an Accredited Instructor, Member of the Faculty, Supervisor, Dean, Shipboard Training Officer or Assessor of Competence for an Approved Education and Training Program (AETP) in an MHEI;
  - .5 Actual period of service as Sea or Harbor Pilot;
  - .6 Service as onboard instructor or assessor of competence;
  - .7 Other such functions which require, by regulation, an equivalent level of certificate of competency or certificate of proficiency, to perform while serving on land; or
- 
- .3 passing the approved theoretical examination and practical assessment; or
  - .4 successfully completing an approved training program that may be allowed by the Administration; or
  - .5 having completed approved seagoing service, performing functions appropriate to the certificate held, for a period of not less than 3 months in a supernumerary capacity; and
- 
- .6 all the requirements as per Section 4.1.3.

11.2 The period of service in Paragraphs 11.1.1.1 and 11.1.2 above may be combined proportionately to meet the requirement for revalidation.

(Example: 6 months of approved seagoing service; plus 4 months of service in the STCW Administration (2 to 1); plus 8 months as an accredited Instructor (2 to 1); plus aggregate of 30 days as accredited Assessor (2 to 1) = 12.5 months total. Therefore, qualified for revalidation)

11.3 A corresponding Certificate of Endorsement (COE) attesting to the issuance of the COC and related Certificates shall be issued upon full compliance with all the requirements of the STCW Convention.

## **12. SCHEDULE OF FEES, PENALTIES AND FINES**

The schedule of fees, penalties and fines shall be provided in a separate circular.

## **13. MISCELLANEOUS PROVISIONS**

13.1 The mandatory minimum requirements for Second Engineer Officer on tankers and passenger ships under Chapter V of the STCW Code (Special Training Requirements) shall be provided in a separate circular;

- 13.2 The Administration shall not accept applications with pending, conditional or partial "PASSED" results of examination or assessment conducted by any other government agency. In such cases, the totality of the theoretical examination or the practical assessment of competence, shall be conducted under the system of MARINA;
- 13.3 The period of validity of any Certificate issued by the Administration shall be in conformance with the standards and guidance set out under the STCW, as amended.

#### **14. TRANSITORY PROVISIONS**

- 14.1 The Professional Regulation Commission (PRC) may continue to conduct assessment of competence and issue Second Engineer Officer Licenses and COCs until December 31, 2014 only;
- 14.2 MARINA shall start accepting applications for examination from November 15, 2014, and shall commence the initial stages of implementation of the examination and assessment process henceforth;
- 14.3 MARINA shall issue Second Engineer Officer Licenses and COCs beginning January 1, 2015.

#### **15. REPEALING CLAUSE**

All previous issuances by MARINA or any other Philippine government agency related to training and certification of Second Engineer Officer on ships of 750 kW propulsion power or more, are hereby superseded, repealed or amended accordingly.

#### **16. EFFECTIVITY:**

This STCW Circular shall take effect immediately on the day of its publication.

Manila, Philippines, October 29, 2014.

Submitted:

  
**CAPT. ALVIN "TOR" TORMON**  
Executive Director

Approved:  
  
**DR. MAXIMO Q. MEJIA, JR.**  
Administrator

### CERTIFICATION

This is to certify that STCW Circular No. 2014-11 was approved by the Administrator on 14 November 2014

  
**ATTY. JABETH SENA JEPATH A. DACANAY**  
Deputy Executive Director

**TABLE OF SPECIFICATIONS OF THEORETICAL EXAMINATION FOR  
SECOND ENGINEER OFFICER ON SHIPS OF 750 kW PROPULSION POWER OR MORE - CLASS I OR CLASS II (\*)**

	Competence	Number of Questions	Time Allocated (minutes)	Passing Mark	Passing Percentage
<b>F1</b>	<b>Function: Marine engineering at the management level</b>				
C1	Manage the operation of propulsion plant machinery	30	30	27 (24*)	90% (80%*)
C2	Plan and schedule operations	10	10	8 (7*)	80% (70%*)
C3	Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery	20	20	16 (14*)	80% (70%*)
C4	Manage fuel, lubrication and ballast operations	10	10	8 (7*)	80% (70%*)
	<b>TOTAL</b>	<b>70</b>	<b>70</b>		
<b>F2</b>	<b>Electrical, electronic and control engineering at the management level</b>				
C5	Manage the operation of electrical and electronic control equipment	30	30	27 (24*)	90% (80%*)
C6	Manage troubleshooting, restoration of electrical and electronic control equipment to operating condition	20	20	16 (14*)	80% (70%*)
	<b>TOTAL</b>	<b>50</b>	<b>50</b>		
<b>F3</b>	<b>Maintenance and repair at the management level</b>				
C7	Manage safe and effective maintenance and repair procedures	10	10	8 (7*)	80% (70%*)
C8	Detect and identify the cause of machinery malfunctions and correct faults	10	10	8 (7*)	80% (70%*)
C9	Ensure safe working practices	10	10	8 (7*)	80% (70%*)
	<b>TOTAL</b>	<b>30</b>	<b>30</b>		
<b>F4</b>	<b>Controlling of operation of the ship and care for persons on board at the management level</b>				
C10	Control trim, stability and stress	10	10	8 (7*)	80% (70%*)
C11	Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment	10	10	8 (7*)	80% (70%*)
C12*	Maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems	10	10	8 (7*)	80% (70%*)
C13	Develop emergency and damage control plans and handle emergency situations	10	10	8 (7*)	80% (70%*)
C14	Use of leadership and managerial skill	10	10	8 (7*)	80% (70%*)
	<b>TOTAL</b>	<b>50</b>	<b>50</b>		
	<b>GRAND TOTAL</b>	<b>200</b>	<b>200</b>		

\* T & A = Training and Assessment Documentary Evidence

**Notes:**

- There are 14 competences in the theoretical examination for Second Engineer Officer 750 kW and above. In addition, C12 (\*) shall be evidenced by approved training and experience related thereto, in accordance with Section A-VI of the STCW Code.
- Each competence is examined, and shall be passed, independently.
- A candidate may choose as many competences as he intends to be examined on, upon filing the application.
- A candidate who fails in 3 or more competences in one sitting may not apply for a re-sit within a 1-month period (The 3-1 Rule).
- A candidate who fails in the same competence 3 times, shall not be allowed to re-sit for that competence, until upon showing proof of approved sea service for a period of not less than 3 months, with a certification from the ship's CE that the candidate has undergone on board experience relating to that particular competence (The 3-3 Rule); or approved training or refresher program relating to that particular competence;
- A candidate shall pass in all the competences with theoretical examination within a period not exceeding 2 years (24 months).
- The full theoretical exam is designed to be completed in **200 minutes** in one sitting, plus any administrative delays that may be incurred in between.
- A re-sit for the same competence on the same day is NOT allowed.



**TABLE OF SPECIFICATIONS OF PRACTICAL ASSESSMENT OF COMPETENCE FOR  
SECOND ENGINEER OFFICER ON SHIPS OF 750 kW PROPULSION POWER OR MORE - CLASS I OR CLASS II (\*)**

	Competence	Number of Exercises	Time Allocated (minutes)	Passing Mark (Points)	Passing Percentage
<b>F1</b>	<b>Function: Marine engineering at the management level</b>				<b>80% ALL</b>
C1	Manage the operation of propulsion plant machinery .1 Marine diesel engine .2 Marine steam turbine .3 Marine gas turbine .4 Marine steam boiler	1 1 1 1	60 30 30 30	48 out of 60 24 out of 30 24 out of 30 24 out of 30	80%
C2	Plan and schedule operations	1	30	24 out of 30	80%
C3	Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery	1	30	24 out of 30	80%
C4	Manage fuel, lubrication and ballast operations	1	30	24 out of 30	80%
	<b>TOTAL</b>	<b>7</b>	<b>380</b>		
<b>F2</b>	<b>Electrical, electronic and control engineering at the management level</b>				<b>80% ALL</b>
C5	Manage the operation of electrical and electronic control equipment	1	60	48 out of 60	80%
C6	Manage troubleshooting, restoration of electrical and electronic control equipment to operating condition	1	30	24 out of 30	80%
	<b>TOTAL</b>	<b>2</b>	<b>90</b>		
<b>F3</b>	<b>Maintenance and repair at the management level</b>				<b>70% ALL</b>
C7	Manage safe and effective maintenance and repair procedures	xxx	xxx		
C8	Detect and identify the cause of machinery malfunctions and correct faults	1	40	28 out of 40	70%
C9	Ensure safe working practices	xxx	xxx		
	<b>TOTAL</b>	<b>1</b>	<b>30</b>		
<b>F4</b>	<b>Controlling of operation of the ship and care for persons on board at the management level</b>				<b>70% ALL</b>
C10	Control trim, stability and stress	1	60	42 out of 60	70%
C11	Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment	xxx			
C12*	Maintain safety and security of the ship's crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems	T & A *			
C13	Develop emergency and damage control plans and handle emergency situations	xxx			
C14	Use of leadership and managerial skill	1	30	21 out of 30	70%
	<b>TOTAL</b>	<b>2</b>	<b>90</b>		
	<b>GRAND TOTAL</b>	<b>12</b>	<b>600</b>		

\* T & A = Training and Assessment Documentary Evidence

**Notes:**

- There are 12 exercises in various competences in the practical assessment of competence for Second Engineer Officer on ships 750 kW and above.
- Each competence shall be demonstrated, assessed, and passed, independently.
- A candidate who fails in the same competence 3 times, shall not be allowed to re-sit for that competence, until upon showing proof of approved sea service for a period of not less than 3 months, with a certification from the ship's master that the candidate has undergone on board experience relating to that particular competence; or approved refresher or training program taken after the third failure (The 3-3 Rule).
- A candidate shall pass in all the competences with practical examination within a period not exceeding 2 years (24 months).
- The full practical assessment of competence is designed to be completed in **600 minutes in one take**, plus any administrative delays that may be incurred in between.
- All the competences are designed to be assessed after successful completion of MLCE (or equivalent of IMO MC 7.02).
- A re-sit for the same competence on the same day is allowed.