Directions as to the Examination of Engineer Officers, Marine Engine Operators and Engine Room Watch Ratings under the Merchant Shipping Acts.

The ‘Exam Directions’

Effective 31st of August 2022

REVISION LOG

Date	Revision No.	Chapter	Comment
23/9/2016	1.01	5.5, 6.2,	Sea service provisions clarified.
10/3/2017	1.02	2, 15	Clarify medical first aid requirements
31/10/2017	1.03	3.2, 4.2	Amend paragraph references.
31/10/2017	1.03	8.8	Clarify dyslexia policy for ETO
16/08/2022	1.04	All relevant chapters	Amend text Department of Transport, Tourism and Sport. Amend DTTAS Text with Department of Transport
16/08/2022	1.04	1.11, Appendix 9	Remove STCW@dttas email address and replace with admin@seafarers.ie
16/08/2022	1.04	Chapter 6	Amend chapter 6 qualifying sea service requirements
16/08/2022	1.04	Appendix	Addition of Appendix 10
16/08/2022	1.04	9.4.2	Addition of Fire Prevention and Firefighting requirements for revalidation
16/08/2022	1.04	9.4.2	Replace text ‘Refresher training’ with ‘Updated Training’
16/8/2022	1.04	Appendix	Addition of Appendix 11
16/8/2022	1.04		Removal of he/she

CORRECTIONS, ERRORS AND OMISSIONS

Errors, omissions and suggestions for alteration of this document should be submitted in writing to the Examiner of Engineers at the address given in Chapter 1.

Contents

CHAPTER 1

INTRODUCTION

Preamble: These examination directions are produced in order to comply with the requirements of the Seafarer's Training Certification and Watchkeeping (STCW) Convention and Code, as amended. The STCW changes take full effect from 1 January 2017 and from this date all engineer officer and electro-technical officer certificates of competency must be issued in accordance with STCW 1978, as amended, to retain their validity. In the interim period up to 1 January 2017 staged changes will be implemented leading to full compliance by 2017.

1.1 These directions, issued under the Merchant Shipping (Training and Certification) Regulations, 2014, and the Merchant Shipping (Certification of Seamen) Act, 1979, specify the standards of competency and the conditions to be satisfied before Engineer Officer Certificates of Competency, Electro-technical Officer Certificates of Competency, Marine Engine Operator Licences and Engine Room Rating Certificates are issued.

These directions give particulars of -

- the conditions of entry for examinations and the approval of the training by the Department of Transport for Certificates of Competency (CoC) and Marine Engine Operator Licences (MEOL) for service in seagoing ships.
- the conditions for issue of Certificates of Equivalent Competency (CEC) by the Department of Transport for service on Irish seagoing ships.
- the issue of Ratings Certificates.

1.2

1.2.1 The Merchant Shipping (Training and Certification) Regulations, 2014 provide for the issue of Certificates of Competency as defined in STCW as follows

Capacity	Propulsive Power Limitation	STCW Regulation
OOW	750 kW or more	III/1
Second Engineer	750 to 2999 kW 3000 kW or more	III/3 III/2
Chief Engineer	750 to 2999 kW 3000 kW or more	III/3 III/2
Electro-technical Officer	750 kW or more	III/6

Notes

Certificates of Competency may carry limitations relating to the sea area in which the holder may sail in any given capacity. Further limitations may also be applied as the Minister may require.

Certificates of Competency and Certificates of Equivalent Competency are issued in motor, steam or combined (motor and steam) categories.
Certificates of Competency or Certificates of Equivalent Competency for Marine Engineers will be issued with the following functions:

3 Control and operation of the ship and care for persons on board.
4 Marine Engineering

5 Electrical, electronic and control engineering
6 Maintenance and repair

Certificates of Competency or Certificates of Equivalent Competency for Electro technical Officers will be issued with the following functions:

3 Control and operation of the ship and care for persons on board.
5 Electrical, electronic and control engineering
6 Maintenance and repair

Certificates of Competency or Certificates of Equivalent Competency for Marine Engineers and Electro-technical Officers will be issued at the following levels:

Management: Chief Engineer, Second Engineer
Operational: Officer in Charge of the Engineering Watch, Electro-technical Officer

1.2.2 The Merchant Shipping (Training and Certification) Regulations, 2014 provide for the issue of Ratings Certificates as defined in STCW Regulation III/4, III/5, III/7.

1.2.3 The Merchant Shipping (Certification of Seamen) Act, 1979 provides for the issue of special certificates of competency such as marine engine operator licences. Any person designated to perform watchkeeping duties in a manned or periodically unmanned engine room on a ship powered by main propulsion machinery of 350 kW power or more but less than 750kW should hold at least the Marine Engine Operator Licence. By the term 'watchkeeping duties' also read UMS duties.

1.3 The Merchant Shipping (Safe Manning, Hours of Work & Watchkeeping) Regulations, 1998, as amended provide that every master and officer assigned to an Irish ship holds an appropriate certificate in respect of any function they are to perform on that ship.

1.4 The Merchant Shipping (Training and Certification) Regulations, 2014 provide that a valid Certificate of Competency means any of the following certificates of the appropriate class, or a higher class, for the capacity in which the holder is to be carried in a ship. Those Certificates listed below and those issued under the above regulations in accordance with STCW, as amended, must be revalidated in order to remain valid for seagoing service:-

1.4.1 Certificate of Competency, issued under the Merchant Shipping (Training and Certification) Regulations 1998, 2007 or 2014.

1.4.2 Certificate of Competency, issued under the Merchant Shipping (Training and Certification) Regulations 1998 or 2007 in exchange for a Certificate of Competency, with or without a Service Endorsement, issued under the Merchant Shipping (Certification of Marine Engineer Officers and Marine Engine Operators) Regulations, 1988.

1.4.3 Certificate of Competency, issued under the Merchant Shipping (Training and Certification) Regulations 1998 or 2007 in exchange for a Certificate of Competency, with or without a Service Endorsement, issued under the Merchant Shipping (Certification of Marine Engineer Officers) Regulations, 1981.

1.4.4 Certificate of Competency, issued under the Merchant Shipping (Training and Certification) Regulations 1998 or 2007 in exchange for a Certificate of Service

issued under the Merchant Shipping (Certification of Marine Engineer Officers) Regulations, 1981.

1.4.5 Certificate of Competency, issued under the Merchant Shipping (Training and Certification) Regulations 1998 or 2007 in exchange for a Certificate of Competency issued under the Merchant Shipping Act, 1894.

1.4.6 Certificate of Competency, issued under the Merchant Shipping (Training and Certification) Regulations 1998 or 2007 in exchange for a Certificate of Service issued under the Merchant Shipping Act, 1894.

1.5 Marine Engine Operator Licences, issued under the Merchant Shipping (Training and Certification) Regulations 1998 or 2007 in exchange for a Marine Engine Operator Certificate of Qualification issued under the Merchant Shipping (Certification of Marine Engineer Officers and Marine Engine Operators) Regulations, 1988 and Marine Engine Operator Licences, issued under the Merchant Shipping (Training and Certification) Regulations 1998 or 2007 will remain valid for service.

1.6 Details of training requirements for masters, officers and ratings on oil, chemical and gas tankers is given in these directions.

1.7 The Merchant Shipping (Training and Certification) Regulations 2014, and therefore these directions, do not apply to Masters and seafarers employed in fishing vessels and pleasure craft not engaged in trade except in so far as equivalent training schemes or sea service may be accepted.

1.8 Any unintended reference in these directions to "he" includes "she" and to "him"/"his" includes "her"/"hers".

1.9 Any Certificate of Competency, Certificate of Equivalent Competency or Marine Engine Operator Licence referred to in these Directions is a Certificate or Licence issued by or on behalf of the Minister for Transport. Such Certificates may only be issued when all of the conditions relating to the issue of the Certificate have been met in accordance with these Directions. Certificates are issued on behalf of the Minster by the Chief Surveyor of the Marine Survey Office.

APPLICATIONS

1.10 Where these exam directions refer to applications, unless otherwise specified, all applications must be made to the Mercantile Marine Office, Dublin.

1.11 **How to Apply.** Applicants should complete the appropriate application form available from the Mercantile Marine Office, Dublin or from www.seafarers.ie. The completed form, together with the supporting documents and appropriate fee should be forwarded to:

Examiner of Engineers,
Mercantile Marine Office
Department of Transport
Leeson Lane
Dublin 2

Telephone +353 1 6783400
Fax +353 1 6783409
Email: admin@seafarers.ie

1.12 **In person.** Candidates may deliver application forms and documents to the public counter of the Mercantile Marine Office during business hours. Certificates may be collected in person or by a designated agent of the candidate at the Mercantile Marine Office, Dublin. Candidates are recommended to make an appointment prior to calling to the public office to ensure that someone will be available to deal with their application.

1.13 **Postal Arrangements**. It is recommended that applicants should use the registered postal service when sending original documents to the Mercantile Marine Office. Candidates may opt to have certificates posted out to a designated address within Ireland. The Registered Postal Service will be used for delivery of Certificates. Certificates will not be posted outside Ireland except at the written request of candidates and on the written undertaking that they accept all responsibility for the certificate in transit. The normal postal service will be used and no responsibility will be taken for lost certificates. Certificates claimed lost in this way will be dealt with as per 6.16. Overseas candidates may request that their Certificate is sent by registered post or courier and in this case they shall bear the cost of such postage**.**

CORRESPONDENCE

1.14 All correspondence with the Examiner of Engineers should be made, in the first instance, through the Mercantile Marine Office, Dublin

SEAFARERS IDENTITY NUMBER

1.15 All seafarers holding certificates or other documents issued by or under the authority of the Department of Transport are required to have a unique identity number which will appear on all certificates issued after 1st September 2016.

1.16 A seafarer identity number can be obtained by logging onto www.seafarers.ie and following the instructions.

CHAPTER 2

CERTIFICATES OF COMPETENCY - CONDITIONS OF ISSUE

2.1 Certificates of Competency are issued as follows:-

2.1.1 Motor Certificate, qualifying the holder to serve as an engineer officer in the capacities specified, in motor ships, including gas turbine ships, being ships propelled by internal combustion engines.

2.1.2 Steam Certificate, qualifying the holder to serve as an engineer officer in the capacities specified, in steam ships, being ships propelled by steam turbines or by steam reciprocating engines.

2.1.3 Combined Certificate, qualifying the holder to serve as an engineer officer in the capacities specified in both motor ships and steamships.

2.1.4 Electro-technical Officer, qualifying the holder to serve as an electro-technical officer in the capacities specified.

2.1.5 Certificates of Competency are issued for service in the near coastal area (NCA) or unlimited area.[1]

2.2 To qualify for the issue of a Certificate of Competency Officer in Charge of an Engineering Watch, motor or steam, (STCW Reg III/1) and Second Engineer (STCW Reg III/3 ships less than 3000 kW, NCA) in Ireland, each candidate must:-

2.2.1 be not less than 18 years of age and;

2.2.2 satisfy the initial training requirements set out in Chapter 3 and;

2.2.3 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 6 and;

2.2.4 have successfully completed an approved on board training record book such as the International Shipping Federation (ISF) On Board Training Record Book for Engineer Cadets, or equivalent, and submit the book and projects to the NMCI for assessment and evaluation and;

2.2.5 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.2.6 provide evidence of having completed basic training in accordance with Appendix 8 issued within the previous five years or have completed approved refresher training and;

2.2.7 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

[1] Historical limits may apply to certain seafarers for service in the near continental trading area (NCT) and middle trade area (MT). New COCs are not issued with these limits
Near Coastal Area (NCA) is defined as: Area within 170 nautical miles from the coast of Ireland and 30 nautical miles from the coast of the United Kingdom

2.2.8 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.2.9 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.2.10 be in possession of documentary evidence verifying satisfactory attendance at an approved maritime training college as detailed in Chapter 7 and;

2.2.11 pass the examinations set out in Chapter 8 or;

2.2.12 comply with Chapter 15.

2.3 To qualify for the issue of a Certificate of Competency Second Engineer, motor or steam, unlimited (STCW Reg III/2) in Ireland, each candidate must:-

2.3.1 be in possession of an Officer in Charge of an Engineering Watch Certificate of Competency valid for service on Irish ships and;

2.3.2 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 5 whilst holding that certificate and;

2.3.3 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.3.4 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

2.3.5 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.3.6 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.3.7 be in possession of documentary evidence verifying satisfactory attendance at an approved maritime training college as detailed in Chapter 7 and;

2.3.8 pass the examinations set out in Chapter 8.

2.4 To qualify for the issue of a Certificate of Competency Chief Engineer, motor or steam, unlimited (STCWIII/2) in Ireland, each candidate must:-

2.4.1 be in possession of a Second Engineer Certificate of Competency valid for service on Irish ships and;

2.4.2 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 5 whilst holding that certificate and;

2.4.3 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.4.4 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

2.4.5 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.4.6 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.4.7 be in possession of documentary evidence verifying satisfactory attendance at an approved maritime training college as detailed in Chapter 7 and;

2.4.8 pass the examinations set out in Chapter 8.

2.5 To qualify for the issue of a Certificate of Competency Second Engineer less than 3000 kW, motor or steam, unlimited (STCW Reg III/3) or Second Engineer (STCW Reg III/2, ships of less than 6000 kW, NCA) in Ireland, each candidate must:-

2.5.1 be in possession of an Officer in Charge of an Engineering Watch Certificate of Competency valid for service on Irish ships and;

2.5.2 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 5 and;

2.5.3 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.5.4 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

2.5.5 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.5.6 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.5.7 Pass the Department of Transport oral examination or;

2.5.8 comply with Chapter 15.

2.6 To qualify for the issue of a Certificate of Competency Chief Engineer less than 3000kW, motor or steam, unlimited (STCW III/3) in Ireland, each candidate must:-

2.6.1 be in possession of a Second Engineer unlimited Certificate of Competency valid for service on Irish ships and;

2.6.2 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 5 and;

2.6.3 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.6.4 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

2.6.5 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.6.6 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.6.7 Pass the Department of Transport oral examination

2.7 To qualify for the issue of a Certificate of Competency Chief Engineer less than 3000kW, motor or steam, NCA (STCW III/3) in Ireland, each candidate must:-

2.7.1 be in possession of an EOOW Certificate of Competency and;

2.7.2 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 5 and;

2.7.3 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.7.4 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

2.7.5 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.7.6 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.7.7 Pass the Department of Transport oral examination or;

2.7.8 comply with Chapter 15.

2.8 To qualify for the issue of a Certificate of Competency Chief Engineer less than 6000kW, motor or steam, NCA (STCW III/2) in Ireland, each candidate must:-

2.8.1 be in possession of a Second Engineer unlimited Certificate of Competency valid for service on Irish ships;

2.8.2 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 5 and;

2.8.3 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.8.4 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

2.8.5 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.8.6 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.8.7 Pass the Department of Transport oral examination

2.9 To qualify for the issue of a Certificate of Competency Electro-technical Officer (STCW Reg III/6) in Ireland, each candidate must:-

2.9.1 be not less than 18 years of age and;

2.9.2 satisfy the initial training requirements set out in Chapter 4 and;

2.9.3 have completed the qualifying sea service, supported by documentary evidence, set out in Chapter 5 and;

2.9.4 have successfully completed an approved on board training record book such as the International Shipping Federation (ISF) On Board Training Record Book for Electro-technical Officer trainees, or equivalent, and submit the book and projects to the NMCI for assessment and evaluation and;

2.9.5 hold an approved and valid Medical Fitness Certificate for Sea Service issued within the previous **two years** and;

2.9.6 provide evidence of having completed basic training in accordance with Appendix 8 issued within the previous five years or have completed approved refresher training and;

2.9.7 be in possession of a certificate of proficiency in advanced fire fighting issued within the previous five years or have completed approved refresher training and;

2.9.8 be in possession of a certificate of proficiency in survival craft and rescue boat operation (other than fast rescue boats) issued within the previous five years or have completed approved refresher training and;

2.9.9 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

2.9.10 be in possession of documentary evidence verifying satisfactory attendance at an approved maritime training college as detailed in Chapter 7 and;

2.9.11 pass the examinations set out in Chapter 8.

MEDICAL FITNESS CERTIFICATES

2.10 An approved and valid Medical Fitness Certificate may be obtained from a recognised Medical Practitioner by meeting the medical fitness requirements of the Merchant Shipping (Medical Examination) Regulations, 2014, or recognised equivalent, acceptable to the Department of Transport. As the standards may change from time to time candidates should check with the Marine Survey Office, Examinations Department regarding the most recent regulations.

2.11 Information concerning Medical Fitness Certificates, medical examinations and approved doctors may be obtained on www.seafarers.ie .

2.12 **Every candidate or potential candidate for a Certificate of Competency is strongly advised to obtain a Medical Fitness Certificate before embarking on any training or education course.**

CHAPTER 3

CERTIFICATES OF COMPETENCY - INITIAL TRAINING ENGINEER OFFICER OF THE WATCH

3.1 Each candidate must have received one of the forms of training specified in this paragraph.

3.1.1 Engineering Cadet Training Scheme: Candidates must have satisfactorily completed the course of engineer cadet training approved by the Department of Transport and conducted in the NMCI. This scheme comprises three years study (including at least 3 months of workshop time) at NMCI and an additional nine months training at sea as an engineer cadet. Sea service is normally conducted after the successful completion of second year modules and includes onboard training meeting the requirements of STCW A-III/1 and must be documented in an approved training record book.

Sea service performed before satisfactory completion of the first and second year examinations of the level 7 ordinary degree in marine engineering will not be accepted. 'Satisfactory completion' means obtaining a pass mark in each module of first year and second year. Any sea service obtained prior to successfully passing all second year modules will not be recognised as qualifying sea service.

Minimum entry requirement to this course is a satisfactory Leaving Certificate or equivalent and entry is via the Central Applications Office (CAO) system.

3.1.2 Full-time Technical College or University Course: A candidate must have satisfactorily completed a full-time course of study for a relevant engineering degree for a period of not less than three years at a recognised Institute of Technology or University and have their experience and training matched to relevant subjects of the Ordinary Degree in Marine Engineering by the recognition of prior learning (RPL) process. Any shortfall identified in the RPL process must be addressed by successful completion of the identified deficient modules for EOOW. In addition each candidate must complete 12 months combined workshop skills training and approved sea going service (minimum 6 months sea service) which includes onboard training meeting the requirements of STCW A-III/1 and is documented in an approved training record book.

3.2 Candidates not complying with the requirements of paragraph 3.1 may be considered for entry to the examinations for the Officer in Charge of an Engineering Watch Certificate of Competency provided that they comply with the requirements of paragraph 3.2.1 or 3.2.2 or 3.2.3 as appropriate.

3.2.1 Engineering Craftsperson including Naval Service Artificer: A candidate must have satisfactorily completed a recognised engineering apprenticeship and provide documentary evidence. In addition each candidate must have their experience and training matched to the relevant subjects for EOOW of the Ordinary Degree by the recognition of prior learning (RPL) process. Any shortfall identified in the RPL process must be addressed by successful completion of the identified deficient modules for EOOW. Each candidate must complete at least 6 months approved sea going service which includes onboard

training meeting the requirements of STCW A-III/1 and is documented in an approved training record book.

3.2.2 Able Seafarer Engine/MEOL to EOOW: Candidates serving onboard ship as able seafarer engine (STCW III/5) should refer to Chapter 14. In addition each candidate must have their experience and training matched to the relevant subjects for EOOW of the Ordinary Degree by the recognition of prior learning (RPL) process. Any shortfall identified in the RPL process must be addressed by successful completion of the identified deficient modules for EOOW.

3.2.3 Fishing Vessel Engineer to Engineer Officer: Candidates holding Irish fishing vessel Certificates of Competency should refer to Chapter 15.

3.3 Deficiency in training: Any deficiency from the requirements of paragraph 3.2 will be assessed in each case by the RPL process in NMCI and may be made good by suitable training, or by further workshop training, or by compensatory shipboard service as a Trainee Engineer, to the satisfaction of the Department of Transport.

3.3.1 Compensatory shipboard service must be performed in motor or steam ships of not less than 750 kilowatt registered power. Such service may be performed on regular watch or on day work.

3.3.2 Workshop service or other industrial training completed before the age of sixteen years will not be accepted.

3.4 Testimonials (documentary evidence – workshop and/or sea service): Each candidate will be required to produce authoritative testimonials covering all oftheir training. Testimonials should state the name of the employee concerned, the dates of commencement and termination of employment, the capacities in which the person was employed, and give a summary of work undertaken. Testimonials must be signed by the employer or a responsible representative. Testimonials will be returned to candidates when the examination is completed.

3.5 Candidates for Engineer Officer Certificates of Competency will be required to produce documentary evidence of satisfactory attendance at college or other training scheme. An attendance rate of at least 90% is required. Documentary evidence may be in the form of college attendance records, a letter from a Lecturer verifying satisfactory attendance throughout the entire course, or an employer's statement.

Any periods of extended non-attendance are to be covered by an explanatory note, doctors certificate etc. Poor attendance may result in training not being fully recognised and/or in additional seatime and projects being imposed.

CHAPTER 4

CERTIFICATES OF COMPETENCY - INITIAL TRAINING ELECTRO-TECHNICAL OFFICER

4.1 Each candidate must have received one of the forms of training specified in this paragraph.

4.1.1 Electro technical Officer Candidates must have satisfactorily completed the course of electro-technical training approved by the Department of Transport and conducted in the NMCI. This scheme comprises three years study (including at least 3 months of workshop time) at NMCI and an additional nine months training at sea as an ETO trainee. Sea service is normally conducted after the successful completion of second year modules and includes onboard training meeting the requirements of STCW A-III/6 and must be documented in an approved training record book.

Sea service performed before satisfactory completion of the first and second year examinations of the level 7 ordinary degree in marine electrotechnology will not be accepted. 'Satisfactory completion' means obtaining a pass mark in each module of first year and second year. Any sea service obtained prior to successfully passing these modules will not be recognised as qualifying sea service.

Minimum entry requirement to this course is a satisfactory Leaving Certificate or equivalent and entry is via the Central Applications Office (CAO) system.

4.1.2 Full-time Technical College or University Course: A candidate must have satisfactorily completed a full-time course of study for a relevant electro-technical degree for a period of not less than three years at a recognised Institute of Technology or University and have their experience and training matched to relevant subjects of the Ordinary Degree in Marine Electro-technology by the recognition of prior learning (RPL) process. Any shortfall identified in the RPL process must be addressed by successful completion of the identified deficient modules for ETO. Each candidate must complete 12 months combined workshop skills training and approved sea going service (minimum required 6 months) which includes onboard training meeting the requirements of STCW A-III/6 and is documented in an approved training record book.

4.2 Candidates not complying with the requirements of paragraph 4.1 may be considered for entry to the examinations for the Electro technical Officer Certificate of Competency (STCW Reg. III/6) provided that they comply with the requirements of paragraph 4.2.1 or 4.2.2 as appropriate.

4.2.1 Electrical Craftsperson including Naval Service Artificer: A candidate must have satisfactorily completed a recognised electrical apprenticeship and provide documentary evidence. In addition each candidate must have their experience and training matched to the relevant subjects for ETO of the Ordinary Degree by the recognition of prior learning (RPL) process. Any shortfall identified in the RPL process must be addressed by successful completion of the identified deficient modules for ETO. Each candidate must complete at least 6 months approved sea going service which includes onboard

training meeting the requirements of STCW A-III/6 and is documented in an approved training record book.

4.2.2 Rating to ETO: Candidates should consult with the Examiner of Engineers.

4.3 Deficiency in training: Any deficiency from the requirements of paragraph 3.2 will be assessed in each case by the RPL process in NMCI and may be made good by suitable training, or by further workshop training, or by compensatory shipboard service as a Trainee Electro technical Officer, to the satisfaction of the Department of Transport.

4.3.1 Compensatory shipboard service must be performed in ships of not less than 750 kilowatt registered power. Such service may be performed on regular watch or on day work.

4.4 Workshop service or other industrial training completed before the age of sixteen years will not be accepted.

4.5 Testimonials (documentary evidence): Each candidate will be required to produce authoritative testimonials covering all of their training. Testimonials should state the name of the employee concerned, the dates of commencement and termination of employment, the capacities in which the person was employed, and give a summary of work undertaken. Testimonials must be signed by the employer or a responsible representative.

Testimonials will be returned to candidates when the examination is completed.

4.6 Candidates for Electro-technical Officer Certificates of Competency will be required to produce documentary evidence of satisfactory attendance at college or other training scheme. An attendance rate of at least 90% is required. Documentary evidence may be in the form of college attendance records, a letter from a Lecturer verifying satisfactory attendance throughout the entire course, or an employer's statement.

Any periods of extended non- attendance are to be covered by an explanatory note, doctor's certificate etc. Poor attendance may result in training not being fully recognised and/or in additional seatime and projects being imposed.

4.7 **Existing Electro-technical Officers (ETOs)**

4.7.1 ETOs currently serving at sea may be considered to have met the requirements for certification if they have served in a relevant capacity on board ship for a period of not less than 12 months within the five year period preceding 1st January 2012 and meet the standards of competence specified in the STCW Code.

4.7.2 The Department of Transport will compare the standards of competence of each applicant for ETO certificate of competency under this section with those specified in section A-III/6 of the STCW Code and determine the need, if any, for updating training to be carried out. Assessments will be done on an individual or case-by-case basis. Candidates should allow sufficient time for the assessment to be carried out.

4.7.3 ***All applicants must: -***

- Complete an application form and submit the relevant documents;
- Meet the medical fitness and eyesight requirements of the *Merchant Shipping (Medical Examination) Regulations*, and produce a valid medical fitness certificate;
- Have at least 12 months documented sea service in the five year period preceding 1st January 2012 as ETO on board ship. Details of the type of ships, size, electrical systems on board including electrical generation systems, hotel systems, communications systems, GMDSS and bridge navigation systems should be provided;
- Complete an approved Electro Technical Officer Training Record Book[2] and;

have completed approved training or refresher training in:

- Proficiency in personal survival techniques (Table A-VI/1-1);
- Proficiency in fire prevention and firefighting (Table A-VI/1-2);
- Proficiency in elementary first aid (Table A-VI/1-3);
- Proficiency in personal safety and social responsibilities (Table A-VI/1-4);
- Proficiency in survival craft and rescue boats other than fast rescue boats (Table VI/2-1);
- Proficiency in Advanced Fire Fighting (Table A-VI/3);
- Proficiency in Medical First Aid (Table VI/4-1);
- Proficiency in Security awareness training (Table A-VI/6-1);
- Human Element Leadership and Management (HELM).

When comparing standards of competence any or all of the following may be required:

- An appropriate third level qualification in marine electronics, electrical or communications[3];
- GMDSS Radio Maintenance Course or equivalent;
- GMDSS GOC (General Operators Certificate);
- High Voltage (Management Level) course or equivalent[4];
- Pass an oral examination.

4.8 High voltage requirements for existing ETO

4.8.1 A High Voltage (HV) system (over 1000V) is where voltage is generated and distributed at high voltage or transformed to and distributed at high voltage. It

[2] Training record books are available from maritime training centres. Each competence must be signed off by the Chief Engineer, Ship's Superintendent or company representative;
In order to sign off on competencies, the Chief Engineer or Ship's Superintendent must hold an STCW Reg III/2 Chief Engineer CoC. Tasks may be signed off retrospectively providing the person signing off the task has personal knowledge that the task was completed.

[3] For example an ordinary degree, formerly diploma in Marine Electronics awarded by Limerick Institute of Technology, or Cork Institute of Technology. A certified electrical craft apprentice, with industrial experience, issued under the authority of a EU Member State may be able to demonstrate an equivalence to these qualifications. It will be the applicant's responsibility to contact the authority that issued the academic qualification in order for them to produce a statement demonstrating equivalence (i.e. the content of the educational programme undertaken must be mapped to the syllabi of these examinations). It may be acceptable for "top up" educational programmes under the authority of an EU Member State to be undertaken to fill any gaps found in the mapping process.

[4] If a High Voltage course taken prior to the 1st July 2013 meets the criteria, the original certificate and course syllabus must be submitted with the application.

does not include systems where high voltage is utilised locally e.g. ignition systems, radio transmission, radar or other navigational equipment.

4.8.2 Electro-technical officers applying for certificates of competency will be required to have HV voltage training whether or not they intend to work on ships with HV equipment.

4.8.3 High Voltage Courses undertaken prior to 1st July 2013 do not need to be approved but applicants must provide documentary evidence confirming the course covered at least the following topics:

- The hazards associated with High Voltage systems;
- Arrangement of High Voltage systems and their protective devices;
- Safety procedures related to High Voltage systems;
- Immediate actions to be taken under fault conditions;
- The functional, operational and safety requirements for a marine high-voltage system;
- Assignment of suitably qualified personnel to carry out maintenance and repair of high-voltage switchgear of various types;
- Taking remedial action necessary during faults in a high-voltage system;
- Producing a switching strategy for isolating components of a high-voltage system;
- Selecting suitable apparatus for isolation and testing of high-voltage equipment;
- Carrying out a switching and isolation procedure on a marine high-voltage system, complete with safety documentation; and
- Performing tests of insulation resistance and polarization index on high-voltage equipment.

CHAPTER 5

CERTIFICATES OF COMPETENCY - QUALIFYING SEA SERVICE (AMOUNT)

5.1. To qualify for the issue of a Certificate of Competency Officer in Charge of an Engineering Watch (STCW III/1 OOW) each candidate must have completed a period of qualifying sea service, whilst under the supervision of a certificated Engineer Officer, in ships of not less than 750 kilowatt registered power as follows:-

5.1.1. Motor Certificate. At least six months must have been spent in watchkeeping or UMS duties of which at least four months must have been on motor ships.

5.1.2. Steam Certificate. At least six months must have been spent in watchkeeping or UMS duties of which at least four months must have been on steam ships.

5.1.3. Combined Certificate. At least eight months, of which at least three months must have been spent in watchkeeping on motor ships and at least three months must have been spent in watchkeeping on steam ships.

5.1.4. Each candidate who has satisfactorily completed the degree course of NMCI engineer cadet training covered by Chapter 3 which includes a minimum of nine months sea service, of which at least six months has been spent in watchkeeping or UMS duties will be allowed to attend for examination as Officer in Charge of an Engineering watch (motor and/or steam). The six month sea service requirement of 4.1.1 and 4.1.2 will not apply in this case. In the case of combined motor/steam certificates the sea service performed during the cadetship must include at least three months of watchkeeping on each type of ship.

5.1.5. Candidates already in possession of an OOW Certificate in motor or steam ships will be required to have at least three months seatime in ships of the machinery type not already endorsed on their Certificate.

5.2. To qualify for the issue of a Certificate of Competency Electro-technical Officer (STCW III/6 ETO) each candidate must have completed a period of qualifying sea service of at least six months, whilst under the supervision of a certificated Electro-technical Officer or Engineer Officer, in ships of not less than 750 kilowatt registered power.

Each candidate who has satisfactorily completed the degree course of ETO NMCI training covered by Chapter 4 which includes a minimum of nine months sea service, will be allowed to attend for examination as ETO. The six month sea service requirement of 5.2 will not apply in this case.

5.3. To qualify for the issue of a Certificate of Competency:

Second Engineer (STCW III/2) ships of 3000 kW propulsion power or more Unlimited Area or;

Chief Engineer (STCW III/3) ships of less than 3000 kW propulsion power Near Coastal Area (NCA) or;

Chief Engineer (STCW III/3) ships of less than 3000 kW propulsion power Unlimited Area

each candidate must have completed a period of qualifying sea service, whilst qualified to serve as an EOOW, in ships of not less than 750 kilowatt registered power as follows:-

5.3.1. Motor Certificate. At least twelve months, of which at least nine months must have been spent in watchkeeping or UMS duties on motor ships.

5.3.2. Steam Certificate. At least twelve months, of which at least nine months must have been spent in watchkeeping or UMS duties on steam ships.

5.3.3. Combined Certificate. At least twelve months, of which at least six months must have been spent in watchkeeping or UMS duties on motor ships and at least six months must have been spent in watchkeeping or UMS duties on steamships.

5.3.4. Candidates possessing qualifying sea service for either steam or motor ships may complete and pass both MARI 8007 and MARI 8008 at the same time prior to attending for oral examination for Second Engineer. In this case an endorsement for the other ship type at EOOW level will be allowed by a combined Second engineer and EOOW oral examination. This endorsement will facilitate gaining the six months seatime required for combined certificate.

5.3.5. Candidates already in possession of a Second Engineer Certificate in motor or steam ships will be required to have at least six months seatime in ships of the machinery type not already endorsed on their Certificate and complete the relevant Marine Propulsion module (MARI 8007 or MARI 8008) before attending for oral examination.

5.4. To qualify for the issue of a Certificate of Competency Second Engineer (STCW III/3, ships powered by main propulsion machinery of between 750 kW and 3000 kW, unlimited area) and Second Engineer (STCW Reg III/2 ships of less than 6000 kW NCA) each candidate must have completed a period of qualifying sea service, in ships of not less than 750 kilowatt registered power as follows:-

5.4.1. Motor Certificate. Twelve months, of which at least three months must have been spent in watchkeeping or similar duties on motor ships whilst in possession of an OOW Certificate. The remaining period may have been spent in watchkeeping, daywork or similar duties on motor ships as qualifying sea service towards the issue of an OOW Certificate.

5.4.2. Steam Certificate. Twelve months, of which at least three months must have been spent in watchkeeping or similar duties on steam ships whilst in possession of an OOW Certificate. The remaining period may have been spent in watchkeeping, daywork or similar duties on steam ships as qualifying sea service towards the issue of an OOW Certificate.

5.4.3. Combined Certificate. Twelve months, of which at least three months must have been spent in watchkeeping or similar duties on motor ships and at least three months must have been spent on steam ships both of which whilst in possession of an OOW Certificate. The remaining period may have been spent in watchkeeping, daywork or similar duties on motor or steam ships as qualifying sea service towards the issue of an OOW Certificate.

Candidates already in possession of a Second Engineer Certificate at this level in motor or steam ships will be required to have at least three months seatime in ships of the machinery type not already endorsed on their Certificate.

5.5. To qualify for the issue of a Certificate of Competency Chief Engineer (STCW III/2, steam or motor ships of 3000 kW propulsion power or more, Unlimited Area) each candidate must in addition to holding a Second Engineer CoC III/2 Unlimited Area:

5.5.1. Motor Certificate. Have completed at least 36 months of qualifying sea service since obtaining the EOOW certificate. At least 9 months of this sea service must have been spent as an engineer officer in a position of responsibility in motor ships of 3000 kW propulsion power or more whilst holding a Second Engineer CoC III/2 Unlimited Area **or** at least 18 months of this sea service must have been spent as an engineer officer in a position of responsibility in motor ships of 3000 kW propulsion power or more;

5.5.2. Steam Certificate. Have completed at least 36 months of qualifying sea service since obtaining the EOOW certificate. At least 9 months of this sea service must have been spent as an engineer officer in a position of responsibility in steam ships of 3000 kW propulsion power or more whilst holding a Second Engineer CoC III/2 Unlimited Area **or** at least 18 months of this sea service must have been spent as an engineer officer in a position of responsibility in motor ships of 3000 kW propulsion power or more;

5.5.3. Combined Certificate. Have completed at least 36 months of qualifying sea service since obtaining the EOOW certificate. At least 9 months of this sea service must have been spent in steam ships **and** at least 9 months of this sea service must have been spent in motor ships, of 3000 kW propulsion power or more, as an engineer officer in a position of responsibility, whilst holding a Second Engineer CoC III/2 Unlimited Area **or**; at least 12 months of this sea service must have been spent in steam ships and at least 12 months of this sea service must have been spent in motor ships, of 3000 kW propulsion power or more, as an engineer officer in a position of responsibility.

Endorsement

5.5.4. For candidates already qualified as Chief Engineer III/2 (3000kw propulsion power or more) at least 6 months must have been spent as an engineer officer in charge of the watch in ships of 3000 kW propulsion power or more of the type for which the endorsement is sought.

5.5.5. Each candidate who requires an EOOW (motor or steam) endorsement to a Chief Engineer Certificate of Competency ships greater than 3000 kW (STCW III/2) will be allowed to apply for the oral examination without further sea service.

5.6. **Chief Engineer Fast track**

If a candidate has sea going service as Second Engineer[5] (STCW III/2) of minimum 12 months the following may apply:

[5] Second engineer officer 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

5.6.1. Motor Certificate: have completed at least 24 months of qualifying sea service since obtaining the EOOW certificate. At least 12 months must have been spent as Second Engineer in motor ships of 3000 kW propulsion power or more.

5.6.2. Steam Certificate: have completed at least 24 months of qualifying sea service since obtaining the EOOW certificate. At least 12 months must have been spent as Second Engineer Officer (STCW III/2 Unlimited Area) in steam ships of 3000 kW propulsion power or more.

5.6.3. Combined Certificate: have completed at least 24 months of qualifying sea service since obtaining the EOOW certificate. At least 12 months must have been spent on either a steam ship or a motor ship, or a combination of both, as Second Engineer Officer (STCW III/2 Unlimited Area). At least 6 months of the 24 months sea service must have been spent on each ship type as engineer officer in a position of responsibility in ships of 3000 kW propulsion power or more.

5.7. To qualify for the issue of a Certificate of Competency Chief Engineer (STCW III/2, ships of less than 6000 kW propulsion power near coastal area) each candidate must have completed at least 36 months of qualifying sea service since obtaining the OOW certificate subject to the following:

5.7.1. Motor Certificate. At least twelve months must have been spent as an engineer officer in a position of responsibility in motor ships whilst qualified as Second Engineer Officer in ships of less than 6000 kW propulsion power NCA (STCW III/2). Of these twelve months at least 9 months must have been spent as an engineer officer in charge of a watch in motor ships of 750 kW propulsion power or more.

5.7.2. Steam Certificate. At least twelve months must have been spent as an engineer officer in a position of responsibility in steam ships whilst qualified to serve as Second Engineer Officer in ships of less than 6000 kW propulsion power NCA (STCW III/2). Of these twelve months at least 9 months must have been spent as an engineer officer in charge of a watch in steam ships of 750 kW propulsion power or more.

5.7.3. Combined Certificate. At least eighteen months, of which at least nine months must have been spent as an engineer officer in a position of responsibility in steam ships of 750 kW propulsion power or more and at least nine months must have been spent as an engineer officer in a position of responsibility in motor ships of 750 kW propulsion power or more. Both periods must be spent whilst qualified to serve as Second Engineer Officer in motor and/or steam ships of less than 6000 kW propulsion power NCA (STCW III/2).

5.7.4. For candidates already qualified as Chief Engineer III/2 (less than 6000 kW propulsion power near coastal area) at least 6 months must have been spent as an engineer officer in charge of the watch in ships of the type for which the endorsement is sought.

5.8. Irish Naval Service – Sea Service

mechanical and electrical installations of the ship will fall in the event of the incapacity of the chief engineer officer.

5.8.1. Sea service performed in Irish Naval Service vessels will generally be assessed as if it had been served in mercantile marine vessels if it has been served whilst holding a Mercantile Marine Engineer Officer Certificate of Competency.

5.8.2. At least six months of the total sea service required for the issue of a Chief Engineer Certificate of Competency (Reg III/2 or III/3), since obtaining the Officer of the Watch Certificate of Competency, must have been served in mercantile vessels. At least three months of the mercantile sea service must have been carried out within the five years preceding oral examination and the remainder within the ten years preceding the date of oral examination.

5.8.3. Naval service candidates must satisfy the initial training requirements set out in Chapter 3 and Chapter 4. Sea service carried out by officer trainees enrolled in a Level 8 engineering or electrical engineering degree programme may be accepted on satisfactory completion of first year and completion of a programme of training in workshop practices, procedures and workshop health and safety.

5.8.4. Naval service candidates must satisfy the requirements of Chapter 2 Conditions of Issue.

5.8.5. The Department of Transport recognises the structured nature of Naval Service artificer training and Marine Engineer Officer training as satisfying the requirements for initial training as set out in Chapter 3 and Chapter 4. Sea service performed on Naval Service vessels will be accepted as qualifying sea service for the EOOW and ETO examinations. when served in an appropriate technical rank.

5.9. Qualifying Sea Service – equivalent arrangements

The minimum periods of qualifying sea service specified in this Chapter may be altered on a case by case basis at the discretion of the Examiner of Engineers. Minimum periods of sea service will not be altered below any minimum specified in the STCW Convention for the issue of a particular certificate. Any deviation from the minimum periods specified above must be requested in writing by the candidate and supported with documentary evidence relating to the request such that the Examiner may form a reasoned opinion that there would be no reduction in safety or standards by acceding to the request.

CHAPTER 6

CERTIFICATES OF COMPETENCY – QUALIFYING VESSELS AND SERVICE GENERAL PROVISIONS

6.1 **Cadet Training Scheme**. In addition to any other provisions contained in this chapter, sea service performed before satisfactory completion of the first and second year modules will not be accepted. 'Satisfactory completion' means obtaining a pass mark in each module of first year and second year. Any sea service obtained prior to successfully passing all relevant first and second year modules will not be recognised as qualifying sea service[6].

6.2 Qualifying Ships

6.2.1 Those ships that have been issued with statutory certificates in accordance with the SOLAS Convention.

6.2.2 Service in ships that are not recognised by paragraph 6.2.1 may be accepted for part of the qualifying sea service required, for second and chief engineer COC only on a case-by-case basis. The Examiner of Engineers shall be satisfied that the sea service performed on such ships is relevant to the qualification being applied for taking into consideration the ship type, statutory certification, operations, nature, and frequency of voyages. The applicant shall be required to provide the documentation and information as applicable as shown in Appendix 10 to support their submission. Candidates are recommended to contact the Examiner of Engineers prior undertaking sea service on such vessels for consideration of sea service. Applicants shall be solely responsible for providing the required documentary evidence.

6.3 **Qualifying Sea Service**:

Qualifying sea service means service on board a qualifying ship relevant to the issue or revalidation of a certificate or other qualification subject to the following.

All ships:

6.3.1 Sea service under crew agreement as engineer officer/electro-technical officer or as assistant watchkeeper on regular watch on main propulsion machinery or auxiliary machinery, on ships of 750 kW propulsion power or more, when such machinery is in use.

6.3.2 A minimum of six months qualifying sea service for any particular certificate of competency or endorsement to a certificate must have been performed within a period of five years preceding the date of the examination. The remaining qualifying sea service must have been performed within a period of ten years preceding the date of the examination.

6.3.3 Sporadic use of main propulsion machinery. Service performed in ships where for considerable periods the main propulsion machinery is not used, will be considered equivalent to normal qualifying sea service by calculating the actual number of days spent at sea underway with the main propulsion machinery in use multiplied by 1.5 but in no case can it exceed the time served under crew agreement during the period concerned. In such cases the testimonials of sea

[6] Candidates may be allowed to proceed to sea with a single failed module at compensation level (> 35%) after second year with the agreement of the Examiner of Engineers.

service, as specified in this chapter, must be accompanied by documentary evidence of the days the ship spent underway at sea.

6.3.4 Ships with Unattended Machinery Spaces (UMS) and ships with watchkeeping are treated equally for award of qualifying sea service.

6.3.5 Service which consists of seagoing work which may be considered pertinent to the operational experience of an engineer officer such as cargo engineer, HVAC engineer or environmental engineer, may be accepted. Such service will not be accepted as counting towards the minimum required, in Chapter 5, to be spent in watchkeeping or UMS duties.

6.3.6 Day Work. Such service will not be accepted as counting towards the minimum required to be spent in watchkeeping or UMS duties specified in Chapter 5.

6.3.7 Service in self-propelled offshore units where the unit is undertaking sea-going passages or well shifts or when it is engaged in maintaining a fixed station by continuous use of the main propulsion machinery will be accepted at full rate.

6.3.8 Service in an offshore unit which is not self-propelled and is fixed to the seabed but is termed a ship will be accepted at half rate. Such service will not be accepted as counting towards the minimum required to be spent in watchkeeping or UMS duties.

6.3.9 New build / dry-docking. Service standing by new build ships in a shipyard and extended dry-docking may count at full rate, up to a maximum period of 6 months. Such service will not be accepted as counting towards the minimum required to be spent in watchkeeping or UMS duties.

Additional requirements for Service in ships not recognised by paragraph 6.2.1

6.3.10 The Examiner of Engineers shall be satisfied that any such sea service not recognised by paragraph 6.2.1 shall be relevant to the qualification being applied for taking into consideration but not limited to the nature of duties performed, level of responsibility during service, duration, and frequency of voyages.

6.3.11 Qualifying sea service must have been carried out under the supervision of an engineer qualified under STCW in the rank above that being applied for. Sea service testimonials must show details of the certificate held by the supervising engineer officer and be signed by them.

6.3.12 Qualifying sea service must have been spent underway or otherwise fully operational if stationary. The number of actual days at sea underway or operational must be supported by documentary evidence[7].

6.3.13 Extended periods alongside will not count towards sea service. Such service will not be accepted as counting towards the minimum required to be spent in watchkeeping or UMS duties detailed in Chapter 5.

7 Official log book entries, AIS vessel movements

6.4 Testimonials. Each candidate must produce testimonials in respect of all sea service performed. These testimonials, which should state the rank and position on watch, the type of main propulsion machinery and the nature of duties performed, are to be signed by the Chief Engineer Officer **and** endorsed by the Engineer Superintendent or some other responsible representative of the employer. Testimonials covering service as Chief Engineer Officer are to be signed by the Engineer Superintendent and some other responsible representative of the employer.

Recommended forms of testimonial to cover sea service are shown in Appendix 2 and 3.

6.5 All candidates for the EOOW or ETO Examination will be required to have successfully completed an approved-on board training record book. The relevant International Shipping Federation (ISF) On Board Training Record Book or MNTB Training Record Book is acceptable. Candidates undergoing training for EOOW are to submit the book and projects to the National Maritime College of Ireland for evaluation. Training record books may be requested by an Examiner of Engineers for further evaluation.

6.6 Verification of service. Sea service may be verified by the entries in the official discharges of the ships and/or discharge books. Sea service which cannot be verified by documentary evidence will not be accepted.

6.7 Calculation of service. Sea service as entered in official discharges and testimonials will be counted by the calendar months, that is, the time included between any given day in any month and the preceding day of the following month, both inclusive. The number of complete months from the commencement of the period, ascertained in this way, should be computed, after which the number of odd days should be counted. The day on which the crew agreement commences, as well as that on which it terminates, should both be included, all leave of absence excluded, and all odd days added together and reckoned at thirty days to the month.

CHAPTER 7

CERTIFICATES OF COMPETENCY- ADMISSIONS TO EXAMINATIONS AND AWARD OF CERTIFICATES

7.1 In order to serve on a ship as a marine engineer or electro-technical officer the seafarer must be qualified and hold the relevant certificate of competency for the position being held on board. Certificates of Competency are issued by the Marine Survey Office of the Department of Transport.

7.2 **CANDIDATES ARE ADVISED TO ENSURE AS EARLY AS POSSIBLE THAT THEY WILL BE CAPABLE OF MEETING THE REQUIREMENTS FOR THE ISSUE OF A MEDICAL FITNESS CERTIFICATE. FAILURE TO OBTAIN SUCH A CERTIFICATE WILL MEAN THAT THE CERTIFICATE OF COMPETENCY CANNOT BE ISSUED.**

7.3 Examinations for Certificates of Competency consist of written examinations, oral examinations and ancillary courses. All modules and written examinations for Certificates of Competency will be set and marked entirely by the National Maritime College of Ireland (NMCI). The Minister may approve other training institutes for this purpose. The required modules for each examination are set out in this chapter.

7.3.1 All examination modules must be passed prior to entry to the oral examinations.

7.3.2 Oral examinations will be conducted by an Examiner of Engineers at the Department of Transport.

7.3.3 Candidates for Engineer Officer of the Watch and Electro-technical Officer examinations may be required to produce documentary evidence of satisfactory attendance at College. An attendance rate of at least 90% must be shown. Documentary evidence may be in the form of College attendance records or a letter from a Senior Lecturer verifying satisfactory attendance throughout the entire course. Any periods of non attendance are to be covered by an explanatory note, doctors certificate etc. Poor college attendance may result in the imposition of additional sea service.

7.4 Before a certificate of competency may be issued to a candidate they must comply with the training requirements of STCW, at the appropriate level, for:

- fire fighting,
- first aid,
- security,
- personal sea survival,
- personal safety and social responsibilities,
- proficiency in survival craft

7.4.1 Candidates that obtained their ordinary degree prior to 1st July 2013 and have not completed high voltage training since then may have to do a high voltage course at the management level.

7.5 **Previous or 'old' system of examination**

7.5.1 Prior to September 2014 the principle route to EOOW certification was by completion of the level 7 ordinary degree in marine engineering, at the National Maritime College of Ireland, which satisfied the initial training requirements and sea service and generally provided exemptions from Department of Transport examinations. Candidates then undertook DTTAS written and oral examinations in engineering knowledge.

7.5.2 Second and chief engineer certification was by completion of further periods of sea service and Department of Transport written and oral examinations, however exemption from some subjects was granted to candidates that completed an ordinary degree in marine engineering at NMCI or other equivalent training.

7.6 Current or 'revised' system of examinations

7.6.1 Engineer Officer of the Watch

The academic subjects previously known as General Engineering Science I and II are no longer examined and are replaced by specified modules of the ordinary degree programme in Marine Engineering as set out in the annex to this chapter.

The professional subjects previously known as General, Motor and Steam engineering knowledge are no longer examined and are replaced by the equivalent modules of the ordinary degree programme in Marine Engineering as set out at in the annex to this chapter. The Department of Transport will only recognize results in Marine Engineering Operations (MARI 7002) when assessment in this module is taken following the completion of approved seagoing service which includes completion of a training record book[8].

Every cadetship candidate for EOOW certification must have been awarded the ordinary level degree in Marine Engineering.

Every candidate for EOOW certification that has not come through the cadetship route at NMCI must either complete, or undergo recognition of prior learning against, the modules specified for EOOW in the annex to this chapter.

The oral examination in marine engineering procedures and practices at engineer officer of the watch level, conducted by an Examiner of Engineers, must be passed before a certificate of competency may be issued.

7.6.2 Electro-technical Officer

The Department of Transport will only recognize results in Marine Electro-technology following the completion of approved seagoing service which includes completion of a training record book[9].

[8] Candidates undergoing training for EOOW are to submit the book and projects to the National Maritime College of Ireland for evaluation. Training record books may also be requested by an Examiner of Engineers for further evaluation.

[9] Candidates undergoing training for ETO are to submit the book and projects to the National Maritime College of Ireland for evaluation. Training record books may also be requested by an Examiner of Engineers for further evaluation.

Every cadetship candidate for ETO certification must have been awarded the ordinary level degree in Marine Electro-technology.

Every candidate for ETO certification that has not come through the cadetship route at NMCI must either complete, or undergo, recognition of prior learning against the course content for a Degree in Marine Electro-technology.

The oral examination in marine electro-technology procedures and practices for electro-technical officer, conducted by an Examiner of Engineers, must be passed before a certificate of competency may be issued.

7.6.3 **Second Engineer**

The academic subjects previously known as technical drawing, mathematics, thermodynamics, mechanics, electro-technology and naval architecture are no longer examined and are replaced by specified modules of the ordinary degree programme in Marine Engineering as set out at in the annex to this chapter. Candidates that have already passed the old academic subjects or equivalent will not be required to retake them.

The professional subjects previously known as General, Motor and Steam engineering knowledge are no longer examined and are replaced by six Code 8000 'professional' modules in marine propulsion (steam/motor), marine auxiliary systems, ship manoeuvring systems, marine safety and environmental protection systems, and planning and resource management.

These 'professional' modules cover the relevant subject matter required for second and chief engineer certification in STCW and will be assessed by the NMCI using a combination of continual assessment and examination in accordance with Munster Technological University (MTU) procedures.

A pass mark of at least 40% will be required in each of the new 'professional' modules, without compensation, in order to be accepted for certification at second engineer level.

A mark of at least 50% will be required in each 'professional' module, without compensation, in order to be accepted for certification at chief engineer level. Candidates that obtain a grade of at least 50% when studying for second engineer will not be required to repeat this module for certification at chief engineer level.

Candidates not coming from the ordinary level degree route must either complete, or undergo recognition of prior learning against, the Code 6000 and 7000 modules in the Second Engineer table in the annex to this chapter.

The oral examination in marine engineering procedures and practices, at second engineer level, conducted by an examiner of the Department of Transport, must be passed before a certificate of competency may be issued. Candidates must pass <u>all</u> the required modules for the second engineer certificate before attempting the oral part of the examination.

7.6.4 **Chief Engineer**

The academic subjects previously known as thermodynamics, mechanics, electro-technology and naval architecture are no longer examined and are

replaced by the equivalent modules of the ordinary degree programme in Marine Engineering as set out in the annex. Candidates that have already passed these modules, or equivalent, will not be required to retake them.

Candidates that have not obtained a mark of at least 50% in the 'professional' modules at second engineer level will have to retake those modules and obtain at least 50% to progress to chief engineer.

The professional subjects previously known as General, Motor and Steam engineering knowledge are no longer examined and are replaced by two new modules in shipboard technical management and hull maintenance.

These modules expand on the subject matter required for second and chief engineer certification in STCW and will be assessed by the NMCI using a combination of continual assessment and examination in accordance with CIT procedures.

The oral examination in marine engineering procedures and practices, at chief engineer level, conducted by an Examiner of Engineers, must be passed before a certificate of competency may be issued. Candidates must pass all the required modules for the chief engineer certificate before attempting the oral part of the examination.

7.6.5 **'Non-degree' candidates**

Candidates for certification that have not completed a degree in marine engineering or an equivalent degree may be assessed on an individual basis by the Examiner of Engineers and may be required to undergo a recognition of prior learning (RPL) assessment by the NMCI/CIT in order to establish equivalence of qualifications and learning with the ordinary degree in marine engineering. Shortfalls in learning and training may be made up by completion of relevant modules.

7.6.6 **Transitional procedures**

A number of existing seafarers are 'between' certification at second and chief engineer levels and have completed some of the examinations required for certification. The Department of Transport written examinations were discontinued from September 2014 to be replaced by the modules set out for second and chief engineer.

Seafarers should not be disadvantaged by implementation of the new procedures.

Seafarers currently working toward higher grades of engineering certificates should submit details of their progress to the Examiner of Engineers and to the NMCI for an RPL assessment to be made.

7.7 **Training courses and examinations:** At present training courses for Second Engineer and Chief Engineer are provided by the National Maritime College of Ireland (NMCI) and are normally run each semester of the college year beginning in September and February.

The Second Engineer course will run for a full semester (13 weeks). Candidates should ensure that they have sufficient qualifying sea service for Second Engineer

prior to starting the course. A Notice of Eligibility to attempt the written and oral examinations will not be issued to those candidates with insufficient sea service.

The Chief Engineer course will run for six weeks. Entry into this course is restricted to candidates who hold a Second Engineer certificate of competency. Candidates should ensure that they have sufficient qualifying sea service for Chief Engineer prior to starting the course. A Notice of Eligibility to attempt the written and oral examinations will not be issued to those candidates with insufficient sea service.

An NMCI certificate will be issued to candidates who are successful in the modules. In the event of failure in any of the modules candidates should make arrangements to re-take the failed subject(s) directly with the NMCI and pay the appropriate NMCI fee.

Candidates should contact the NMCI for course details and fees.

7.8 **Application procedures:** Candidates for certificates of competency should make an application to the Marine Survey Office enclosing supporting documentation and the relevant fee at least four weeks before entry into the relevant course. Incomplete applications may result in delays.

The academic modules contained in the ordinary level degree may be taken at any time with the agreement of the NMCI. This applies to non cadet entry candidates.

Fees. Each candidate will be required to pay the appropriate fee on each occasion of making application for examination. Details of the current fees may be obtained from the Examination Clerk, Marine Surveyor's Office, Dublin.

Determination of Eligibility. Each candidate enquiring as to their eligibility for admission to an examination will be required to make formal application and pay the appropriate fee before assessment of their application will be made.

Candidates seeking admission to the written and oral examinations should apply for a Notice of Eligibility as follows:

- An application will only be accepted by the Department if the candidate has satisfactorily completed the relevant training and the qualifying sea service requirements for the grade of certificate applied for.
- When a candidate's application has been approved a Notice of Eligibility will be issued by the Department of Transport. This notice will specify which modules and training are required to be completed and it will authorise the candidate's admission to the NMCI module courses and the oral parts of the examination as appropriate.
- A Notice of Eligibility is valid for two years from the date it is issued.

7.9 An NMCI certificate will be issued to candidates who pass the relevant modules. In the event of failure in any of the modules candidates should make arrangements to re-take the failed module(s) directly with the NMCI and pay the appropriate NMCI fee.

7.10 Candidates agree arrangements for the oral examination with the Exam Clerk, Department of Transport, Dublin either by telephone or email.

7.11 Following examination the result of the oral examination will be entered on the Notice of Eligibility by the Examiner of Engineers, Department of Transport. To apply for re-examination in the event of failure, the Notice of Eligibility together with a fresh application is to be made and a new Notice of Eligibility will be issued. When ALL the necessary written and oral examinations have been passed and all other conditions met, a Certificate of Competency will be issued to the candidate.

7.12 **Forgery and fraud**. The European Union (Training, Certification and Watchkeeping for Seafarers) Regulations 2014 provides for penalties and fines in respect of forgery relating to certificates of competency and to documents required for the issue of a certificate. A prosecution or a fixed penalty may be issued to candidates alleged to have committed an offence under those regulations.

7.13 **Proof of Identity**. Each candidate for a Certificate of any grade will be required to produce proof of name, nationality and place and date of birth. Proof of nationality will in general involve the production of a passport, birth certificate or of a certificate of naturalisation.

7.14 **Knowledge of English**. Each candidate must prove to the satisfaction of the Department of Transport that they are competent in the use and understanding of English in both the written and oral form and have adequate knowledge of the English language to enable them to use engineering publications and perform engineering duties in an Irish ship.

Non-native English speaking candidates may provide, or be required to provide, evidence of their competence in the English language by providing a Test Report Form from the International English Language Testing System (IELTS) or equivalent. This test report should show that the applicant has achieved at least academic level 6 in the four modules:- listening, reading, writing, and speaking with an overall band score of at least 6.5 in the academic modules.

Oral examinations will be conducted in the English Language. Candidates that cannot communicate effectively in the English Language will not be issued with a Certificate of Competency.

7.15 Issue of Certificate. Certificates of Competency are issued at the Mercantile Marine Office, Dublin, when all parts of the examination and all other mandatory conditions governing the Certificate are successfully completed or met.

Before the holder of a Certificate of Competency of a particular grade is issued with a certificate of a higher class, that person shall surrender the first mentioned certificate to the Minister for Transport or to such person as the Minister directs, for cancellation.

7.16 Lost Certificate. An application form for a certified copy of a lost Certificate of Competency should be submitted to the Mercantile Marine Office together with the appropriate fee. A declaration as to the circumstances in which the certificate was lost must be made by the applicant. A replacement certificate may be issued to the applicant when the circumstances surrounding its loss have been verified and the Minister for Transport is satisfied that a Certificate may be reissued under such circumstances.
A fee is not chargeable if the applicant can show that the certificate was lost through shipwreck or fire.

7.17 Breach of Examination Rules. A candidate who violates any of the examination rules will be considered to have failed and will not be accepted for re-examination for such a period as may be decided by the Examiner of Engineers.

7.18 Attempted Bribery. A candidate who offers a gratuity to any officer of the Department of Transport or any other officer involved in the examination system will be regarded as having committed an act of misconduct and will be rejected. They may not be re-examined until a period of at least twelve months has elapsed. This penalty is additional to any penalty to which they may be liable under criminal law.

7.19 Candidates violating any of the Regulations, engaging in rude, abusive or threatening behaviour to the Examiner or to any of the administrative staff, or of disorderly or improper conduct in or about the examination room will be considered to have failed and will not be accepted for re-examination for such period as may be decided by the Department of Transport.

Engineer Officer of the Watch			
Previous DTTAS examination or requirement	**B.Eng (Ord) marine engineering equivalent modules**	**CIT module code**	**RPL possible**
Engineering Science I Engineering Science II	Technical Drawing 1	MARI 6004	Yes
	Technological Maths 1	MATH 6016	Yes
	Mechanics 1	MARI 6001	Yes
	Mechanics 2	MARI 6002	Yes
	Introduction to Thermodynamics	MARI 6003	Yes
	Electrical and Electronics 1	ELEC 6010	Yes
Engineering Knowledge Motor, General and Steam	Introduction to Marine Engineering	MARI 6006	Yes
	Marine Engineering Practice	MARI 6009	Yes
	Marine Engineering Operations*	MARI 7002	No [10] See footnote
	Electrical Automation Systems	ELEC 7002	Yes
	HV Operation and protection	ELEC 7020	Yes
Training Record Book	Marine E&E Sea Phase	MARI 6020	No
Sea service	Marine E&E Sea Phase	MARI 6020	No
Modules that include some workshop time and practical experience. These modules relate only to the practical training component of the B. Eng. (Ord) Degree in Marine Engineering. Candidates not following the B. Eng. (Ord) Degree course must demonstrate adequate practical training by appropriate means such as completion of a recognised engineering apprenticeship.	Mechanical Workshop 1	MECH 6020	Yes
	Mechanical Workshop 2	MECH 6026	Yes
	Mechanical Workshop 3	MECH 6027	Yes
	Mechanical Workshop 4	MECH 7012	Yes
	Physics for Marine Engineers	PHYS 6020	Yes
	Marine Instrumentation	PHYS 6026	Yes
	Marine Control Engineering	PHYS 7005	Yes
	Technical Drawing 2	MARI 6005	Yes
	Electrical and Electronics 2	ELEC 6014	Yes
	Marine Electrical Power	ELEC 7011	Yes
	Marine Project	MARI 7015	Yes

[10] Module MARI 7002 may be passed by assessment, without attending the module, in the case of non-B.Eng(Ord) Degree Marine Engineering students.

Second Engineer Officer			
Previous DTTAS examination or requirement	**B.Eng (Ord) marine engineering equivalent modules**	**CIT module code**	**RPL possible**
Engineering Drawing	Technical Drawing 2	MARI 6005	Yes
Mathematics	Mathematics 2	MATH 6027	Yes
	Mathematics 3	MATH 6035	Yes
	Mathematics 4	MATH 6036	Yes
Thermodynamics	Thermodynamics	MARI 6012	Yes
	Applied Thermodynamics	MARI 7001	Yes
Mechanics	Mechanics 3	MARI 6010	Yes
	Mechanics 4	MARI 6011	Yes
	Mechanics 5	MARI 7004	Yes
Naval Architecture	Naval Architecture principles	MARI 7005	Yes
	Naval Architecture Applications	MARI 7006	Yes
Electro-technology	Electrical and Electronics II	ELEC 6014	Yes
	Marine Electrical Power	ELEC 7011	Yes
	Marine Control Engineering	PHYS 7005	Yes

The following modules are required for Second Engineer and Chief Engineer[11]		
Marine Auxiliary Systems*	MARI 8001	No
Marine Safety and Environmental Protection Systems*	MARI 8002	No
Ship Manoeuvring Systems*	MARI 8003	No
Marine Propulsion Motor*	MARI 8007	No
Marine Propulsion Steam*	MARI 8008	No
Planning and Resource Management*	MARI 8004	No

Chief Engineer Officer		
Module Name	**CIT module code**	**RPL possible**
Hull Maintenance and Dry-docking*	MARI 8005	No
Shipboard Technical Management*	MARI 8006	No

* Denotes modules for which a Notice of Eligibility is required.

[11] To be done at Second Engineer level following obtaining adequate qualifying sea service. 50% pass mark is required for Chief Engineer.

CHAPTER 8

CERTIFICATES OF COMPETENCY – ORAL AND NATIONAL MARITIME COLLEGE OF IRELAND WRITTEN EXAMINATIONS

8.1. The standard of education required for certificates of competency is the Bachelor of Engineering in Marine Engineering or the Bachelor of Engineering in Marine Electro-technology. These are four year ordinary degree programmes conducted by Munster Technological University (MTU) at the National Maritime College of Ireland. The courses include a mandatory work experience module, safety training and the necessary academic and workshop modules to comply with STCW requirements for the engineer officer of the watch certificate of competency or the electro-technical officer certificate of competency.

Satisfactory completion of the B. Eng in Marine Engineering degree also covers the educational requirements for second and chief engineer certificates of competency in thermodynamics, mechanics, electro-technology, naval architecture, mathematics and engineering drawing.

Further written and oral examinations are required for certification at second engineer and chief engineer level.

8.2. The Engineering Knowledge syllabuses for Certificates of Competency are separated into written and oral parts. The salient features are:

8.2.1. The Chief Engineer syllabus is principally concerned with the safe and efficient operation, testing, maintenance and management of on board systems and protection of the marine environment.

The responsibilities of a chief engineer officer at the management level are reflected in the syllabus as a whole taking into account that a chief engineer is the senior officer responsible for the mechanical propulsion, and the operation and maintenance of the mechanical and electrical installations of the ship.

8.2.2. The Second Engineer syllabus is principally concerned with the constructional details and the working principles of marine systems and equipment, the safe and efficient operation of plant, the correct use of equipment provided for the safety & security of the ship and crew, and the protection of the marine environment.

The responsibilities of a certificated engineer officer at the management level are reflected in the syllabus as a whole taking into account that a Second Engineer is the engineer officer next in rank to the Chief Engineer 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.

8.2.3. The engineer officer of the watch syllabus is mainly concerned with the constructional details and working principles of marine systems and equipment with particular emphasis on watchkeeping on main machinery, the safe and efficient operation of plant, the correct use of equipment provided for

the safety & security of the ship and the protection of the marine environment. The responsibilities of a certificated engineer officer at the operational level are reflected in the syllabus as a whole.

8.2.4. The Electro-technical officer syllabus is mainly concerned with the working principles of all electrical systems and equipment on board, The syllabus also covers maintenance and testing of electrical equipment, including High Voltage and GMDSS. The responsibilities of a certificated Electro-technical officer at the operational level are reflected in the syllabus as a whole.

8.3. Candidates who have completed courses, leading to other recognised qualifications in mechanical engineering, or electrical engineering, may be considered for recognition of prior learning (RPL) against the required modules of the ordinary degree programmes specified in Chapter 7

Candidates who are not granted RPL against modules will be required to pass all, or the remaining, modules under the examinations conducted by NMCI.

Partial passes or exemptions from examinations administered by other Administrations will not be recognised or accepted other than by RPL.

No exemption will be granted from the Engineering Knowledge oral examinations. All oral examinations will be conducted by an Examiner of Engineers from the Department of Transport.

8.4. Permitted attempts

8.4.1. A candidate may present themselves for the B. Eng. Marine Engineering modules from which they have not been granted recognition of prior learning, at any time.

8.4.2. A candidate may present themselves for the professional modules for second and chief engineer at any time after they have completed the necessary period of training and qualifying sea service, except that in the case of the chief engineer modules they must also be in possession of a Second Engineer Certificate of Competency (STCW Reg. III/2 greater than 3000 kW unlimited area) and in the case of the second engineer modules they must be in possession of an Engineer Officer of the Watch Certificate of Competency (STCW Reg III/1). The candidate must also have a valid Notice of Eligibility.

8.5. Re-examination. Each candidate who fails the oral examination is required to make a fresh application and pay the appropriate fee. Candidates will not be scheduled for repeat oral exam until at least 14 days after the failed attempt.

8.6. A candidate who shows ignorance of topics vital to an engineer officer's duties and which, if neglected could lead to conditions whereby the safety of life at sea, the safety and security of the ship or the marine environment is endangered will not be accepted for re-examination until they have performed a further period of sea service between three and six months to be determined by the Examiner of Engineers.

8.7. Pass Marks. Oral examinations are assessed on the basis of a candidate’s knowledge and ability to answer questions on various topics of relevance to the duties of an engineer officer at the level being examined. A pass mark is not specified,

however inability to adequately answer correctly across a range of topics and/or failure to answer adequately on an area related to safety of life or protection of the marine environment issues may lead to failure.

DYSLEXIA

8.8. Dyslexia Policy for Examination and Assessment Procedures

8.8.1. Examinations require students to demonstrate knowledge and understanding of the subject through timed assessments. During the examination students are expected to select and manipulate thoughts and transfer these concepts into written format. This process emphasises a dyslexic student's difficulties.

8.8.2. Candidates undertaking study and written examinations for Bachelor Degrees in Nautical Science, Marine Engineering and Marine Electro-technology at the National Maritime College of Ireland (NMCI) may avail of the NMCI policy and procedures relating to examinations set out by MTU.

8.8.3. The courses of study mentioned above normally lead to a career at sea and in order to obtain a seafaring qualification or Certificate of Competency further oral and written examination is required by national and international legislation. Seafaring is a regulated profession, and examinations leading to Certificates of Competency in the Mercantile Marine and Fishing Industry are conducted by NMCI and Bord Iaschaigh Mhara (BIM) respectively and accepted by the Department of Transport which has responsibility for regulation in this area, and ensuring safety of life at sea and pollution prevention.

8.8.4. Candidates undertaking written examinations conducted by the NMCI, or BIM on behalf of the Department of Transport, who have been diagnosed as dyslexic by an educational psychologist may be allowed an extra 10 minutes for each hour of normal examination time, and/or the use of acetates or tinted film if required.

8.8.5. The time allowance is applicable only to those professional written examinations leading directly to a deck or engineer certificate of competency, and does not apply to ancillary courses such as radio certificates, first aid etc.

8.8.6. Where possible, candidates having extra time may be accommodated in a separate examination room, or at the back of the room, so that they are not disturbed by the main body of students departing at the end of normal examination time.

8.8.7. Given the safety critical nature of the tasks which holders of a Certificate of Competency perform, and the conditions under which they carry them out, the use of readers, amanuensis (scribes), computers or other aides that could not reasonably be brought to sea and used under emergency conditions will not be allowed.

8.8.8. Allowances may be made by Examiners for spelling errors and composition of passages, provided that the meaning of the answer is clear to the Examiner. Clerical errors in safety related calculations will be dealt with in the same way for all candidates.

8.8.9. Candidates that have been diagnosed as dyslexic must have documented written proof of this diagnosis, in the form of an assessment report, if they wish to avail of extra time.

8.8.10. Candidates wishing to apply for extra time should contact their personal or course tutor who will guide them through the procedure.

8.8.11. Some groups of examinations must be completed within a two year period prior to the issue of a Certificate of Competency - no concession is granted in respect of this requirement.

8.9. Initial Action

8.9.1. If you think that you may be dyslexic, there are a number of on-line tests that may help you decide if formal assessment is appropriate.

8.9.2. If you have been clinically assessed as having dyslexia and wish to request additional examination time, your initial action should be to contact your personal or course tutor. They will be able to guide you through making the application.

8.10. Assessment Report

8.10.1. For the purposes of gaining additional time in written examinations leading to a Certificate of Competency, an assessment report will be accepted from a qualified Educational Psychologist. Further information may be obtained from the Dyslexia Association of Ireland and the Psychological Society of Ireland.

8.10.2. Assessments must have been carried out as an adult (post 16 years old), include cognitive assessment, and clearly identify dyslexia as a significant learning difficulty.

8.10.3. All candidates attending courses of study leading to Certificates of Competency are strongly recommended to obtain a Certificate of Medical Fitness for service at sea prior to commencing a course. The medical examination for a Certificate of Medical Fitness does not test for dyslexia; however seafarers with dyslexia may have difficulty with vision testing, and should discuss this with the approved doctor conducting the examination.

8.11. Administrative Procedures

8.11.1. Dyslexic candidates putting themselves forward for DTTAS examinations should notify the examination centre at least 2 weeks in advance of the examination, together with supporting documentation. NMCI/BIM will liaise with the Department of Transport and advise the examination centre invigilator of any additional time granted.

8.11.2. Once an increased examination time has been agreed it will remain valid for all future examinations until the tenth anniversary of the assessors report, without reference to the Department of Transport.

8.11.3. Examination centres may seek to recover the additional costs incurred by the supervision of the additional examination room and/or examination time. You should talk to the examination centre concerned to find out their policy.

8.12. Examination Results

8.12.1. Once a candidate has been given additional time in an examination, they may not have their dyslexia raised as an issue for special considerations.

CHAPTER 9

CONTINUED PROFICIENCY AND UPDATING OF KNOWLEDGE; REVALIDATION OF CERTIFICATES.

9.1 All certificates of competency need to be revalidated or renewed, at five yearly intervals, if the holder wishes to continue to be able to serve at sea. All certificates issued to Engineer Officers and Electro technical Officers will have a maximum validity of five years and will become due for revalidation on or before the expiry date shown in the certificate.

9.2 When a certificate is being revalidated the certificate and endorsement will be reissued as a new document.

9.3 Certificates may be revalidated up to six months prior to the expiry date. In such cases the expiry date of a new certificate will be five years from the date of expiry of the previous certificate.

9.4 **Certificates of Competency**. In order to fulfil the requirements for revalidation certificate holders will have to show medical fitness and continued professional competence by:

9.4.1 holding an approved and valid Medical Fitness Certificate (maximum validity **two years)** and;

9.4.2 having attended approved training or updated training (refer to Appendix 11) in personal survival techniques, fire prevention and fire fighting, proficiency in survival craft and advanced fire fighting within the previous five years and;

9.4.3 having approved sea going service in ships of greater than 350 kW propulsion power, performing functions appropriate to the certificate held as an Engineer Officer or Electro technical Officer, for a period of at least 12 months in total during the preceding 5 years or;

9.4.4 having approved sea going service in fishing vessels of greater than 750 kW propulsion power, performing functions appropriate to the certificate held as an Engineer Officer or Electro technical Officer, for a period of at least 12 months in total during the preceding 5 years or;

9.4.5 having completed at least three months approved seagoing service in ships of greater than 750 kW propulsion power, performing functions appropriate to the certificate held as an Engineer Officer or Electro technical Officer in total during the preceding six months immediately prior to revalidating; or

9.4.6 having completed at least three months seagoing service, in ships of greater than 750 kW propulsion power, performing functions appropriate to the certificate held in a supernumerary capacity, or in a lower officer rank than that for which the certificate is issued, immediately prior to application for revalidation (i.e. Chief Engineer Officers may sail as Second Engineer Officers, Second Engineer Officers as Engineer Watchkeepers and Engineer Watchkeepers as second in charge of a watch); or

9.4.7 applying to the Examiner of Engineers for an assessment of relevant working experience which may result in the candidate being required to undertake additional updating training, revalidation interview, and/or passing an approved test, training course; or

9.4.8 having performed functions considered to be equivalent to the seagoing service required in paragraph 8.4.3 (such as Flag State Surveyor, Marine Surveyor, Maritime Lecturer, Marine Superintendent, Ship Repairer) which ensures an adequate updating of marine engineering or electro-technical knowledge. Applications for waiving the revalidation sea service should be made only by certificate holders who wish to go to sea in the highest capacity appropriate to their certificate. Such applicants will have been actively involved in the inspection, operation or survey of sea-going ships or other duties for a substantial proportion (at least half) of the 5 years preceding the date of application for revalidation. Certificate holders in other occupations not specifically mentioned will also be considered on application.

9.5 Any relevant refresher and updating training courses required shall be approved and include changes in relevant national and international regulations concerning the safety of life at sea, security and the protection of the marine environment and take account of any updating of the required standard of competence.

9.6 There will be no time limit on applications for the revalidation of an expired certificate of competency for sea-going service, irrespective of the date on which it ceased to be valid for such service.

9.7 Holders of certificates that have not been revalidated on or before the expiry date[12], who wish to apply to have a certificate revalidated or reissued, must:

9.7.1 hold an approved and valid Medical Fitness Certificate for Sea Service (medical cert may be issued for less than two years) and;

9.7.2 have attended approved training or updated training (refer to Appendix 11) in personal survival techniques, fire prevention and fire fighting, proficiency in survival craft and advanced fire fighting within the previous five years and;

9.7.3 be in possession of a certificate of proficiency in medical first aid issued within the previous five years and;

9.7.4 pass an interview conducted by the Examiner of Engineers who may then either:

9.7.4.1 issue a Certificate of Competency permitting the certificate holder to sail in the rank lower than that for which the original certificate was issued except those holding EOOW certificates. Following the accrual of seatime as per 8.4 the new certificate may be submitted for reinstatement to the original rank or;

9.7.4.2 re-instate the Certificate in exceptional circumstances.

[12] Holders of certificates that have not been revalidated on or before the expiry date may apply to have a certificate revalidated provided that they can meet the sea service requirements of paragraph 9.4 within the five year period following the expiry date of the certificate. In such cases the validity of the new certificate will not exceed five years from the expiry date of the previous certificate.

9.8 Engineer Officers - High Voltage requirements

9.8.1 A High Voltage (HV) system (over 1000V) is where voltage is generated and distributed at high voltage or transformed to and distributed at high voltage. It does not include systems where high voltage is utilised locally, e.g. ignition systems, radio transmission, radar or other navigational equipment.

9.8.2 All engineer officers are required to undergo education and training in HV systems, at both the operational and management levels. This requirement will applies to all Engineer Officers starting training after 1st July 2013.

9.8.3 From 1st January 2017, all Engineer Officers who work on ships with HV systems will need to comply with the HV training requirements.

9.8.4 There is no requirement for additional training to be undertaken by existing Engineer Officers who do not, or don't intend to, work on ships with HV systems. These Engineer Officers will receive the following CoC limitation:

"From 1 January 2017 this certificate is not valid for service on ships fitted with High Voltage (over 1000V) systems"

9.8.5 Engineer Officers may subsequently request the removal of this limitation by providing documentary evidence of approved HV training.

9.8.6 Engineers progressing to higher levels of Certificates of Competency will be required to have HV voltage training whether or not they intend to work on ships with HV equipment.

9.9 EOOW CoC Reg. III/1 (Operational Level)

9.9.1 To avoid having the High Voltage limitation, Engineer Officers of the Watch must provide documentary evidence of completion of an approved High Voltage course or completion of the following sea service in the engine room on vessels fitted with HV systems;

9.9.1.1 six months in the preceding five years; or
9.9.1.2 three months sea service during the last twelve months.

9.9.2 Sea service evidence can be provided in the form of a company letter signed by an authorised official within the company.

9.10 Second/Chief Engineer Officer CoC Reg. III/2 and III/3 (Management Level)

9.10.1 To avoid having the High Voltage limitation, Senior Engineer Officers must provide documentary evidence of completion of a High Voltage (HV) course.

9.11 High Voltage Courses

9.11.1 Courses previously undertaken prior to 1st July 2013 do not need to be approved but you must provide documentary evidence confirming the course covers at least the following topics:

9.11.2 At the operational level

- The hazards associated with High Voltage systems;
- The functional, operational and safety requirements for a marine high-voltage system;
- Basic arrangement of High Voltage systems and their protective devices;
- Safety procedures related to High Voltage systems; and
- Immediate actions to be taken under fault conditions.

The original certificate and course syllabus must be submitted with the application.

9.11.3 At the management level

- The functional, operational and safety requirements for a marine high-voltage system;
- Assignment of suitably qualified personnel to carry out maintenance and repair of high-voltage switchgear of various types;
- Taking remedial action necessary during faults in a high-voltage system;
- Producing a switching strategy for isolating components of a high-voltage system;
- Selecting suitable apparatus for isolation and testing of high-voltage equipment;
- Carrying out a switching and isolation procedure on a marine high-voltage system, complete with safety documentation; and
- Performing tests of insulation resistance and polarization index on high-voltage equipment.

9.12 Certificates of Proficiency (tanker endorsements)

9.12.1 Separate Certificates of Proficiency (tanker endorsements) are required for oil tankers, chemical tankers and for liquefied gas tankers.

9.12.2 STCW defines continued professional competence for seafarers revalidating tanker endorsements under Regulation I/11 as:

- approved seagoing service, performing duties appropriate to the tanker certificate or endorsement held, for a period of at least three months in total during the preceding five years, **or**
- successfully completing an approved relevant training course or courses.

9.12.3 Seafarers revalidating certificates of proficiency (tanker endorsements) must provide evidence of approved minimum sea service appropriate to each of the types of tanker that they want to remain qualified for.

9.12.4 If evidence of sea service cannot be provided the Certificate of Proficiency (tanker endorsement) will not be renewed. Before it can be re-issued, the applicant will be required to complete:

- the relevant advanced tanker training programme or
- 14 days approved supervised ship-board training (which must include at least one loading and one discharge operation) in a supernumerary capacity in the relevant type of tanker.

CHAPTER 10

MARINE ENGINE OPERATOR LICENCES

10.1 Marine Engine Operator Licences are issued as Special Certificates of Competency under the Merchant Shipping (Certification of Seamen) Act, 1979.

10.2 Marine Engine Operators may, subject to any Safe Manning Document, be in charge of the machinery spaces on:

- Cargo vessels of less than 750 kW propulsion power in unlimited areas.
- Passenger and cargo ships of less than 750kW propulsion power in the Near Coastal Area.

Normally the Marine Engine Operator shall not be the designated Master of the vessel. However, Masters may be qualified as Marine Engine Operators if they satisfy the criteria set out below. Holders of Marine Engine Operator Licences may act in a dual purpose capacity when specified on the vessel's safe manning document.

10.3 Proof of Identity: Each candidate for a Marine Engine Operators Licence (MEOL) will be required to produce proof of name, nationality and place and date of birth. Proof of nationality will in general involve the production of a passport, birth certificate or of a certificate of naturalisation.

10.4 Sea Service: Official Discharge Book entries or Certificates of Discharge are normally acceptable evidence of sea service. However, if a Discharge Book does not show all the service an applicant is claiming, written statements from employers testifying that the applicant has performed the service claimed will also be accepted as proof of sea service. In the case of a person claiming sea service in a dual purpose capacity written statements from employers testifying that the service has been in a dual purpose role must be submitted covering the period for which such service is claimed.

Written statements should contain the following information:

10.4.1 the ship or ships on which the applicant has served giving the propulsive power;

10.4.2 the capacity in which the applicant served;

10.4.3 the dates on which the periods of service began and ended;

10.4.4 the trading area for which the service is claimed.

10.5 Testimonials. Each candidate must produce testimonials in respect of all sea service performed. These testimonials, which should state the rank and position on board, the type of main propulsion machinery and the nature of duties performed, are to be signed by the Master or Chief Engineer Officer and endorsed by the Engineer Superintendent or some other responsible representative of the employer. A sample testimonial is shown in Appendix 5.

10.6 To qualify for the first issue of a Marine Engine Operator Licence each candidate must:-

10.6.1 satisfy the training requirements set out in 9.4 and;

10.6.2 hold an approved and valid Medical Fitness Certificate for Sea Service (max validity two years) and;

10.6.3 provide evidence of having completed basic training within the previous five years (see Appendix 8) and;

10.6.4 be in possession of a certificate verifying proficiency in advanced fire fighting issued within the previous five years and (Reg VI/3);

10.6.5 be in possession of a certificate verifying proficiency in survival craft and rescue boats (other than fast rescue boats) issued within the previous five years and (Reg VI/2);

10.6.6 be in possession of a certificate verifying proficiency in medical first aid issued within the previous five years and (Reg VI/4);

10.6.7 pass the oral examination set out in Chapter 13.

10.7 Training Requirements MEOL:

10.7.1 Sea service or other industrial training completed before the age of sixteen years will not be accepted. Each candidate must:

10.7.2 Have twenty-four months sea service in ships of not less than 350 kilowatt registered power or;

10.7.3 Have twenty four months shore employment with an engineering background acceptable to the Examiner of Engineers and 3 months qualifying sea service in ships of not less than 350 kilowatt registered power or;

10.7.4 Satisfactorily complete a recognised engineering apprenticeship, provide documentary evidence of this and have six weeks of qualifying sea service in ships of not less than 350 kilowatt registered power or;

10.7.5 Hold a Fishing Vessel Certificate of Competency Class 3 or higher and comply with the additional requirements set out in Chapter 15; or

10.7.6 Hold a Certificate of Proficiency as Able Seafarer Engine; and

10.7.7 Complete an engineering skills course acceptable to the Examiner of Engineers or other documented and appropriate training (Appendix 7). This requirement may be waived where the apprenticeship, shore employment or sea service mentioned above is of an acceptable standard and;

10.7.8 Satisfactorily complete the Training Record as outlined in Appendix 5.

10.8 All training, shore employment, sea service etc is to be documented and verified in a manner acceptable to the Examiner of Engineers.

10.8.1 Sea service and training may be performed in a dual purpose capacity provided such service is accurately described by appropriate entries in the crew agreement such as "deck officer/trainee engine operator", and provided such

service is covered by sea service testimonials which should state the type of main propelling machinery and the nature of the duties performed.

10.8.2 The Examiner of Engineers may accept structured training programmes which provide sea service, basic engineering skills training and qualifying sea service as a trainee engine operator within a 24 month period (Appendix 7).

10.9 Knowledge of English. Each candidate must prove to the satisfaction of the Examiner of Engineers that they are competent in the use and understanding of English in both the written and oral form and have adequate knowledge of the English language to enable them to use engineering publications and perform engineering duties in an Irish ship.

Non-native English speaking candidates may provide, or be required to provide, evidence of their competence in the English language by providing a Test Report Form from the International English Language Testing System (IELTS) or equivalent. This test report should show that the applicant has achieved at least academic level 6 in the four modules: - listening, reading, writing, and speaking with an overall band score of at least 6.5 in the academic modules.

Oral examinations will be conducted in the English Language. Candidates that cannot communicate effectively in the English Language will not be issued with a Licence.

10.10 Application procedures: Candidates for Marine Engine Operator should make an application to the Marine Survey Office enclosing supporting documentation and the relevant fee at least four weeks before entry into any course. Incomplete applications may result in delays.

Fees. Each candidate will be required to pay the appropriate fee on each occasion of making application for examination. Details of the current fees may be obtained from the Examination Clerk, Marine Surveyor's Office, Dublin.

10.11 Determination of Eligibility. Each candidate enquiring as to their eligibility for admission to an examination will be required to make formal application and pay the appropriate fee before assessment of their application will be made.

When a candidate's application has been approved a Notice of Eligibility will be issued by The Department of Transport. This notice will specify which training is required to be completed and it will authorise the candidate's admission to the oral examination.

- A Notice of Eligibility is valid for two years from the date it is issued.

10.12 Forgery and fraud. The European Union (Training, Certification and Watchkeeping for Seafarers) Regulations 2014 provides for penalties and fines in respect of forgery relating to certificates of competency and to documents required for the issue of a certificate. A prosecution or a fixed penalty may be issued to candidates alleged to have committed an offence under those regulations.

10.13 Issue of Licence: The result of the oral examination will be entered on the Notice of Admission by the Examiner, Department of Transport. To apply for re-examination in the event of failure, the Notice of Admission together with a fresh application is to be made as per paragraph 9.5 and a new Notice of Admission will be issued. When the

necessary courses, oral examinations and all other requirements have been passed a licence will be issued to the candidate.

CHAPTER 11

SPECIAL TRAINING FOR PERSONNEL ON TANKERS

11.1 The Regulations provide that Officers **and** Ratings assigned specific duties and responsibilities related to cargo or cargo equipment on tankers shall hold a certificate in **basic** training for tanker cargo operations and 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 tankers shall hold a certificate in **advanced** training for tanker cargo operations.

- **Oil tanker** means a ship constructed and used for the carriage of petroleum and petroleum products in bulk.
- **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.
- **Liquefied gas** tanker 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 International Gas Carrier Code.

11.2 Basic Training for Tanker Cargo Operations.

11.2.1 Every candidate for a certificate in basic training for **oil and chemical tanker** cargo operations or **liquefied gas tanker** cargo operations must have completed basic safety training in accordance with provisions of section A-VI/1 of the STCW Code in:

- Personal survival techniques
- Fire prevention and fire fighting
- Elementary first aid
- Personal safety and social responsibilities

11.2.2 In addition every candidate must hold a Certificate of Proficiency, or equivalent, in Advanced Fire Fighting.

11.2.3 Basic **oil and chemical tanker** training may be completed by attendance at an approved basic tanker training course for oil and chemical tanker cargo operations and meeting the standard of competence specified in section A-V/1-1, paragraph 1 of the STCW Code.

11.2.4 Basic **liquefied gas tanker** training may be completed by attendance at an approved basic training course for liquefied gas tanker cargo operations and meeting the standard of competence specified in section A-V/1-2, paragraph 1 of the STCW Code.

11.2.5 A Certificate of Proficiency in basic tanker training will be issued to those candidates that have completed the relevant basic tanker training.

11.3 Advanced training for oil tanker cargo operations

11.3.1 Every candidate for a certificate of proficiency in advanced training for oil tanker cargo operations must hold a certificate of proficiency in basic training for oil

and chemical tanker cargo operations[13]. While qualified for certification in basic training for oil and chemical tanker cargo operations, every candidate must have and have:

- At least three months of approved seagoing service on oil tankers, which includes at least one load and one discharge operation, whilst holding a certificate of proficiency in basic training for oil and chemical tanker cargo operations, or
- At least one month of approved onboard training on oil tankers in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1 of the STCW Code and;
- Completed approved advanced training for oil tanker cargo operations and meet the standard of competence specified in section A-V/1-1, paragraph 2 of the STCW Code and hold documentary evidence of this training.

11.3.2 A Certificate of Proficiency in advanced oil tanker training will be issued to those candidates who have completed the relevant training.

11.4 Advanced training for chemical tanker cargo operations

11.4.1 Every candidate for a certificate of proficiency in advanced training for chemical tanker cargo operations must hold a certificate of proficiency in basic training for oil and chemical tanker cargo operations[13]. While qualified for certification in basic training for oil and chemical tanker cargo operations, every candidate must have:

- At least three months of approved seagoing service on chemical tankers, which includes at least one load and one discharge operation, or
- At least one month of approved onboard training on chemical tankers in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1 of the STCW Code and;
- Completed approved advanced training for oil tanker cargo operations and meet the standard of competence specified in section A-V/1-1, paragraph 3 of the STCW Code and hold documentary evidence of this training.

11.4.2 A Certificate of Proficiency in advanced chemical tanker training will be issued to those candidates that have completed the relevant training.

11.5 Advanced training for liquefied gas tanker cargo operations

11.5.1 Every candidate for a certificate of proficiency in advanced training for liquefied gas tanker cargo operations must hold a certificate of proficiency in basic training for liquefied gas tanker cargo operations[14]. While qualified for certification in basic training for liquefied gas tanker cargo operations, every candidate must have

[13] Tanker familiarisation courses carried out prior to 1st July 2013 will be accepted until 31st December 2016 in lieu of basic training together with completion of training in fire-fighting operations (STCW Code Chapter V) relevant to the type of tanker for which the certificate of proficiency is being sought.
[14] Tanker familiarisation courses carried out prior to 1st July 2013 will be accepted until 31st December 2016 in lieu of basic training together with completion of training in fire-fighting operations (STCW Code Chapter V) relevant to the type of tanker for which the certificate of proficiency is being sought.

- At least three months of approved seagoing service on liquefied gas tankers, which includes at least one load and one discharge operation, or
- At least one month of approved onboard training on liquefied gas tankers in a supernumerary capacity, which includes at least three loading and three unloading operations and is documented in an approved training record book taking into account guidance in section B-V/1 of the STCW Code and;
- Completed approved advanced training for liquefied gas tanker cargo operations and meet the standard of competence specified in section A-V/1-2, paragraph 2 of the STCW Code and hold documentary evidence of this training.

11.5.2 A Certificate of Proficiency in advanced liquefied gas tanker training will be issued to those candidates that have completed the relevant training.

11.6 Testimonials

Testimonials of service on board tankers for which the certificate is being sought must be provided with each application for a certificate. A sample testimonial is shown at Appendix 4. Each application for a certificate of proficiency must include the following documents:

- Completed application form
- Fee
- Current certificate of competency (if any)
- Valid medical fitness certificate
- Certificate(s) of training in basic and/or advanced tanker training relevant to the type of certificate being applied for
- Discharge book
- Tanker sea service testimonials

CHAPTER 12

ENGINE ROOM AND ELECTRO-TECHNICAL RATING CERTIFICATES

Engine Room Watch Rating

12.1 Every rating forming part of an engine room watch or designated to perform duties in a periodically unmanned engine room on a ship powered by main propulsion machinery of 750 kW propulsion power or more, other than ratings under training or whose duties are of an unskilled nature shall hold an engine room watch rating certificate. Engine Room Watch Rating Certificates may be issued to ratings, who can meet the qualifying conditions set out below, by Companies approved and authorised to issue Watch Rating Certificates or by the Minister. Companies should ensure that a Chief Engineer holding a Certificate of Competency STCW Regulation III/2, ships of 3000 kW propulsion power, or more has certified that the candidate meets the qualifying conditions.

12.2 To qualify for the issue of an Engine Room Watch Rating Certificate in Ireland, each candidate must: -

12.2.1 be not less than 16 years of age and:

12.2.2 have not less than six months of approved training and experience of engine room watchkeeping duties and:

12.2.3 be found competent by a certificated engineer officer in the duties specified in section A-III/4 of the STCW Code and:

12.2.4 provide evidence of having completed basic training in accordance with Appendix 8 within the previous five years (Reg VI/1) and;

12.2.5 have successfully completed the relevant parts of an approved on board training record book such as the International Shipping Federation (ISF) On Board Training Record Book for Engine Ratings, or equivalent, and submit the book to the Chief Engineer Officer for evaluation on the vessel(s) on which the training was carried out.

12.3 A maximum of four of the six months sea going experience required by paragraph 12.2.2 may be remitted if the rating has completed a course of training which is acceptable to the Examiner of Engineers.

12.4 If it is established that a rating meets the requirements of paragraph 12.2 then that rating may be issued with an Engine Room Watch Rating Certificate using the Seafarer Information System.

12.5 Unqualified ratings may form part of an engine room watch or be designated duties in an unmanned engine room when they are under training or when their duties are of an unskilled nature.

12.6 Every rating, before being issued with an Engine Room Rating Watch Keeping Certificate, should be familiar with the watchkeeping duties in the machinery spaces of the ship in which they are serving, as set out in the ISF Book. Familiarity with

these duties should be verified by the issuing Chief Engineer Officer using direct questioning and 'on the job' assessment.

Able Seafarer Engine

12.7 To qualify for the issue of an Able Seafarer Engine Certificate in Ireland, each candidate must: -

12.7.1 be not less than 18 years of age and;

12.7.2 meet 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 and;

12.7.3 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

12.7.4 meet the standard of competence specified in section A-III/5 of the STCW Code.

12.7.5 have successfully completed the relevant parts of an approved on board training record book such as the International Shipping Federation (ISF) On Board Training Record Book for Engine Ratings, or equivalent.

12.8 The standard of competence specified in section A-III/5 may be met by completing an approved Able Seafarer Engine training course. Approved training courses, for which a certificate of training is issued, carried out in a member State of the European Union, Norway or Iceland are acceptable.

12.9 If it is established that a rating meets the requirements of paragraph 12.7 then that rating may be issued with an Able Seafarer Engine Certificate using the Seafarer Information System.

Electro-technical Rating

12.10 To qualify for the issue of an Electro-technical Rating Certificate in Ireland, each candidate must: -

12.10.1 be not less than 18 years of age and;

12.10.2 have completed approved seagoing service including not less than 12 months training and experience, or

12.10.3 have completed approved training, including an approved period of seagoing service which shall not be less than 6 months, or

12.10.4 have qualifications that meet the technical competences in table A-III/7 of the STCW code and an approved period of seagoing service, which shall not be less than 3 months, and

12.10.5 meet the standard of competence specified in section A-III/7 of the STCW Code.

12.10.6 have successfully completed the relevant parts of an approved on board training record book such as the International Shipping Federation (ISF) On Board Training Record Book for Engine Ratings, or equivalent.

12.11 The standard of competence specified in section A-III/7 may be met by completing an approved electro-technical rating training course. Approved training courses, for which a certificate of training is issued, carried out in a member State of the European Union, Norway or Iceland are acceptable.

12.12 If it is established that a rating meets the requirements of paragraph 12.10 then that rating may be issued with an Electro-technical Rating Certificate using the Seafarer Information System.

CHAPTER 13

EXAMINATION SYLLABUSSES

The Department of Transport examinations prescribed in the Merchant Shipping (Training and Certification) Regulations 2014 and in these Directions are based on the knowledge, understanding and proficiency required by STCW for each grade of certificate or qualification.

Certificates are progressive from grade to grade. The knowledge, understanding and proficiency for a higher grade in both written and oral examination is always regarded as including the knowledge, understanding and proficiency for the corresponding subject, if any, for certificates of a lower grade.

Although English is not included in the knowledge, understanding and proficiency as a separate subject, candidates are required to demonstrate proficiency in the use of written and oral English and to show a good standard of English in their descriptive answers. Failure to demonstrate adequate proficiency in the use of English may adversely affect the overall marks given.

Oral examinations will predominantly be based upon the operational duties of a Marine Engineer Officer or Electro technical Officer in the following functions and at the level appropriate to the examination that they are taking, however the examination may include aspects of the syllabus normally covered in written examinations.

- Control and operation of the ship and care for persons on board.
- Marine Engineering
- Electrical, electronic and control engineering
- Maintenance and repair

Candidates for management level certificates are expected to prepare themselves thoroughly for oral examinations. In addition to technical ability the oral examination is an assessment of a candidate's ability to manage personnel and emergency situation.

Table A-III/1 Officers in charge of an engineering watch

STCW	
Competence	**Knowledge Understanding and Proficiency**
Marine engineering at the operational level	
Maintain a safe engineering watch	Thorough knowledge of principles to be observed in keeping an engineering watch, including: .1 duties associated with taking over and accepting a watch .2 routine duties undertaken during a watch .3 maintenance of the machinery space logs and the significance of the readings taken .4 duties associated with handing over a watch Safety and emergency procedures; change-over of remote/automatic to local control of all systems Safety precautions to be observed during a watch and immediate actions to be taken in the event of fire or accident, with particular reference to oil systems *Engine-room resource management* Knowledge of engine-room resource management principles, including: .1 allocation, assignment, and prioritization of resources .2 effective communication .3 assertiveness and leadership .4 obtaining and maintaining situational awareness .5 consideration of team experience
Use English in written and oral form	Adequate knowledge of the English language to enable the officer to use engineering publications and to perform engineering duties
Use internal communication systems	Operation of all internal communication systems on board
Operate main and auxiliary machinery and associated control systems	Basic construction and operation principles of machinery systems, including: .1 marine diesel engine .2 marine steam turbine .3 marine gas turbine .4 marine boiler .5 shafting installations, including propeller .6 other auxiliaries, including various pumps, air compressor, purifier, fresh water generator, heat exchanger, refrigeration, air-conditioning and ventilation systems .7 steering gear .8 automatic control systems .9 fluid flow and characteristics of lubricating oil, fuel oil and cooling systems .10 deck machinery Safety and emergency procedures for operation of propulsion plant machinery, including control systems Preparation, operation, fault detection and necessary measures to prevent damage for the following machinery items and control systems: .1 main engine and associated auxiliaries .2 steam boiler and associated auxiliaries and steam systems .3 auxiliary prime movers and associated systems .4 other auxiliaries, including refrigeration, air-conditioning and ventilation systems
Operate fuel, lubrication, ballast and other pumping systems and	Operational characteristics of pumps and piping systems, including control systems Operation of pumping systems: .1 routine pumping operations .2 operation of bilge, ballast and cargo pumping systems

associated control systems	Oily-water separators (or-similar equipment) requirements and operation
Electrical, electronic and control engineering at the operational level	
Operate electrical, electronic and control systems	Basic configuration and operation principles of the following electrical, electronic and control equipment: .1 electrical equipment: .a generator and distribution systems .b preparing, starting, paralleling and changing over generators .c electrical motors including starting methodologies .d high-voltage installations .e sequential control circuits and associated system devices .2 electronic equipment: .a characteristics of basic electronic circuit elements .b flowchart for automatic and control systems .c functions, characteristics and features of control systems for machinery items, including main propulsion plant operation control and steam boiler automatic controls .3 control systems: .a various automatic control methodologies and characteristics .b Proportional-Integral-Derivative (PID) control characteristics and associated system devices for process control
Maintenance and repair of electrical and electronic equipment	Safety requirements for working on shipboard electrical systems, including the safe isolation of electrical equipment required before personnel are permitted to work on such equipment Maintenance and repair of electrical system equipment, switchboards, electric motors, generator and DC electrical systems and equipment Detection of electric malfunction, location of faults and measures to prevent damage Construction and operation of electrical testing and measuring equipment Function and performance tests of the following equipment and their configuration: .1 monitoring systems .2 automatic control devices .3 protective devices The interpretation of electrical and simple electronic diagrams
Maintenance and repair at the operational level	
Appropriate use of hand tools, machine tools and measuring instruments for fabrication and repair on board	Characteristics and limitations of materials used in construction and repair of ships and equipment Characteristics and limitations of processes used for fabrication and repair Properties and parameters considered in the fabrication and repair of systems and components Methods for carrying out safe emergency/temporary repairs Safety measures to be taken to ensure a safe working environment and for using hand tools, machine tools and measuring instruments Use of hand tools, machine tools and measuring instruments Use of various types of sealants and packings
Maintenance and repair of shipboard machinery and equipment	Safety measures to be taken for repair and maintenance, including the safe isolation of shipboard machinery and equipment required before personnel are permitted to work on such machinery or equipment Appropriate basic mechanical knowledge and skills Maintenance and repair, such as dismantling, adjustment and reassembling of machinery and equipment

	The use of appropriate specialized tools and measuring instruments Design characteristics and selection of materials in construction of equipment Interpretation of machinery drawings and handbooks The interpretation of piping, hydraulic and pneumatic diagrams
Controlling the operation of the ship and care for persons on board at the operational level	
Ensure compliance with pollution-prevention requirements	*Prevention of pollution of the marine environment* Knowledge of the precautions to be taken to prevent pollution of the marine environment Anti-pollution procedures and all associated equipment Importance of proactive measures to protect the marine environment
Maintain seaworthiness of the ship	*Ship stability* Working knowledge and application of stability, trim and stress tables, diagrams and stress-calculating equipment Understanding of the fundamentals of watertight integrity Understanding of fundamental actions to be taken in the event of partial loss of intact buoyancy *Ship construction* General knowledge of the principal structural members of a ship and the proper names for the various parts
Prevent, control and fight fires on board	*Fire prevention and fire-fighting appliances* Ability to organize fire drills Knowledge of classes and chemistry of fire Knowledge of fire-fighting systems Action to be taken in the event of fire, including fires involving oil systems
Operate life-saving appliances	*Life-saving* Ability to organize abandon ship drills and knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment, including radio life-saving appliances, satellite EPIRBs, SARTs, immersion suits and thermal protective aids
Apply medical first aid on board ship	*Medical aid* Practical application of medical guides and advice by radio, including the ability to take effective action based on such knowledge in the case of accidents or illnesses that are likely to occur on board ship
Monitor compliance with legislative requirements	Basic working knowledge of the relevant IMO conventions concerning safety of life at sea, security and protection of the marine environment
Application of leadership and teamworking skills	Working knowledge of shipboard personnel management and training A knowledge of related international maritime conventions and recommendations, and national legislation Ability to apply task and workload management, including: .1 planning and coordination .2 personnel assignment .3 time and resource constraints .4 prioritization Knowledge and ability to apply effective resource management: 1 allocation, assignment, and prioritization of resources .2 effective communication on board and ashore .3 decisions reflect consideration of team experiences

	.4 assertiveness and leadership, including motivation .5 obtaining and maintaining situational awareness Knowledge and ability to apply decision-making techniques: .1 situation and risk assessment .2 identify and consider generated options .3 selecting course of action .4 evaluation of outcome effectiveness
Contribute to the safety of personnel and ship	Knowledge of personal survival techniques Knowledge of fire prevention and ability to fight and extinguish fires Knowledge of elementary first aid Knowledge of personal safety and social responsibilities

Table A-III/2 Chief and Second Engineer Officer

STCW	
Competence	**Knowledge Understanding and Proficiency**
Marine engineering at the management level	
Manage the operation of propulsion plant machinery	Design features, and operative mechanism of the following machinery and associated auxiliaries: .1 marine diesel engine .2 marine steam turbine .3 marine gas turbine .4 marine steam boiler
Plan and schedule operations	*Theoretical knowledge* Thermodynamics and heat transmission Mechanics and hydromechanics Propulsive characteristics of diesel engines, steam and gas turbines, including speed, output and fuel consumption Heat cycle, thermal efficiency and heat balance of the following: .1 marine diesel engine .2 marine steam turbine .3 marine gas turbine .4 marine steam boiler Refrigerators and refrigeration cycle Physical and chemical properties of fuels and lubricants Technology of materials Naval architecture and ship construction, including damage control

Operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery	*Practical knowledge* Start up and shut down main propulsion and auxiliary machinery, including associated systems Operating limits of propulsion plant The efficient operation, surveillance, performance assessment and maintaining safety of propulsion plant and auxiliary machinery Functions and mechanism of automatic control for main engine Functions and mechanism of automatic control for auxiliary machinery including but not limited to: .1 generator distribution systems .2 steam boilers .3 oil purifier .4 refrigeration system .5 pumping and piping systems .6 steering gear system .7 cargo-handling equipment and deck machinery
Manage fuel, lubrication and ballast operations	Operation and maintenance of machinery, including pumps and piping systems
Electrical, electronic and control engineering at the management level	
Manage operation of electrical and electronic control equipment	*Theoretical knowledge* Marine electro technology, electronics, power electronics, automatic control engineering and safety devices Design features and system configurations of automatic control equipment and safety devices for the following: .1 main engine .2 generator and distribution system .3 steam boiler Design features and system configurations of operational control equipment for electrical motors Design features of high-voltage installations Features of hydraulic and pneumatic control equipment
Manage trouble-shooting, restoration of electrical and electronic control equipment to operating condition	*Practical knowledge* Troubleshooting of electrical and electronic control equipment Function test of electrical, electronic control equipment and safety devices Troubleshooting of monitoring systems Software version control
Maintenance and repair at the management level	
Manage safe and effective maintenance and repair procedures	*Theoretical knowledge* Marine engineering practice *Practical knowledge* Manage safe and effective maintenance and repair procedures

	Planning maintenance, including statutory and class verifications Planning repairs
Detect and identify the cause of machinery malfunctions and correct faults	*Practical knowledge* Detection of machinery malfunction, location of faults and action to prevent damage Inspection and adjustment of equipment Non-destructive examination
Ensure safe working practices	*Practical knowledge* Safe working practices
Controlling the operation of the ship and care for persons on board at the management level	
Control trim, stability and stress	Understanding of fundamental principles of ship construction and the theories and factors affecting trim and stability and measures necessary to preserve trim and stability Knowledge of the effect on trim and stability of a ship in the event of damage to, and consequent flooding of, a compartment and countermeasures to be taken Knowledge of IMO recommendations concerning ship stability
Monitor and control compliance with legislative requirements and measures to ensure safety of life at sea, security and protection of the marine environment	Knowledge of relevant international maritime law embodied in international agreements and conventions Regard shall be paid especially to the following subjects: .1 certificates and other documents required to be carried on board ships by international conventions, how they may be obtained and the period of their legal validity .2 responsibilities under the relevant requirements of the International Convention on Load Lines, 1966, as amended .3 responsibilities under the relevant requirements of the International Convention for the Safety of Life at Sea, 1974, as amended .4 responsibilities under the International Convention for the Prevention of Pollution from Ships, as amended .5 maritime declarations of health and the requirements of the International Health Regulations .6 responsibilities under international instruments affecting the safety of the ships, passengers, crew or cargo .7 methods and aids to prevent pollution of the environment by ships .8 knowledge of national legislation for implementing international agreements and conventions
Maintain safety and security of the vessel, crew and passengers and the operational condition of life-saving, fire-fighting and other safety systems	A thorough knowledge of life-saving appliance regulations (International Convention for the Safety of Life at Sea) Organization of fire and abandon ship drills Maintenance of operational condition of life-saving, fire-fighting and other safety systems Actions to be taken to protect and safeguard all persons on board in emergencies Actions to limit damage and salve the ship following fire, explosion, collision or grounding
Develop emergency and damage control plans and handle emergency situations	Ship construction, including damage control Methods and aids for fire prevention, detection and extinction Functions and use of life-saving appliances

Use leadership and managerial skills	Knowledge of shipboard personnel management and training A knowledge of international maritime conventions and recommendations, and related national legislation Ability to apply task and workload management, including: .1 planning and coordination .2 personnel assignment .3 time and resource constraints .4 prioritization Knowledge and ability to apply effective resource management: .1 allocation, assignment, and prioritization of resources .2 effective communication on board and ashore .3 decisions reflect consideration of team experience .4 assertiveness and leadership, including motivation .5 obtaining and maintaining situation awareness Knowledge and ability to apply decision-making techniques: .1 situation and risk assessment .2 identify and generate options .3 select course of action .4 evaluation of outcome effectiveness Development, implementation, and oversight of standard operating procedures

Table A-III/6 Electro-technical Officer

STCW	
Competence	**Knowledge Understanding and Proficiency**
Monitor the operation of electrical, electronic and control systems	
Monitor the operation of electrical, electronic and control systems	Basic understanding of the operation of mechanical engineering systems, including: .1 prime movers, including main propulsion plant .2 engine-room auxiliary machinery .3 steering systems .4 cargo handling systems .5 deck machinery .6 hotel systems Basic knowledge of heat transmission, mechanics and hydromechanics Knowledge of: Electro-technology and electrical machines theory Fundamentals of electronics and power electronics Electrical power distribution boards and electrical equipment Fundamentals of automation, automatic control systems and technology Instrumentation, alarm and monitoring systems Electrical drives Technology of electrical materials Electro-hydraulic and electro-pneumatic control systems Appreciation of the hazards and precautions required for the operation of power systems above 1,000 volts
Monitor the operation of	Preparation of control systems of propulsion and auxiliary machinery for operation

automatic control systems of propulsion and auxiliary machinery	
Operate generators and distribution systems	Coupling, load sharing and changing over generators Coupling and breaking connection between switchboards and distribution panels
Operate and maintain power systems in excess of 1,000 volts	Theoretical knowledge High-voltage technology Safety precautions and procedures Electrical propulsion of the ships, electrical motors and control systems Practical knowledge Safe operation and maintenance of high-voltage systems, including knowledge of the special technical type of high-voltage systems and the danger resulting from operational voltage of more than 1,000 volts
Operate computers and computer networks on ships	Understanding of: .1 main features of data processing .2 construction and use of computer networks on ships .3 bridge-based, engine-room-based and commercial computer use
Use English in written and oral form	Adequate knowledge of the English language to enable the officer to use engineering publications and to perform the officer's duties
Use internal communication systems	Operation of all internal communication systems on board
Maintenance and repair at the operational level	
Maintenance and repair of electrical and electronic equipment	Safety requirements for working on shipboard electrical systems, including the safe isolation of electrical equipment required before personnel are permitted to work on such equipment Maintenance and repair of electrical system equipment, switchboards, electric motors, generator and DC electrical systems and equipment Detection of electric malfunction, location of faults and measures to prevent damage Construction and operation of electrical testing and measuring equipment Function and performance tests of the following equipment and their configuration: .1 monitoring systems .2 automatic control devices .3 protective devices The interpretation of electrical and electronic diagrams
Maintenance and repair of automation and control systems of main propulsion and auxiliary machinery	Appropriate electrical and mechanical knowledge and skills Safety and emergency procedures Safe isolation of equipment and associated systems required before personnel are permitted to work on such plant or equipment Practical knowledge for the testing, maintenance, fault finding and repair Test, detect faults and maintain and restore electrical and electronic control equipment to operating condition
Maintenance and repair of bridge	Knowledge of the principles and maintenance procedures of navigation equipment, internal and external communication systems

navigation equipment and ship communication systems	Theoretical knowledge: Electrical and electronic systems operating in flammable areas Practical knowledge: Carrying out safe maintenance and repair procedures Detection of machinery malfunction, location of faults and action to prevent damage
Maintenance and repair of electrical, electronic and control systems of deck machinery and cargo-handling equipment	Appropriate electrical and mechanical knowledge and skills Safety and emergency procedures Safe isolation of equipment and associated systems required before personnel are permitted to work on such plant or equipment Practical knowledge for the testing, maintenance, fault finding and repair Test, detect faults and maintain and restore electrical and electronic control equipment to operating condition
Maintenance and repair of control and safety systems of hotel equipment	Theoretical knowledge: Electrical and electronic systems operating in flammable areas Practical knowledge: Carrying out safe maintenance and repair procedures Detection of machinery malfunction, location of faults and action to prevent damage
Controlling the operation of the ship and care for persons on board at the operational level	
Ensure compliance with pollution-prevention requirements	*Prevention of pollution of the marine environment* Knowledge of the precautions to be taken to prevent pollution of the marine environment Anti-pollution procedures and all associated equipment Importance of proactive measures to protect the marine environment
Prevent, control and fight fires on board	*Fire prevention and fire-fighting appliances* Ability to organize fire drills Knowledge of classes and chemistry of fire Knowledge of fire-fighting systems Action to be taken in the event of fire, including fires involving oil systems
Operate life-saving appliances	*Life-saving* Ability to organize abandon ship drills and knowledge of the operation of survival craft and rescue boats, their launching appliances and arrangements, and their equipment, including radio life-saving appliances, satellite EPIRBs, SARTs, immersion suits and thermal protective aids
Apply medical first aid on board ship	*Medical aid* Practical application of medical guides and advice by radio, including the ability to take effective action based on such knowledge in the case of accidents or illnesses that are likely to occur on board ship
Application of leadership and teamworking skills	Working knowledge of shipboard personnel management and training A knowledge of related international maritime conventions and recommendations, and national legislation Ability to apply task and workload management, including: .1 planning and coordination .2 personnel assignment .3 time and resource constraints .4 prioritization Knowledge and ability to apply effective resource management: 1 allocation, assignment, and prioritization of resources .2 effective communication on board and ashore

	.3 decisions reflect consideration of team experiences .4 assertiveness and leadership, including motivation .5 obtaining and maintaining situational awareness Knowledge and ability to apply decision-making techniques: .1 situation and risk assessment .2 identify and consider generated options .3 selecting course of action .4 evaluation of outcome effectiveness
Contribute to the safety of personnel and ship	Knowledge of personal survival techniques Knowledge of fire prevention and ability to fight and extinguish fires Knowledge of elementary first aid Knowledge of personal safety and social responsibilities

CHAPTER 14

ENGINE ROOM RATING TO ENGINEER OFFICER

14.1 Able seafarer engine room ratings may progress to become engineer officers. Ratings that cannot fully comply with Chapter 3 Initial Training and Sea Service may be allowed to progress to Engineer Officer of the Watch through additional training courses taken at shore training facilities. Ratings that comply with this Chapter and the relevant parts of Chapter 3 may then progress to Engineer Officer of the Watch by complying with the Conditions of Issue Chapter 2. The following are the minimum conditions that candidates are required to meet.

14.2 **GENERAL CONDITIONS**

14.2.1 Candidates (ratings) that cannot comply with Chapter 3 must have completed combined workshop skills training and approved sea going service of not less than 36 months of which not less than 30 months must have been seagoing service in the engine department whilst qualified as able seafarer engine, as second in charge of a watch, or substantially involved in the operation of the machinery whilst on watch.

14.2.2 Candidates that have completed a recognised engineering craft apprenticeship must have at least twelve months sea service in the engine room department of which at least six months must have been whilst qualified as rating forming part of an engine room watch or able seafarer engine, as second in charge of the watch or substantially involved in the operation of the machinery whilst on watch.

14.2.3 For those who have served as General Purpose ratings (qualified as both able seafarer deck and able seafarer engine), two thirds of the service on crew agreement in such a capacity will count as qualifying sea service and all sea service should have been served whilst qualified as able seafarer engine as second in charge of the watch or substantially involved in the operation of the machinery whilst on watch.

14.2.4 Marine Engine Operator Licence holders may apply to the Examiner of Engineers for an assessment of their experience, qualifications and required sea service leading to EOOW. Combined sea service and training of less than [36] months will not be accepted.

14.2.5 Engineering experience gained ashore prior to sea service may be taken into account and all details should be submitted to the Examiner of Engineers.

14.2.6 For all candidates' testimonials signed by the Chief Engineer must be provided as evidence of satisfactory service at sea in the engineering department.

14.3 Candidates, unless qualified in an engineering craft, will be required to undertake formal engineering workshop skills training of not less than [6 months]. This training may be completed onboard ship but must be documented and signed off by the Chief Engineer.

14.3.1 Engineering workshop skills training should cover the skills set out below in paragraph 6.

14.3.2 During qualifying sea service the ISF Cadet Training Record book or equivalent must be completed.

14.3.3 Candidates must also comply with Chapter 3 paragraph 3.2.2.

14.3.4 Engineering workshop skills training – guidelines for minimum requirements

Module		**Indicative Duration**
1	Introduction to Reading of Drawings	1 week
2	Bench Fitting	4 weeks
3	Precision Measurement and Tooling	1 week
4	Machinery maintenance fitting	6 weeks
5	Use of Machine Tools	4 weeks
6	Turning	6 weeks
7	Manual Metal Arc Welding	2 weeks
8	Gas Welding & brazing	2 weeks
	TOTAL DURATION OF COURSE	**28 WEEKS**

In no case shall the combined training and sea service for a rating to officer be less than 36 months.

CHAPTER 15

FISHING VESSEL ENGINEER TO MERCANTILE MARINE

15.1 Fishing vessel engineer certificates of competency are issued under national legislation in three classes:

- Class Three - may sail as third engineer on any size fishing vessel and second engineer on fishing vessels of less than 3000kW
- Class Two - may sail as second engineer on any size fishing vessel and chief engineer on fishing vessels of less than 3000kW
- Class One - may sail as chief engineer on any size fishing vessel.

Candidates holding Fishing Vessel Certificates of Competency may sail on Mercantile Marine vessels **when in possession of a valid STCW Certificate of Competency**. The conditions for issuing STCW Certificates of Competency to fishing vessel engineers are set out below.

All candidates must be in possession of a valid Medical Fitness Certificate for Sea Service issued within the previous two years.

15.2 Candidates in possession of a **Class 3** fishing vessel certificate of competency who have completed a total of 12 months sea service since obtaining the Class 3 certificate, in the preceding five years, in vessels of greater than 350 kW propulsion power, may be issued with:-

15.2.1 a marine engine operator licence (MEOL) valid for service on ships of less than 750 kW; and/or

15.2.2 Chief Engineer Certificate of Competency, motorships only, STCW Reg III/3 valid for service in the Near Coastal Area on voyages not more than 30 miles from the coast of the State on ships of not more than 1000 kW propulsion power; when

15.2.3 the basic and advanced training courses shown in Appendix 8 have been completed within the previous five years.

15.3 Candidates in possession of a **Class 2** fishing vessel certificate of competency who have completed a total of twenty four months sea service since obtaining the Class 2 certificate, in the preceding five years, in appropriate vessels may be issued with:

15.3.1 an Engineer Officer of the Watch Certificate of Competency, motorships only, STCW Reg III/1 and

15.3.2 Chief Engineer Certificate of Competency, motorships only, STCW Reg III/3 less than 3000 kW in the Near Coastal Area

Prior to the issue of a Certificate of Competency the following must be completed:

15.3.3 basic and advanced training courses shown in Appendix 8 within the previous five years and,

15.3.4 an approved High Voltage training course and

15.3.5 security awareness training and,

15.3.6 six months sea service as assistant engineer on ships to which STCW applies with propulsion power of not less than 750 kW and,

15.3.7 during the six month sea service satisfactory completion of an approved Training Record Book and projects and

15.3.8 oral examination conducted by the Department of Transport.

15.4 Candidates in possession of a **Class 1** fishing vessel certificate of competency and at least 12 months appropriate sea service served in the position of Second or Chief Engineer (fishing vessel), whilst holding a Class1 Certificate of Competency, on vessels of over 750 kW within the last five years, may be issued with

15.4.1 an Engineer Officer of the Watch Certificate of Competency, motorships only, STCW Reg III/1 and,

15.4.2 Second Engineer Certificate of Competency, motorships only, STCW Reg III/3 less than 3000kW unlimited area, on completion of at least 3 months sea service as qualified engineer on ships to which STCW applies with propulsion power of not less than 750 kW and/or

15.4.3 Chief Engineer Certificate of Competency, motorships only, STCW Reg III/3 less than 3000 kW in the Near Coastal Area.

Prior to the issue of a Certificate of Competency the following must be completed:

15.4.4 basic and advanced training courses shown in Appendix 8 within the previous five years and,

15.4.5 an approved High Voltage training course and

15.4.6 security awareness training.

15.5 After an adaptation period of six months sea service, on ships to which STCW applies with propulsion power of not less than 750 kW, as qualified engineer officer, candidates in possession of a **Class 1** Certificate of Competency may apply to sit for the 2/E unlimited STCW Reg III/2 and C/E <3000kW STCW Reg III/3 examinations when the following additional requirements have been completed:

15.5.1 A recognition of prior learning (RPL) conducted by the National Maritime College of Ireland against the required modules for EOOW and Second Engineer as set out in Chapter 7 and,

15.5.2 Successful completion of any required modules for EOOW and Second Engineer that are not given recognition by RPL and,

15.5.3 Oral examination for Second Engineer conducted by the Department of Transport

15.6 Thereafter candidates may progress as for Second Engineer towards Chief Engineer STCW Reg III/2.

CHAPTER 16

CERTIFICATE OF EQUIVALENT COMPETENCY

16.1 A Certificate of Equivalent Competency (CEC) is required by officers holding non-Irish STCW certificates working on Irish-registered merchant ships.

16.2 A certificate of competency granted by another party to the STCW Convention may be endorsed to attest its recognition and the endorsement will be in the form of a separate document called a Certificate of Equivalent Competency. Holders of Irish Certificates of Equivalent Competency (CECs) may serve in the appropriate position on Irish registered ships.

16.3 An Irish CEC may be issued to officers holding valid STCW certificates issued by other parties to the STCW Convention with which Ireland has mutual recognition agreements in place. CECs require periodic revalidation and will remain valid only as long as the original STCW certificate remains valid. The original STCW certificate must always be carried with the CEC.

16.4 A CEC will not be issued with limits that are not issued to holders of an Irish CoC.

16.5 A CEC will not be issued with limits for service in the Near Coastal Area of the country that issued the original certificate of competency unless an agreement is in place with the issuing party[15]

16.6 Officers applying for a CEC must:

16.6.1 Have an acceptable level of competency in the English language in written, oral and aural form (refer to appendix 9) and

16.6.2 Be in possession of a valid medical fitness certificate and

16.6.3 Submit an application for CEC to the Mercantile Marine Office – refer to Chapter 1

16.7 Immigration Rules

CEC applicants who are not nationals of EU countries should note that they may need to have a work permit if they are intending to work on a ship which operates solely within Irish territorial waters.

[15] Near Coastal Area limits issued by the UK Maritime and Coastguard Agency will, in general, be recognised.

Appendix 1

CERTIFICATION REQUIREMENTS

(a) The following table refers to the STCW regulation required to sail in the position indicated.
(b) All certificates required are to be endorsed with the STCW regulation and any limitations applying to type of service that the certificate is valid for.
(c) Vessels are to be manned in accordance with the safe manning document held on board.

Trading Area	Type of Ship	Registered Power (kW) of Ships including sail training ships	Required Minimum STCW Regulation required for service in following vessels in rank specified and required syllabus for STCW Regulation			
			Chief Engineer	Second Engineer	OOW	Marine Engine Operator
Unlimited Voyages	All types	3000 and over	III/2	III/2	III/1	
		750 and over but less than 3000	III/3[16]	III/3[17]	III/1	
	Passenger	350 and over but less than 750	III/1			
	Cargo					MEOL
Near Coastal Voyages	All types	6000 and over	III/2	III/2	III/1	
		3000 and over but less than 6000	III/2[16]	III/2[17]	III/1	
		750 and over but less than 3000	III/3[17]	III/3	III/1	
	Passenger & Cargo	350 and over but less than 750				MEOL Syllabus MEOL

Near Coastal Voyages means voyages during which the vessel is at any time during the voyage not more than 170 nautical miles from the coast of the state or not more than 30 nautical miles from the coast of the United Kingdom.

[16] Second Engineer STCW III/2 with additional limits
[17] Engineer Officer of the Watch III/1 with additional limits by completing additional qualifying sea service required as set out in Chapter 5 and oral examination in the duties of Chief Engineer or Second Engineer

Appendix 2

EXAMPLE OF SEA SERVICE TESTIMONIAL ENGINEER OFFICERS

This form is to be used when the engineer officer or the Chief Engineer under whom the officer serves leaves the vessel.

COMPANY NAME

SEA SERVICE TESTIMONIAL – ENGINEER OFFICER

Company Address: .....
.....
.....
Tel. ..... e-mail.....

PART 1- Watchkeeping Service

This is to certify that:
Name of Officer .....
Date of Birth .....
Discharge Book No. or other I.D. .....

Has served on the following vessel in the rank of ..... on unlimited/near coastal/both* voyages

From (dates) ..... To (dates).....

Name of Vessel ..... O.N or I.M.O. No.....

Type of Vessel ..... Gross Tonnage .....

Registered Power (kW) ..... Flag .....

Type / Make of main propelling machinery..... .....

Type / Make of Auxiliary Machinery..... .....

Type / Make of Boilers..... .....

During this period the above named officer accrued the following engine room watchkeeping/duty engineer UMS* service for not less than 8 hours out of every 24 hours whilst the vessel was engaged on sea going voyages. (*delete as appropriate)

Months..... Days.....

Nature of Other Duties (tick all appropriate boxes)

1. Day Work ..... ☐
2. Regular Watch on auxiliary machinery ..... ☐
3. Regular watch on main propulsion machinery
   (a) in full charge..... ☐
   (b) in subsidiary capacity ..... ☐

4. Regular work in ships having
   (a) centralised control room ..... ☐
   (b) full or partial automation..... ☐
   (c) facility to operate machinery in the unmanned mode for a significant part of each 24 hour period..... ☐

During the whole period stated above the officer was granted:

(a) no leave of absence*
(b) days leave of absence whilst on crew agreement (*delete as appropriate)

PART 2 – Testimonial

My report on the above named officer during the period stated is as follows:

	Satisfactory	Unsatisfactory
Conduct	☐	☐
Experience / Ability	☐	☐
Behaviour / Sobriety	☐	☐

Name of Chief Engineer Officer (block capitals).....

Signature of Chief Engineer Officer .....

Issuing Authority, Certificate Number & STCW Grade of Chief Engineer Officer.....

.....

Ships / Company Stamp and Date

stamp

Signature of Engineer Superintendent .....

or

Signature of responsible representative of owners (e.g. Master).....

stamp

Appendix 3

EXAMPLE OF SEA SERVICE TESTIMONIAL ELECTRO-TECHNICAL OFFICER

This form is to be used when the electro-technical officer trainee or the Chief Engineer under whom the officer trainee serves leaves the vessel.

COMPANY NAME

SEA SERVICE TESTIMONIAL – ELECTROTECHNICAL OFFICER

Company Address: .....
.....
.....
Tel. ..... e-mail.....

PART 1- Seagoing Service

This is to certify that:
Name of Officer .....
Date of Birth .....
Discharge Book No. or other I.D. .....

Has served on the following vessel in the rank of ..... on unlimited/near coastal/both* voyages

From (dates) ..... To (dates).....

Name of Vessel ..... O.N or I.M.O. No. .....

Type of Vessel ..... Gross Tonnage .....

Registered Power (kW) ..... Flag .....

Type / Make of main propelling machinery..... .....

Type / Make of main generators .... (HV/LV/Both*)

Type / Make of main switchboard .... (HV/LV/Both*)

During this period the above named officer accrued the following shipboard service for not less than 8 hours out of every 24 hours whilst the vessel was engaged on sea going voyages.

Months..... Days.....

Nature of Other Duties (tick all appropriate boxes)

2. Day Work ..... ☐

2. Regular Watchkeeping ..... ☐

5. Regular work in ships having
   (d) centralised control room ..... ☐
   (e) full or partial automation..... ☐
   (f) facility to operate machinery in the unmanned mode for a significant part of each 24 hour period..... ☐

During the whole period stated above the officer was granted:

(c) no leave of absence*
(d) days leave of absence whilst on crew agreement

PART 2 – Testimonial

My report on the above named officer during the period stated is as follows:

	Satisfactory	Unsatisfactory
Conduct	☐	☐
Experience / Ability	☐	☐
Behaviour / Sobriety	☐	☐

Name of Chief Engineer Officer (block capitals).....

Signature of Chief Engineer Officer .....

Issuing Authority, Certificate Number & STCW Grade of Chief Engineer Officer.....

.....

Ships / Company Stamp and Date

stamp

Signature of Electrical or Engineer Superintendent .....

or

Signature of responsible representative of owners (e.g. Master).....

stamp

(*delete as appropriate)

Appendix 4

EXAMPLE OF SEA SERVICE TESTIMONIAL TANKERS

This form is to be used when the engineer officer or the Chief Engineer under whom the officer serves leaves the vessel.

COMPANY NAME
Report of Shipboard Service Relating to Special Training on Tankers

Company Address: .....
.....
.....
Tel. ..... e-mail.....

This is to certify that:
Name of Officer .....
Date of Birth .....
Discharge Book No. or other I.D. .....

Has served on the following vessel on voyages of more than/less than* 72 hours

From (dates) ..... To (dates).....

Name of Vessel ..... O.N or I.M.O. No. .....

Type of Vessel petroleum/liquefied gas/liquefied chemical* tanker

Gross Tonnage ..... Flag .....

Type of Cargo Carried .....

Number of loading and/or discharge operations carried out .....

My report on the above named officer during the period stated is as follows:

I consider .... to have acquired:

(a) adequate knowledge of safe operational practices*

(b) experience appropriate to duties as Chief Engineer/Second Engineer/Engineer/other Officer/Rating*

on petroleum/liquefied gas/liquefied chemical* tankers

Name of Chief Engineer Officer (block capitals).....

Signature of Chief Engineer Officer .....

Issuing Authority, Certificate Number & STCW Grade of Chief Engineer Officer.....

Ships / Company Stamp and Date

stamp

(*delete as appropriate)

Appendix 5

RECORD OF DUTIES PERFORMED FOR MARINE ENGINE OPERATOR LICENCE

COMPANY NAME

Company Address: .....
.....
.....
Tel..... e-mail .....

This is to certify that:
Name of trainee .....
Date of Birth .....
Discharge Book No. or other I.D. .....

Name of Vessel ..... O.N or I.M.O. No. .....

Type of Vessel ..... Gross Tonnage .....

Registered Power (kW) ..... Flag.....

Type / Make of main propelling machinery ....

Type / Make of Auxiliary Machinery ....

Type / Make of Boilers..... .....

Has satisfactorily performed the following duties:-

Duties Performed	Date	Initial	Considered competent	Comments
Prepare main machinery and auxiliary equipment for sea				
Shut down main machinery				
Manoeuvre main machinery				
Manoeuvre main machinery on local/emergency control				
Prepare, start, couple and change over alternators				
Transfer fuel oil and/or take bunkers				
Prepare and operate FO/LO purification plant				
Pump bilges				

Operate oily water separator				
Prepare and operate air compressors				
Prepare and start steering gear, conduct appropriate tests to ensure correct operation				
Test boiler water level gauges under working conditions				
Operate fired boilers/water heaters including combustion system				
Transfer ballast and fresh water				
Compile machinery space log book and understand readings				
Act as assistant watchkeeper at sea				
Operate engine alarm and monitoring system				
Demonstrate knowledge of engine room firefighting				
Operate life saving appliances				

* Note: Not all duties may be applicable

Name of Chief Engineer (block capitals).....

Signature of Chief Engineer .....

Issuing Authority, Certificate or Licence Number & STCW Grade (if applicable) of Chief Engineer

.....

Ships / Company Stamp and Date

stamp

Signature of Engineer Superintendent .....

or

Signature of responsible representative of owners (e.g. Master) .....

Appendix 6

AWARDS RECOGNISED FOR INITIAL TRAINING

The following awards are recognised for initial training

1. Bachelor of Engineering in Marine Engineering. CAO code CR095

2. Bachelor of Engineering in Marine Electro-technology. CAO code CR805

3. University Degree in Engineering conferred by an Irish university.

4 A National Craft Certificate awarded on completion of a Statutory Apprenticeship in any of the following trades:

- Mechanical automation and maintenance fitter
- Fitter
- Turner
- Motor vehicle mechanic
- Heavy vehicle mechanic
- Refrigeration and air-conditioning
- Agricultural mechanic
- Construction plant fitter
- Aircraft mechanic
- Electrician

Appendix 7

MARINE ENGINE OPERATOR LICENCE ENGINEERING SKILLS

Acceptable courses for engineering skills leading to MEOL

1. BIM one year off the job training as fishing vessel engineer (FETAC Level 5)

2. Registered craft apprenticeship as fitter, turner, motor vehicle mechanic, heavy vehicle mechanic, refrigeration and air-conditioning, electrician, agricultural mechanic, construction plant fitter, aircraft mechanic.

3. Any course of training in engineering that provides elementary skills in:

    - Bench fitting, correct and safe use of hand tools and hand held power tools, understanding of common materials in use (steel, cast iron, brass, bronze, aluminium, copper), drilling, grinding, hand and power saws, threading and tapping, common threads in use, pipe joining techniques, correct torques.
    - Machining – basic understanding and safe use of machine tools to produce round and flat surfaces to a tolerance of 0.2mm using lathe, milling machine and pedestal drill. Understand surface finishes and limits/fits.
    - Welding – joining of steel material using stick welding downhand. Understanding the need to use qualified welders for repairs.
    - Shipboard machinery – understanding of the four stroke cycle and main components of a marine diesel engine, simple adjustments and repairs to ensure reliability (oil and filter changes, leak repair, cleanliness) Understanding of the need to adhere to manufacturers recommendations. Air compressor safety and routine maintenance. Basic pump construction and operation.

4. Structured training programmes should include the principles of ‘on the job’ training under the direct supervision of a qualified Marine Engineer Officer or Fishing Vessel Engineer Class 1 or Class 2 and substantially include training in the elementary skills listed above. All training and sea service must be documented.

Appendix 8

BASIC TRAINING

Basic Training is required for all seafarers employed or engaged in any capacity on board ship on the business of that ship as part of the ship's complement with designated safety or pollution prevention duties in the operation of the ship.

Evidence of the following approved Basic Training is required, as set out in the exam directions:

- Personal Survival Techniques PST.
- Fire Prevention and Fire Fighting FPFF.
- Elementary First Aid EFA.
- Personal Safety and Social Responsibilities PSSR.

ADVANCED TRAINING

- Certificate of Proficiency in Survival Craft other than Fast Rescue Boats CPSC
- Certificate of Proficiency in Advanced Fire Fighting AFF
- Certificate of Proficiency in Medical First Aid MFA

Appendix 9

ENGLISH LANGUAGE REQUIREMENTS

Applicants for Certificates of Equivalent Competency (CEC) issued by the Government of Ireland are required to show an acceptable level of competency in the English language in written, oral and aural form. This is a requirement under Irish and International regulations. One of the following may be accepted as demonstrating this level of competency in English.

- Pass in the Marlins English Language Computer Test at an approved Marlins Test Centre. Approved Marlins test centres are available on the Marlin company home page **http://www.marlins.co.uk**

  The minimum acceptable pass marks (to be submitted on a Marlins approved centre stamped computer printout) are as follows:

Deck Officers	**Engineering Officers**
Senior Deck Officers (Management level) 90%	Senior Engineering Officers (Management level) 80%
Junior Deck Officers (Operational level) 80%	Junior Engineering Officers (Operational level) 70%

  In addition, as the Marlins English Language Computer Test does not cover oral English, evidence of a satisfactory level of oral English has to be demonstrated. Oral English has to be assessed at a centre recognised by the Department of Transport. In order to be recognised, assessors should forward details of their credentials, qualifications and competency in the English language to:

  Examination Section — Ph +353 1 6783400
  Marine Survey Office — Fx + 353 1 6783409
  Department of Transport — Email admin@seafarers.ie
  Leeson Lane
  Dublin 2
  Ireland

  The recommended criteria in this appendix and the checklist should be used each time an oral assessment of an individual's level of competency in the English language is made. A copy of the checklist is to be retained by the company and a copy of the checklist (together with any other certificates required e.g. Marlins) is to be submitted with the application for CEC to:

  Examination Section — Ph +353 1 6783400
  Marine Survey Office — Fx + 353 1 6783409
  Department of Transport — Emailadmin@seafarers.ie
  Leeson Lane
  Dublin 2
  Ireland

- Pass in the Marlins English Language Computer Test at an approved Marlins Test Centre, as outlined above and in addition, pass in the ISF Marlins Test of Spoken English (TOSE) at an approved Marlins Test Centre. The TOSE complements the computer-based test. Approved Marlins test centres for the English Language Computer Test and the TOSE are available on the Marlin company home page http://www.marlins.co.uk
  The minimum acceptable pass marks (to be submitted on a Marlins approved centre stamped computer printout) for the Marlins combined test scoring system is as follows:

Level / Department	ISF Marlins English computer test Minimum acceptable score	Test of Spoken English (TOSE) Minimum acceptable TOSE result (overall)	**Minimum acceptable combined score**
Management & Operational Level ***Navigational Dept.***			
Master	**90%**	Upper Intermediate	**86%**
Chief Officer	**90%**	Upper Intermediate	**86%**
2nd Officer	**80%**	Intermediate	**72%**
3rd Officer	**80%**	Lower Intermediate	**62%**
Engineering Dept.			
Chief Engineer Officer	**80%**	Intermediate	**72%**
2nd Engineer Officer	**80%**	Lower Intermediate	**62%**
3rd Engineer Officer	**70%**	Lower Intermediate	**58%**
4th Engineer Officer	**70%**	Lower Intermediate	**58%**

- Hold an STCW Certificate of Competency for which the examinations were conducted wholly in English.

- Hold an English Language test certificate that is comparable to or exceeds the level of Marlins (e.g. IELTS Level 6, Berlitz Language School level 2+ endorsed by the company, TOEFL for admission to US University).

- Other evidence of proficiency in the English language may be dealt with on a case by case basis by the Examiner (e.g. evidence of degree or diploma where the course and examinations are conducted through English).

RECOMMENDED CRITERIA FOR ENGLISH ASSESSMENTS FOR CERTIFICATES OF EQUIVALENT COMPETENCY

When to use

The MARLINS English Language Computer Test for Seafarers does not cover oral or spoken English. The assessment method outlined below is for use for applicants for Certificates of Equivalent Competency (CECs) and is to be used in addition to the MARLINS English Language Computer Test. The checklist should be used to confirm standards of English and as an auditable record for CEC applicants.

The assessment

This is to be conducted on a one-to-one basis with a native English speaker ('the assessor'). Where possible the assessments should be tape-recorded. It should consist of three separate sections of approximately one hour in duration altogether. Where there is doubt as to whether certain criteria are being met there may be a need to retry during the assessment.

Section 1 - oral interview

This should cover general topics, for example career to date, future plans. The questions should enable and encourage discursive responses allowing the seafarer the chance to ask questions or seek clarification.

Section 2 - live listening/comprehension

The assessor should, at a steady pace, read a passage lasting 3-5 minutes of a general maritime nature, e.g. an incident or a procedure. The seafarer may take notes throughout (in their own language if preferred). They should be allowed 2-3 minutes to look over their notes and then be asked to describe the incident in their own words, summarising the main points.

Section 3 - specific/job focused communications

This section needs to be tailored to the vocabulary relating to the specific functions to be undertaken by the seafarer. This may need to include listening to radio messages, loudspeaker announcements, and should certainly include the testing of comprehension and communication of the type of orders, statements and requests that the seafarer is likely to hear or have to make.

Criteria checklist

These criteria are to help establish levels of listening and speaking abilities and are to be filled-in each time an assessment is made and in all CEC applications to confirm established competence. The criteria are to be used as a checklist and where the assessor decides that one/some are not met that is to be noted for the record against the criterion (a tick for met and a cross for not met). It will be for the assessor to decide whether failure to meet any of the criteria means the seafarer's level of English would not be sufficient to carry out their functions safely and effectively. The completed criteria sheet and, where available, the tape-recording will form the basis of the documentation required for audit.

CRITERIA CHECKLIST

Speaking

1. Clarity - language is sufficiently clear and accurate to be understood by native and non-native speakers of English; any inaccuracies, faults in intonation or hesitation do not impede comprehension of the points being made. ☐

2. Initiation of dialogue - there is evidence of the seafarer not simply echoing or responding, but also of taking the conversation forward, asking questions and raising other issues. ☐

3. Vocabulary - the seafarer can speak about their main job functions and communicate in both familiar and unfamiliar situations; - their vocabulary is extensive enough to allow some flexibility of expression, and is appropriate to the context/topic. ☐

Listening

4. The seafarer shows he/she can understand the overall theme in ways other than repeating back to the examiner word for word. ☐

5. Key points can be identified. ☐

6. Inferences and conclusions can be drawn. ☐

7. The seafarer can demonstrate understanding of work-related communications delivered in a variety of registers and in varying degrees of complexity. ☐

Comments

Company assessment

I can confirm that the standard of English of
..... (name)

..... (function)

was assessed today.....(date)

Stamp

and was found to be acceptable/not acceptable

by .....……(signature).....(print name)

date ……..

Assessor Details

Name.....Company.....

Signature .....Address .....

(insert √ for met or **x** for not met)

Appendix 10

INFORMATION TO BE PROVIDED BELOW IN RESPECT OF SEAGOING SERVICE ON SHIPS THAT ARE NOT RECOGNIZED BY PARAGRAPH 6.2.1

Ship Details:

Name of Ship	
Port of Registry	
Owner / Operator / Manager	
Company Contact (Name, position, contact details)	
Company Address	
Company email / telephone	
Registered length	
Gross tonnage	
Classification Society	
Class notation	
Registered propulsion power kW	
Main propulsion machinery make and model	
Fuel type	
Generators kW	
Generator make and model	
Boilers/steam plant	
Details of pollution prevention equipment	
Deck machinery	
Accommodation services	
Number and rank of engineer officers	
Evidence of STCW qualifications	
Number of engineering staff total	
Total number of crew	
Details of fire safety systems and equipment on board	
Details of lifesaving appliances and equipment on board	
Dates of last fire and abandon ship drills.	
Detailed description of duties and responsibilities on board.	
Statutory certification relevant to the ship such as:	
Passenger ship or Cargo ship safety certification	
Minimum Manning certification	
ISM Compliance certification	
Load line Certificate	
Other	

Appendix 11

ASSESSMENT OF EVIDENCE OF HAVING MAINTAINED THE REQUIRED STANDARDS OF COMPETENCE TO UNDERTAKE THE TASKS, DUTIES AND RESPONSIBILITIES IN RELATION TO TRAINING REQUIREMENTS AS REQUIRED IN STCW CODE PART A, CH VI

Where the exam directions require that an applicant has attended approved training or updated training in the following 'short courses' within the previous five years the procedure below will be applied;

- personal survival techniques;
- fire prevention and fire fighting;
- proficiency in survival craft;
- advanced fire fighting;

Where the applicant has a Certificate of Proficiency (CoP) issued by Ireland or another EU Member State (at the time of issue) and within the last five years this will be acceptable for revalidation.

Applicants that have an original CoP issued by Ireland or another EU MS (at time of issue) and more than five years from the date of application must also have "satisfactory evidence" of having maintained the required standards of competence for the STCW short courses within last five years.

Applicants that can not provide the satisfactory evidence referred to above should undergo training or update training for the issue of the relevant CoP in Ireland or another EU Member State.

Applicants that do not have the relevant CoP issued by Ireland or another EU Member State either less than or more than five years ago will have their applications refused.

"Satisfactory Evidence" may be one of the following:

- A relevant proficiency update training certificate issued by an approved course provider in Ireland or similar documentation issued by another EU Member State (at the time of issue).
- A relevant proficiency update training certificate or similar documentation issued by an approved course provider in a third country. Third countries must be recognised by the European Union by means of a Commission Implementing Decision regarding the minimum level of training of seafarers for the purposes of Directive (EU) 2022/993, whereby it has been confirmed, through an evaluation of that Party, which may include inspection of facilities and procedures, that the requirements of the STCW Convention regarding standards of competence, training and certification and quality standards are fully complied with. An up to date list of third countries is available at https://portal.emsa.europa.eu/web/stcw .

Where documentation that is accepted as providing satisfactory evidence is a Certificate of Proficiency issued by a third country, there is to be no recognition, either implied or otherwise, of such a CoP for any other purpose in relation to the European Union (Training, Certification and Watchkeeping for Seafarers) Regulations, as amended.