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## COMPREHENSIVE REVIEW OF THE 1978 STCW CONVENTION AND CODE

### Template and additional information for the submission of proposals for phase 2 of the comprehensive review

#### Note by the Secretariat

#### SUMMARY

<i>Executive summary:</i>	This document provides a template and additional information for the submission of proposals for phase 2 of the comprehensive review of the STCW Convention and Code.
<i>Strategic direction,</i> <i>if applicable:</i>	6
<i>Output:</i>	6.17
<i>Action to be taken:</i>	Paragraph 8
<i>Related documents:</i>	HTW 11/WP.4 and HTW 11/11

#### Background

1 The Sub-Committee, at its eleventh session, agreed to the list of gaps identified in the STCW Convention and Code, as set out in annex 1 to document HTW 11/WP.4 (HTW 11/11, paragraph 6.34).

2 HTW 11 noted that, instead of establishing an intersessional correspondence group on the comprehensive review of the STCW Convention and Code, it would be more appropriate to submit proposals on draft amendments to chapters 2 and 3 directly to HTW 12, and invited Member States and international organizations to do so. The Sub-Committee also noted the need for a template to harmonize the proposals, including requirements to link them to agreed gaps and the consideration of the cumulative impact, taking into account the example set out in the annex to document HTW 10/6/2 (United Kingdom) (HTW 11/11, paragraph 6.40).

3 In this context, and to facilitate the consideration of proposals at HTW 12, the Secretariat, in consultation with the Chair of the HTW Sub-Committee, and taking into account the requests made by the Working Group on Comprehensive Review of the 1978 STCW Convention and Code during HTW 11 (HTW 11/WP.4, paragraph 47.4), has prepared a template for submission of proposals for phase 2, which can be downloaded [here](https://docs.imo.org/Shared/Download.aspx?did=156565) (<https://docs.imo.org/Shared/Download.aspx?did=156565>) or may be found on **IMODOCS**.

4 In addition, the Secretariat allocated numbers for each gap identified during HTW 11 (HTW 11/WP.4, annex 1), as set out in the annex, which will be used throughout phase 2 with a view to the effective organization of the discussion.

### **Submission of proposals on draft amendments to chapters 2 and 3**

5 In accordance with the work plan for phase 2 of the comprehensive review (HTW 11/WP.4, annex 2), HTW 12 (2026) is expected to work on:

- .1 **Chapter 2**, existing provisions (gap numbers 107 to 160\*), and including new provisions for:
  - .1 Violence and harassment, including sexual harassment, bullying and sexual assault (HTW 11/WP.4, annex 1, appendix 10) (gap numbers 384 to 390);
  - .2 Mental health, psychological safety, and gender and cultural diversity (HTW 11/WP.4, annex 1, appendix 11) (gap numbers 394 and 395 (chapters II and III only));
  - .3 Ballast water management (HTW 11/WP.4, annex 1, appendix 12) (gap numbers 405 to 408); and
  - .4 Cybersecurity (HTW 11/WP.4, annex 1, appendix 13) (gap numbers 409 to 416, (chapters II and III only)); and
- .2 **Chapter 3**, existing provisions (gap numbers 161 to 242), and including new provisions for:
  - .1 Violence and harassment, including sexual harassment, bullying and sexual assault (HTW 11/WP.4, annex 1, appendix 10) (gap numbers 384 to 390);
  - .2 Mental health, psychological safety, and gender and cultural diversity (HTW 11/WP.4, annex 1, appendix 11) (gap numbers 394 and 395 (chapters II and III only));
  - .3 Ballast water management (HTW 11/WP.4, annex 1, appendix 12) (gap numbers 405 to 408); and
  - .4 Cybersecurity (HTW 11/WP.4, annex 1, appendix 13) (gap numbers 409 to 416, (chapters II and III only)).

6 In order to facilitate the submission of documents to HTW 12 in a harmonized manner, the following recommendations are provided:

- .1 documents should be strictly limited to addressing the gaps referred to in paragraph 5 above;
- .2 documents should avoid repetition of the background information of phase 1 and the draft amendments to the Convention and Code should be clear and concise in accordance with the template;

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\* Refer to annex for the allocated numbers for the gaps.

- .3 each document, in principle, should address one gap at a time, however, if different gaps could be addressed through one set of amendments (e.g. the same paragraph of the Convention and Code), practical arrangements should be considered;
- .4 gap No.11 should be taken into account for proposals on draft amendments to the Code, i.e. appendix 4 (action verb taxonomy for IMO model courses) to the revised *Guidelines for the development, review and validation of model courses* (MSC-MEPC.2/Circ.15/Rev.2), with a view to a harmonized use of action verbs;
- .5 noting the anticipated volume of documents on proposals for phase 2, the submission of these documents (agenda item 6) should only be subject to the 13-week deadline, as set out in paragraph 6.12.3 of the Committees' method of work (no later than 21 November 2025); and the 7-week deadline for commenting documents, as set out in paragraph 6.12.5 of the Committees' method of work (no later than 2 January 2026), in order to ensure their timely processing, translation and publication; and
- .6 tracked changes should be used based on the existing provisions and practice, i.e. "strikeout" for deleted text and "grey shading" to highlight all modifications and new insertions, including deleted text (i.e. not using the track changes function of Microsoft Word), in order to ensure that such changes are not lost during further editorial work (e.g. cut and paste).

7 In addition, documents containing proposed amendments that were kept in abeyance during phase 1 should be resubmitted during phase 2 of the comprehensive review, using the template (e.g. documents HTW 11/6/8 to 11/6/18, 11/6/20 and 11/6/21 (India)) (HTW 11/WP.4, paragraph 47.5).

#### **Action requested of the Sub-Committee**

8 The Sub-Committee is invited to consider the information above and take action as appropriate.

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## ANNEX

### ASSIGNED NUMBER FOR GAPS IDENTIFIED IN THE 1978 STCW CONVENTION AND CODE

#### APPENDIX 1

##### Articles of the Convention

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
1	Article II	Review of the definition of "Administration" to provide a linkage to the state entity which is the Party to the Convention	ISWG-STCW 1/2/34 Revision of regulation I/1, section B-II
2	Article III	Facilitation of transition and/or transfer between industries and relevant conventions, including seagoing service	ISWG-STCW 1/2/29 Revision of section B-III
3	Article IX	<p>The regulations identified do not include provisions on how the Administrations may adopt or retain equivalencies for training or seagoing service in line with article IX of the STCW Convention. It is necessary that the STCW Convention and the STCW Code provide for the:</p> <p>1 Equivalencies to the STCW-F Convention;</p> <p>2 Procedures to be followed by the Administration in adopting or recognizing education or training that has been undertaken under the national provisions, including, but not limited to, naval qualifications, local (port) systems, etc.;</p> <p>3 Reporting of such arrangements and the evaluations in accordance with the provisions of regulations I/7 and I/8 of the STCW Convention and sections A-I/7 and A-I/8 of the STCW Code.</p>	ISWG-STCW 1/2/18 Revision of section B-IX
4	Article IX	To ensure that there is a common system in place for Administrations to recognize certificates issued under provisions of the STCW-F Convention, and any other national system in place. As discussed by South Africa, these amendments will make it easier for seafarers already in the industry, who may seek opportunities elsewhere, to	ISWG-STCW 1/2/48 Revision of section B-IX

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		grow or change their subsectors which will help address the global shortage of STCW-certified seafarers.	
5	Article VI	Review "certificate issuing Administration" in line with article II.	ISWG-STCW 1/2/34 Revision of regulation I/1
6	Article VIII	Obsolete unit for gross tonnage (register tons).	ISWG-STCW 1/2/11 Revision of section B-VIII
7	Article VIII	Obsolete unit for gross tonnage (register tons).	ISWG-STCW 1/2/25 Revision of section B-VIII
8	Article VIII	"1600 GRT" to be changed to "3000 GT"	ISWG-STCW 1/2/34 Revision of section B-VIII
9	Article VIII	The "Format of dispensation" needs to be prescribed and communication of such dispensations to the Organization be made more effective.  Add GMDSS Radio Operator to article VIII paragraph (1) along with Radio officer/Radiotelephone operator.	ISWG-STCW 1/2/34 Revision of parts A and/or B of the Code
10	Article VIII	Clarify the reporting requirements of dispensations.	ISWG-STCW 1/2/11 Revision of section B-VIII to address the issue of NIL reporting for dispensation.

## APPENDIX 2

### All competency tables in the STCW Code

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
11	STCW Code	Consistency with regard to the use of action verb taxonomy should be ensured in all tables of part A of the STCW Code to classify the requirements for seafarers into KUPs, methods for demonstrating competence, and criteria for evaluating competence, which should be in line with the taxonomy used in the modern education system.	HTW 11/6/7

## Chapter I

**Regulation I/1**  
**Section A-I/1**  
**Section B-I/1**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
12	Regulation I/1, paragraph 1	<p>1 Definitions are not in alphabetical order and should be arranged in order for ease of referencing.</p> <p>2 Definition of seafarers - as per the MLC, 2006, as amended to be included.</p> <p>3 Definition of trainees - Trainee officer to be added: Trainee officer means a prospective officer being trained to become a certified officer.</p> <p>4 Definition of trainees - Trainee Rating to be added: Trainee Rating means a prospective rating being trained to become a certified rating.</p> <p>5 Include the definitions of cybersecurity, Company Training Officer (CTO), Shipboard Training Officer (STO) and Structured Shipboard Training Plan (SSTP).</p>	ISWG-STCW 1/2/35

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>6 Add definition of rating forming part of a watch in accordance with regulations II/4, III/4 and VII/2.</p> <p>7 Definition 11 and 12 to merge Radio operator and GMDSS radio operator.</p>	
13	Regulation I/1, paragraph 1	<p>New definitions, and clarifications to existing definitions may be necessary to address emerging technology and trends.</p> <p>There is an inconsistency in the formatting of the definitions for external references. While some external references, such as the ISPS Code and Polar Code are defined explicitly, others (e.g. SOLAS, Radio Regulations) are only referenced in other definitions. Some of these references include acronyms and some do not.</p>	ISWG-STCW 1/2/16
14	Regulation I/1 paragraph 1	<p>Include a definition for "oil/chemical tanker" as most ships are built as such and personnel working on board such ships require certification for both. Further explanation to support the need for this is provided under "Ch. V and STCW Code A-V – Review the requirements for training and certifications for advanced oil, chemical and liquefied gas tankers and ships subject to the IGF Code" below.</p>	ISWG-STCW 1/2/19
15	Regulation I/1	<p>1 Lacking the definitions of "seafarer", "crew", "medical certificate", and "quality standards system", which may lead to inconsistent interpretation and implementation of subsequent provisions.</p> <p>2 The defining method used for "Deck officer" and "Engineer officer" are inconsistent, with electro-technical officer being excluded from engineer officer.</p> <p>3 The definition of oil tanker in regulation I/1 is inconsistent with that in the SOLAS and MARPOL Conventions.</p>	ISWG-STCW 1/2/25

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
16	Regulation I/1 Regulation I/1.15	Revision to align with other sections of the Convention and Code.	ISWG-STCW 1/2/46
17	Regulation I/1, paragraph 1.26	Including an agreed framework for replacement of seagoing service by simulator time in the definitions of the STCW Convention, preferably by adding a new paragraph, as it affects a wide range of regulations within the Convention and sections within the Code.	ISWG-STCW 1/2/10
18	Regulation I/1, paragraph 1.45	Revision to define "original form" as an electronic form of any certificate.	ISWG-STCW 1/2/21

**Regulation I/2**  
**Section A-I/2**  
**Section B-I/2**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
19	Regulation I/2, sections A-I/2 and B-I/2	The interpretation and use of the term "endorsement", as set out throughout regulation I/2 of the STCW Convention and sections A-I/2 and B-I/2 of the STCW Code, is not consistent.	HTW 11/6/2
20	Regulation I/2	The provisions lack flexibility for administrations to extend the validity period of certificates in cases of exceptional circumstances. (i.e. COVID).	ISWG-STCW 1/2/16
21	Regulation I/2, paragraph 2	Regulations V/3 and V/4 (IGF and Polar Codes). Supported for consistency and cross-referencing only.	ISWG-STCW 1/2/35
22	Regulation I/2, paragraph 2.14	Include cadets in the register of certificates.	ISWG-STCW 1/2/10
23	Regulation I/2, paragraph 2	Requires the addition of V/2, V/3 and V/4 to the existing text to capture other relevant regulations of the Convention in this paragraph. Supported for consistency and cross-referencing only.	ISWG-STCW 1/2/46
24	Regulation I/2, section A-I/2	<p>Amendments to paragraphs 6, 7, 9, 11, 13, 15 and 16 of regulation I/2 and paragraphs 5, 7 to 9 of section A-I/2.</p> <p>Paragraph 6 needs to be amended for clarity that provision is only applicable to regulation I/2, paragraph 5 (endorsement attesting the issuance of a certificate).</p> <p>Paragraph 7, 9, 11, 13, 15, and 16 be amended to address potential inconsistency and potential different interpretations.</p> <p>Amend paragraphs 5, 7 to 9 of section A-I/2 for clarification and inclusion of criteria relevant to the seagoing service required for issuance of certificates of competency at the management level. Supported except for age (paragraph 13.2).</p>	ISWG-STCW 1/2/3
25	Regulation I/2, paragraph 7	If regulation I/2 requires that endorsement shall only be issued by the recognizing Administration if all the requirements of the Convention have been complied with, it seems that it duplicates the process of the independent evaluation under regulation I/8. Supported, clarification of the term "endorsements" needed	ISWG-STCW 1/2/20

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
26	Regulation I/2, paragraph 7.2	Requires the addition of V/2, V/3 and V/4 to the existing text to capture other relevant regulations of the Convention in this paragraph. Supported for consistency and cross-referencing only.	ISWG-STCW 1/2/46
27	Regulation I/2, paragraph 7.2	Add regulations V/3 and V/4 (IGF and Polar Codes). Supported for consistency and cross-referencing only.	ISWG-STCW 1/2/35
28	Regulation I/2, paragraph 8.4	<p>According to the current regulation, if the endorsement expires or if it is withdrawn, suspended, or cancelled by the issuing Party, the certificate's validity ceases immediately and, in any case, expires five years from the date of issuance. However, the COVID-19 pandemic has highlighted the inflexibility of this regulation, as seafarers encountered significant challenges in renewing their certificates.</p> <p>In cases of unavoidable situations such as pandemics or exceptional circumstances, it is necessary to consider amendments to provide flexibility regarding the validity periods.</p>	ISWG-STCW 1/2/30
29	<p>Regulation I/2, section A-I/2, paragraph 9.1</p> <p>Section B-I/2, paragraph 3</p>	<ul style="list-style-type: none"> <li>- Certificate of competency (CoC), certificate of proficiency (CoP), documentary evidence, medical certificates and any other documents issued under the STCW Convention and Code, must be accepted in electronic format.</li> <li>- Paragraph 9.1 and consider reference to electronic certificates. Mentioning "destroyed" or "reported lost", when it concerns electronic certificates, may not necessarily apply.</li> <li>- Paragraph 5.9, concerning the information in the format of the CoPs, the photograph may not be needed for electronic certificates. Although part B of the STCW Code is a recommendation, it shall be aligned.</li> </ul> <p>Consider moving the format of the CoPs from part B to part A of the STCW Code.</p>	ISWG-STCW 1/2/10

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		A new format for electronic certificates should also be considered. The text included in the form of the STCW Convention and Code might be difficult to read and not necessary when having the certificate on a mobile phone.	
30	Regulation I/2, paragraph 11 Table B-I/2	Propose to amend the Convention language to provide clarity/flexibility regarding the use of digital certificates.	ISWG-STCW 1/2/44
31	Regulation I/2, paragraph 13.3	The requirement to meet the standards for medical fitness in A-I/9 of the STCW Code prior to issuing a Certificate of Competency may be an unnecessary administrative burden.	ISWG-STCW 1/2/16  Revise paragraph 13.3 to remove the requirement to qualify for medical certification prior to the issuance of a certificate of competency.
32	Regulation I/2 Paragraphs 14 Paragraph 15 Paragraph 16 Section A-I/2 Regulation I/9 Regulation V/2	<p>While there are provisions under the STCW Convention for the verification and registration of certificates, they do not provide specific requirements for:</p> <p>1 Means, procedure or mechanism for real-time verification of its authenticity and validity; and</p> <p>2 The nature of a register, taking into consideration the available technologies for digitalization of documents.</p> <p>Further, the phrase "electronic means" mentioned in regulation I/2, paragraph 16 and "electronic register" in section I/2, paragraph 7 are vague and may be subject to different interpretations.</p> <p>There is no specific provision in the Convention requiring the authenticity and validity of documentary evidence under regulations I/9 (medical certificates) and V/2 (documentary evidence of training) to be verifiable by other Parties or companies. It also does not require maintaining a register of documentary evidence.</p>	ISWG-STCW 1/2/21  Addition of a new regulation for the maintenance of electronic register and real-time verification of certificates and endorsements under regulation I/2, medical certificates under regulation I/9 and documentary evidence of training under regulation V/2  Addition of a new section in support of the proposed new regulation;  Revision of A-I/2 and B-I/2, table B-I/2 as appropriate

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
33	Regulation I/2, paragraph 16	The 1 January 2017 date has passed.	ISWG-STCW 1/2/16
34	Regulation I/2	<p>- Paragraph 12 of the existing regulation I/2 requires Parties to ensure that certificates are issued "to candidates who comply with the requirements of this regulation", i.e. regulation I/2, but not if all other requirements of the Convention have been complied with.</p> <p>- The Certificates of Proficiency (CoP) issued to masters and officers in accordance with the provisions of regulations V/1-1 and V/1-2, are not required to include a date of expiry.</p> <p>However, the provision in regulation I/11, paragraph 3, requires masters and officers certified in accordance with the provisions of regulations V/1-1 and V/1-2 to establish continued professional competence for tankers "at intervals not exceeding five years".</p> <p>It is therefore unclear how masters and officers holding Certificates of Proficiency for tankers with indefinite validity should establish continued professional competence at intervals not exceeding five years.</p> <p>- Paragraph 13.4 requires candidates for certification to provide satisfactory proof of having completed "any related compulsory training required by these Regulations for the certificate applied for".</p> <p>However, the provisions in regulations II/1, II/2.2.2, III/1, III/2, III/3, III/6, IV/2, VII/1, require candidates for the relevant certificates to have completed approved education and training.</p> <p>- Paragraph 13.5, which requires candidates for certification to provide satisfactory proof of having met "the standards of competence prescribed by these regulations for the capacities, functions and levels that are to be identified in the endorsement to the</p>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>certificate", does not apply to candidates to CoPs as an endorsement is not required to be issued, although those candidates are also required by the relevant regulations to meet the standards of competence concerned.</p> <p>- Paragraph 15, which require each Party to make available information on the status of certificates of competency, endorsements and dispensations to other Parties and companies for verification of their authenticity and validity when seafarers seek recognition of their certificates under regulation I/10 or employment on board, does not apply to CoPs issued to masters and officers on tankers, while these CoPs are also required to be recognized by endorsement under regulation I/10 in accordance with the provisions of regulation I/2, paragraph 7.</p> <p>- Paragraph 16, which reads "the information on the status of information required to be available in accordance with paragraph 15 shall be made available [...] through electronic means", is unclear and inconsistent with the text of paragraph 15.</p>	
35	Section B-I/2	<p>Does not specify the essential elements to be included in certificates of dispensations. It is recommended that such elements be clarified to avoid inconsistencies in implementation by each Party;</p>	<p>ISWG-STCW 1/2/25</p> <p>1 Conduct a comprehensive review of the types of certificates covered by the Convention;</p> <p>2 Specify the basic elements to be included on the certificate of dispensations;</p> <p>3 Adjust the elements that should be included on the medical certificate from sections A-I/9 to A-I/2, and specify the format of the medical certificate.</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
36	Section A-I/2	<p>- Paragraph 3, on basic safety training, A-VI/2, paragraphs 5 and 11, on survival craft and rescue boats other than fast rescue boats, and on fast rescue boats, and A-VI/3, paragraph 5, on advanced fire-fighting, establishes that "seafarers qualified in accordance with [...] shall be required, every five years, to provide evidence of having maintained the required standards of competence".</p> <p>However, the Convention does not require CoPs to be issued with a validity date. It is therefore unclear how seafarers holding CoPs issued with indefinite validity should provide evidence of having maintained the required standard of competence every five years. Like previous.</p> <p>- Paragraph 4.2, requires Parties using formats which might be different from those set forth in section A-I/2 to ensure that in all cases all information relating to "the capacity or capacities in which the holder is entitled to serve [...], as well as any limitations" are "prominently displayed and easily identified".</p> <p>Therefore, in using such formats, Parties are not obliged to ensure that all information related to the functions the holder is entitled to perform on board, together with their associated levels of responsibility and limitations, are displayed in the document. However, this is not consistent with regulation VII/1, paragraph 1, which requires stating on the certificates and in the endorsements the "associated functions and levels of responsibility".</p> <p>- Paragraph 5, which was moved from part B to part A of the Code in the context of the Manila amendments, includes the verb tense "should", instead of "shall", for establishing the requirement to ensure that the seagoing service to be approved for certification is relevant to the qualification being applied for. This is found inconsistent.</p>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>- Paragraph 6 of section A-I/2, which was moved from part B to part A of the Code in the context of the Manila amendments, refers to "approval of training courses" and, therefore, it is not consistent in this section on "certificates and endorsements".</p> <p>- Paragraph 6 provides that in approving training courses and programmes, Parties should take into account that the relevant IMO model courses can assist in the preparation of such courses and programmes and ensure that the detailed learning objectives recommended therein are suitably covered.</p> <p>However, the development, updating and validation of the IMO model courses might be delayed in relation to the date of entry into force of amendments to the tables of competence in the STCW Code. Consequently, the detailed learning objectives recommended in the IMO model courses may become obsolete at a certain time. In addition, the existing paragraph 6 of section A-I/2 cannot be changed into a mandatory provision because of the recommended character of the IMO model courses.</p> <p>- Paragraph 7 of requires Administrations to issue endorsements attesting the recognition of certificates of competence and of certificates of proficiency issued to masters and officers in accordance with the provisions of regulations V/1-1 and V/1-2 to use the form of endorsement set forth in paragraph 3 of section A-I/2 of the STCW Code.</p> <p>However, this form is not consistent for endorsements attesting the recognition of certificates of proficiency issued to masters and officers in accordance with the provisions of regulations V/1-1 and V/1-2.</p>	

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>- Paragraph 7 of section A-I/2 refers to "the maintenance of the electronic register in accordance with paragraph 15 of regulation I/2".</p> <p>However, paragraph 15 of regulation I/2 does not provide for establishing or maintaining an electronic registry but requires Parties to make available information to other Parties or companies on the status of certificates, endorsements and dispensations issued to seafarers seeking recognition under regulation I/10 or employment, while paragraph 16 of regulation I/2 requires that such information is made available through electronic means.</p> <p>- Paragraph 9 of section A-I/2, which was taken from part B of the Code in the context of adoption of the Manila amendments, uses the verb tense "should", instead of "shall", to specify the items of information that are required to be recorded in the database for certificate registration.</p>	
37	Section B-I/2	<p>- Paragraph 1.4.4 Incorrectly refers to regulation VII/1. Regulation VII/2 is the one referring to "certification of seafarers".</p> <p>- Reference to regulation V/1 paragraph 1.4.4.5, is not correct since that regulation does not exist.</p> <p>- The example given in paragraph 1.8 in section B-I/2 may be confusing.</p> <p>- Guidance on relevant to the extension of validity of a certificate of proficiency when the application is made within six months before its expiry, and whereas the validity may be extended until the fifth anniversary of its date of expiry, or extension of validity, is not provided in the current text of this section.</p> <ul style="list-style-type: none"> <li>• Paragraph 1.8 and 1.10 are not in compliance with regulation I/2 and section A-I/2. The given examples lead to incorrect interpretations which limitations can be entered on the certificate. The limitation to wear corrective lenses</li> </ul>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		appears on the medical certificate; it is not necessary to enter it to the "limitations" column. It is not necessary to enter a limitation to any CoC if not qualified under chapter V. However, owing to the unnecessary examples listed there, misinterpretations arise, and further limitations are entered that are not provided for in the STCW Convention, e.g. only on traditional ships, only on sailing ships or size limitations that are not 3,000 GT or 3,000 kW.	
38	Section B-I/2	Guidelines on the use of electronic certificates of seafarers should be reviewed to ensure all types of documentary evidence issued in accordance with the Convention are included, and all guidelines to be incorporated into part B of the STCW Code.	ISWG-STCW 1/2/16 Review MSC.1/Circ.1665 Guidelines on the use of electronic certificates for seafarers and incorporate into section B-1/2 as appropriate.

**Regulation I/3**  
**Section A-I/3**  
**Section B-I/3**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
39	Regulation I/3	Paragraph 5 is about seafarers holding near-coastal voyage (NCV) certification to be engaged in near-coastal voyage areas of other coastal States, and hence, it has to be inserted in place of paragraph 6, and other paragraphs to remain the same.	ISWG-STCW 1/2/35

**Regulation I/4**  
**Section A-I/4**  
**Section B-I/4**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
40	Regulation I/4 paragraph 1.1 paragraph 2.1	The term "documentary proof" is not defined. This is an inconsistency with the defined term "documentary evidence" (regulation I/1 paragraph 1.32)  This inconsistency is noted in several additional provisions throughout the Convention and Code: Regulations I/5, paragraph 4.2 and I/10 paragraph 5, and section B-I/10, paragraphs 2 and 3.	ISWG-STCW 1/2/16
41	Regulation I/4 paragraph 1	PSC inspections are limited to verifications and assessments which are identified in regulation I/4. However, a lack of familiarity of the seafarers on board with their specific duties and with all ship arrangements, installations, equipment, procedures and ship characteristics that are relevant to their routine or emergency duties is not, under this regulation, a deficiency that may pose a danger to persons, property or the environment, nor is the ability for the ship's complement to effectively coordinate their activities in an emergency situation and to have effective oral communication.	HTW 11/6/27

**Regulation I/5**  
**Section A-I/5**  
**Section B-I/5**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
42	Regulation I/5, section B-I/5	Considering measures to promote the use of electronic certificates of seafarers, which are effective in preventing fraudulent certificates, such as drafting additional provisions in the STCW Code B that encourage Administrations to independently develop measures for electronic data management and security.	ISWG-STCW 1/2/30
43	Section A-I/5, section B-I/5	Section lacks provisions to address the need for information-sharing and cooperation between Parties to detect and prevent unlawful practices associated with fraudulent activities associated with the seafarer certificates.  No provisions currently exist. Development of guidance may be necessary depending on potential changes to regulation I/5 or section A-I/5.	ISWG-STCW 1/2/16

**Regulation I/6**  
**Section A-I/6**  
**Section B-I/6**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
44	Section A-I/6	There are no mandatory standards for distance learning and e-learning, which may affect the quality of training or lead to abuse.	ISWG-STCW 1/2/25  Move the guidance about distance learning and e-learning in section B-I/6 to the mandatory provisions in section A-I/6.
45	Section A-I/6	Section lacks provisions for the use of distance learning and modern technology.  During the COVID pandemic, administrations successfully integrated new delivery formats for seafarer training that provide flexibility in meeting the competence requirements of the Convention.	ISWG-STCW 1/2/16

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
46	Section B-I/6	Although "Guidance regarding Training and Assessment" provides guidance on distance education and e-learning, there are limitations in applying them to educational equipment that utilizes new digital technologies.	ISWG-STCW 1/2/30
47	Section B-I/6	The guidance does not account for developments in distance learning techniques and delivery methods.	ISWG-STCW 1/2/16
48	Regulation I/6, Section A-I/6  Regulation I/8 Section A-I/8  Regulation I/11 Section A-I/11  Regulation I/14 Section A-I/14	<p>Establish procedures detailing the planning, supervision and monitoring of the training on board. Include digital tools to monitor the onboard training.</p> <p>In order to facilitate more coherent development of an approved seagoing service as part of the approved training programme (onboard training), modernization could focus on the onboard training register and the possibility of developing digital tools to monitor onboard training.</p> <p>Companies should also ensure that the trainees and the responsible officers on board have sufficient time for performing their duties arising from the STCW Convention and Code.</p> <p>The ISM Company should also have a role in this process for both knowledge sharing from the office as well as facilitation. This should be part of the STCW regulations and Code and is also relevant for the developments under alternative certification.</p> <p>Distance learning programmes, in combination with guidance for the onboard responsible master and officers, would benefit the learning objectives of seagoing service.</p> <p>The ISM Company should also have a role in this process for both knowledge sharing from the office as well as facilitation. This should be part of the STCW regulations and Code and is also relevant for the developments under alternative certification.</p>	ISWG-STCW 1/2/10

**Regulation I/7**  
**Section A-I/7**  
**Section B-I/7**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
49	Regulation I/7 Sections A-I/7 Section B-I/7	Amendments to regulation I/7 of the Convention and sections A-I/7 and B-I/7 of the Code for clarity and consistency.	ISWG-STCW 1/2/8
50	Section A-I/7 Paragraph 3.3	Reference to "seafarers holding alternative certificates issued under regulation VII/1".  However, it is not regulation VII/1 but regulation VII/2 the one referring to "certification of seafarers".	ISWG-STCW 1/2/11
51	Section A-I/7	Paragraph 3.4 Language is needed to address repetitive requirements for submissions of information  Paragraph 4 section lacks clarity on what constitutes "within six months of its completion" of an independent evaluation when reporting the results of each independent evaluation.  Paragraph 9 section lacks clarity for the time frame for panels of competent persons to complete their initial consideration of the information submitted, and that Parties should be expected to provide requested clarification to a panel.  Revision is needed to address inconsistencies between requirements and practical procedures in paragraphs 10, 10.3 and 13. (e.g. tendencies for use of email in lieu of meetings, elections of competent person panel chairs by the Secretariat, etc.)	ISWG-STCW 1/2/16
52	Section A-I/7	Paragraph 4 proposes to amend to provide clarity regarding the information that the Report of the Independent Evaluation must contain.  Paragraph 9 Timeline missing for the panel of competent persons to review the report.	ISWG-STCW 1/2/44

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
53	Section B-I/7	Amend the content in accordance with paragraph 4 of section A-I/7, and in particular, add content regarding the "verification" specified in paragraph 4.4.1.	ISWG-STCW 1/2/25
54	Section B-I/7	Guidance should be updated to support a streamlined process for the communication of information, including the use of modern technology to accomplish the objectives of the requirements (i.e. virtual meetings, modern methods of information-sharing), and the development and publication of a timely "white list" of parties giving the Convention full and complete effect.	ISWG-STCW 1/2/16
55	Regulation I/7 Section A-I/7	<p>Identifies challenges, emanating from the information exchange with the panels of competent persons, in particular the timing for taking corrective measures as part of the submission of the independent evaluation reports and related documents; modernization of methods to handle information; and procedures for reporting to the Committee by the Secretary-General.</p> <p>Noted Issues identified by CP Panels:</p> <ol style="list-style-type: none"> <li>1 Knowledge of the STCW Convention</li> <li>2 Regulatory issues</li> <li>3 Development of training programmes</li> </ol>	ISWG-STCW 1/2/47

**Regulation I/8**  
**Section A-I/8**  
**Section B-I/8**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
56	Regulation I/8.2	The provisions do not specify criteria for the qualification of the "qualified person" who can perform the tasks as described.	ISWG-STCW 1/2/26
57	Section A-I/8 Paragraph 1	Provides requirements relevant to education and training objectives, examination and assessment of seafarers, and levels of knowledge, understanding and proficiency to be achieved, which are not directly associated with the requirement for	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		implementing a quality standards system provided for by regulation I/8.	
58	Section A-I/8 Paragraph 3	Section lacks clarity on the five-year interval between successive independent evaluations.	ISWG-STCW 1/2/16
59	Section A-I/8	Review and specify the scope of the independent evaluation	ISWG-STCW 1/2/25  The scope of the independent evaluation may be set forth in a similar manner as adopted by section A-I/16 (with items listed in tables), to avoid inconsistent interpretation of this section.
60	Regulation I/8 Section A-I/8 Section B-I/8.	Amendments for clarity and consistency:  1 the scope of activities covered by the QSS be shifted to section A-I/8, paragraph 2 of the STCW Code; and  2 the applicable activities are clearly specified therein.  3 Clarify what quality-standards models are acceptable for the training providers (section B-I/8, paragraph 3).  4 Clarify provisions applicable to an external audit from a training provider and those applicable to independent evaluation.  5 Clarify applicability (regulation and sections) to the Maritime Administration (certification system) and approved training providers.  6 Clarify:  .1 whether independent evaluation should cover all approved training providers, as set out in section B-I/8, paragraphs 4.6, 5.3 and 7; and  .2 who should conduct independent evaluation from the training providers, as set out in section B-I/8, paragraph 7,	ISWG-STCW 1/2/7

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		second sentence, which states that "a recognized academic accreditation or quality-standards body or Government agency should be used".	
61	Regulation I/8 Section A-I/8	<p>The following matters have been identified for clarification with a view to consistently implementing the quality standards, the oversight requirements and the review conducted by the panels of competent persons:</p> <ul style="list-style-type: none"> <li>- whether the QSS shall be developed and audited based on the STCW Convention or a generic quality management standard might be acceptable.</li> <li>- how the QSS serves to monitor all the activities covered by the Convention (all training, assessment of competence, certification, including medical certification, endorsement and revalidation activities) in a comprehensive manner, irrespective of the entity that performs these activities, such as governmental and non-governmental agencies, training institutions or shipping companies;</li> <li>- the meaning of "independent evaluation", in particular: .1 .2 .3 who is entitled to conduct an independent evaluation; whether an external audit of the QSS conducted by a duly accredited body to certify the system can be considered an independent evaluation or a separate evaluation conducted by "qualified persons" is necessary; and coordination of the independent evaluation processes by different entities involved in the implementation of the Convention, avoiding duplication and promoting complementarity.</li> </ul>	<p>ISWG-STCW 1/2/47</p> <p>The following may need consideration and addressing:</p> <ol style="list-style-type: none"> <li>1 Structure and implementation of the current verification of compliance scheme; and</li> <li>2 use and understanding of circulars</li> </ol> <p>MSC.1/Circ.1163 and MSC.1/Circ.1164, taking into account STCW regulation I/7.3.2 (see paragraph 14.4); and</p> <ol style="list-style-type: none"> <li>3 the possibility of using IMSAS to streamline the STCW compliance and quality standard evaluation process.</li> </ol>

**Regulation I/9**  
**Section A-I/9**  
**Section B-I/9**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
62	Regulation I/9 Section A-I/9	Clarify the term "Party".	ISWG-STCW 1/2/11
63	Regulation I/9 Section A-I/9	Documents issued under the Convention and Code, must be accepted in electronic format.  Medical certificates format in section A-I/9 also require a signature of the seafarer.	ISWG-STCW 1/2/10
64	Regulation I/9	Medical standards do not incorporate relevant elements of the Guidelines on the medical examination of seafarers (STCW.7/Circ.19/Rev.1), in particular, the requirements for authorizing medical practitioners and examination procedures.	ISWG-STCW 1/2/11
65	Regulation I/9 Paragraph 4.2	Delete the words "his/her" to make it gender-neutral.	ISWG-STCW 1/2/35
66	Regulation I/9, paragraph 4.2 Section A-I/9, paragraph 1, 7.1.2.3	There is a binary reference to gender in both of the annexes to the Convention and part A of the STCW Code.	ISWG-STCW 1/2/44  Propose to use the phrasing "their" to replace "his/her". Also, propose to remove the phrasing in parenthesis "(Male/Female)".
67	Regulation I/9	The provisions for the extension of medical certificates in paragraphs 6 and 7 may not allow administrations enough flexibility in cases of exceptional circumstances (e.g. COVID).  Paragraphs 6 and 7 include duplicative provisions and require clarification.	ISWG-STCW 1/2/16
68	Regulation I/9, paragraph 5	In cases of unavoidable situations such as pandemics or exceptional circumstances, there is a need to examine whether additional flexibility is required for this regulation.	ISWG-STCW 1/2/30
69	Section A-I/9	Medical fitness specified details of the seafarer should be revised and add "others".	ISWG-STCW 1/2/35
70	Section A-I/9	Footnotes to Table A-I/9 reference external documents that are out of date or not readily available.	ISWG-STCW 1/2/16

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
71	Section A-I/9, paragraph 7	States that "The medical certificate provided for in regulation I/9, paragraph 3 shall include the following information as a minimum: .2.3 Gender: (Male/Female)".	ISWG-STCW 1/2/10 Ensure the provision reflects gender equality and inclusivity.
72	Section B-I/9.2	The reference to the ILO/IMO guidelines on the medical examinations of seafarers is outdated and should be updated.	ISWG-STCW 1/2/10
73	Section B-I/9, paragraph 12	References to external documents are out of date or not readily available.	ISWG-STCW 1/2/16 Evaluate sections A-I/9 and B-I/9 to ensure the provided external reference documents are up to date. Replace external references if there are more recent, relevant, or readily available versions.

**Regulation I/10**  
**Section A-I/10**  
**Section B-I/10**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
74	Regulation I/10	When a certificate recognition arrangement is explicitly established or reviewed, a written undertaking should be concluded between the Party which is to recognize the certificates (i.e. the Administration), and the Party which is issuing the certificates to be recognized (i.e. the certificate-issuing Party).	ISWG-STCW 1/2/25
75	Regulation I/10 Section B-I/10	1 Amending paragraphs 1, 3, 5 and 6 of regulation I/10 and section B-I/10;  2 Revision of guidance MSC.1/Circ.1450; and  3 Amending paragraph B-I/10.1 and transferring it to section B-I/2 of the STCW Code. For clarity.	ISWG/STCW 1/2/9

**Regulation I/11**  
**Section A-I/11**  
**Section B-I/11**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
76	Regulation I/11, paragraph 1	Requires revision to remove regulation V/3 from the text.  Requires the addition of a new paragraph to cover the IGF requirements separately and renumbering relevant existing paragraphs.	ISWG-STCW 1/2/46
77	Regulation I/11, paragraph 1	Inconsistency in the requirements for the revalidation of a Certificate of Proficiency issued under regulation V/3 and regulation V/1-1 or regulation V/1-2.	ISWG-STCW 1/2/44  Propose to amend the existing language to take into consideration that since the required standard of competence was met when the seafarer obtained the Certificate of

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
			Proficiency, we should consider, at intervals not exceeding five years, that continued professional competence be established similar to regulation I/11, paragraph 3.
78	Regulation I/11, paragraph 1	<p>Address duplication:</p> <p>.1 intent of regulation I/11.1 is to specify revalidation requirements for certificates of competencies for service on any type of ship;</p> <p>.2 intent of regulations I/11.3 and I/11.4 are for revalidation of certificates of proficiencies, or endorsements, for service on tankers and ships operating in polar waters; and</p> <p>.3 intent of regulation V/2.4 is to specify requirements for revalidation of certificates/documentary evidence for service on passenger ships.</p> <p>Taking the above into account, it seems that regulation I/11.1; .1 duplicates the revalidation requirements set out in regulations I/11.3, I/11.4 and V/2.4 for service on tankers, ships operating in polar waters and passenger ships; and .2 mandates establishing continued professional competence (approved seagoing service) for revalidation of recognition endorsements.</p>	ISWG-STCW 1/2/6
79	Regulation I/11	<p>Maximum interval for meeting the standards of medical fitness in paragraphs 1 and 1.1 do not align with the prescribed interval in regulation I/9, paragraph 5 and can be prohibitive to seafarers returning to the industry after more than 5 years.</p> <p>The requirement to meet the standards for medical fitness in A-I/9 of the STCW Code prior to revalidating a Certificate of Competency may be an unnecessary administrative burden.</p>	ISWG-STCW 1/2/16

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
80	Regulation I/11, paragraphs 1, 3 and 4	The provision of "at intervals not exceeding five years" may make it difficult to comply with it in the event of an inevitable situation such as a pandemic or exceptional circumstances.	ISWG-STCW 1/2/30
81	Regulation I/11, paragraph 3 paragraph 4	Address redundancy since paragraph 1 refers to certificates "issued or recognized under any chapter of the Convention other than regulation V/3 or chapter VI", and, therefore, it also applies to certificates issued or recognized under regulations V/1-1, V/1-2 and V/4.	ISWG-STCW 1/2/11
82	Regulation I/11, paragraph 5	1 January 2017 date has passed.	ISWG-STCW 1/2/16
83	Regulation I/11	Adding appropriate extension clauses and reporting requirements for seafarers whose medical certificates, certificates of competency or recognition of certificates cannot be renewed or revalidated due to exceptional circumstances factors, such as the impact of the pandemic.	ISWG-STCW 1/2/25
84	Regulation I/11.5 2	Transitional provisions have expired.	ISWG-STCW 1/2/25
85	Regulation I/11 Section A-I/11	Clarify the provisions on "who is serving at sea or intends to return to sea after a period ashore" which might be confused.	ISWG-STCW 1/2/11
86	Regulation I/11 Section A-I/11	<p>Proposed new paragraph for regulation I/11 for seafarers on ships subject to the IGF Code: "Every master, engineer officer or officer shall, for continuing seagoing service on board ships under the IGF Code, meet the requirements in paragraph 1 of this regulation and be required, at intervals not exceeding five years, to establish continued professional competence for ships operating with fuels listed under the IGF Code requirements in accordance with section A-I/11, paragraph 3a (new paragraph, see below) of the STCW Code."</p> <p>Proposed new paragraph for section A-I/11 for seafarers on ships subject to the IGF Code: "Continued professional competence for ships operating with fuels listed under IGF code requirements as required under regulation I/11, paragraph 3a (new paragraph, see above) shall be established by: .1 approved seagoing</p>	ISWG-STCW 1/2/35

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		service, performing duties appropriate to the IGF certificate or endorsement held, for a period of at least one month in total during the preceding five years; or .2 successfully completing an approved relevant training course or courses."	
87	Section A-I/11, paragraph 3	Requires the addition of a new sub-paragraph and renumbering existing sub-paragraphs to cover revalidation requirements using an alternative acceptable occupation.	ISWG-STCW 1/2/46
88	Section A-I/11, paragraph 3.1	The phrase "performing duties appropriate to the tanker certificate or endorsement held" does not allow flexibility for oil/chemical tankers.	ISWG-STCW-1-2-19
89	Section A-I/11	It is proposed that simulator-based training and assessment be included as options to establish continued professional competence for revalidation of certificates.	ISWG-STCW 1/2/26
90	Section B-I/11	Although "Guidance regarding Training and Assessment" provides guidance on distance education and e-learning, there are limitations in applying them to educational equipment that utilizes new digital technologies.	ISWG-STCW 1/2/30

**Regulation I/12**

**Section A-I/12**

**Section B-I/12**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
91	Regulation I/12	Provisions do not include the use of non-mandatory simulator training to meet certain requirements.	ISWG-STCW 1/2/16
92	Regulation I/12 Section A-I/12 Section B-I/12	Although it is comprehensively expressed as the 'use of simulators', it is necessary to review whether it includes various new digital technologies, IRT such as AR, VR, MR, and Metaverse. It is necessary to review whether it includes technologies that utilize IRT.  Standards governing for the Use of Simulators include simulator performance standards, training and evaluation procedures, etc., including radar, ARPA, and ECDIS simulation, but do not include	ISWG-STCW 1/2/30

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>content on education and training based on new digital technologies.</p> <p>Although "Guidance regarding Training and Assessment" provides guidance on distance education and e-learning, there are limitations in applying them to educational equipment that utilizes new digital technologies.</p>	
93	Regulation I/12, paragraph 1.1	<p>The term "mandatory" requiring the performance standards and other provisions laid down in section A-I/12 to be complied with in respect of "all mandatory simulator-based training" leaves such training unspecified.</p> <p>While some Parties have interpreted that the mandatory training referred to in this provision is the training considered in accordance with the national provisions, few other Parties interpret that the reference to mandatory training means the training explicitly required by the STCW Code to be conducted or carried out by means of a simulator.</p>	ISWG-STCW 1/2/11
94	Regulation I/12 Section A-I/12	<p>Provisions concerning the minimum technical specification for simulation equipment as well as the qualifications and experience of instructors and assessors, and the competences and associated KUPs in which seagoing time can be replaced with time spent in simulators (e.g. Collision Avoidance, Emergency Management, Communication) should be revised, partly tightened (e.g. in regard to technical aspects and maximum number of trainees) and specified.</p>	ISWG-STCW 1/2/10
95	Section A-I/12, part-I	<p>"Additional performance standards" provisions have not addressed ECDIS simulation operational capacities. It is proposed that ECDIS simulation operational capacities as per all applicable performance standards adopted by the Organization be included within the section.</p>	ISWG-STCW 1/2/26
96	Section A-I/12 Section B-I/12	<p>Section is lacking performance standards and provisions for the use of modern simulation.</p>	ISWG-STCW 1/2/16

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>There are currently no provisions for some types of simulators in common use today.</p> <p>Section lacks guidance for the use of modern simulation in seafarer training.</p>	
97	Section B-I/12	<p>Amend the guidance regarding the use of simulators based on the latest performance standards for radar equipment, GMDSS equipment and ECDIS, as well as the Guidance on Good Practice for ECDIS (MSC.1/Circ.1503/Rev.2).</p>	ISWG-STCW 1/2/25

**Regulation I/14**  
**Section A-I/14**  
**Section B-I/14**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
98	Regulation I/14	Regulation I/14 holds Companies responsible for ensuring that seafarers assigned to any of its ships have received refresher and updating training as required by the Convention, thus this should be clarified.	ISWG-STCW 1/2/11
99	Regulation I/14	The guidance in section B-VIII/1.8 proposes that companies consider the implementation of a policy of drug and alcohol abuse prevention.  However, this guidance should be moved to the text of the STCW Convention in regulation I/14.	ISWG-STCW 1/2/10
100	Regulations I/14.1	Requires that each seafarer assigned to any of its ships holds an appropriate certificate in accordance with the provisions of the Convention and as established by the Administration.  Regulation IV/2 requires that every person in charge of or performing radio duties on a ship required to participate in the GMDSS shall hold an appropriate certificate related to the GMDSS, issued or recognized by the Administration under the provisions of the Radio Regulations.  The term appropriate certificate and the term "Radio Regulations" are not defined. Clarify the meaning of appropriate certificate or delete it.	ISWG-STCW 1/2/11
101	Section A-I/14	Paragraphs 3 and 4 are duplicative of requirements in chapters II, III, and V. Many of the referenced guidance in B-I/14 is generally applicable to all ships and seafarers and are not necessarily specific to passenger and ro-ro passenger ships.	ISWG-STCW 1/2/16
102	Section B-I/14	Guidance under paragraphs 2 and 3 is duplicative of requirements in chapters II, III, and V, and is generally applicable to all ships and seafarers and is not necessarily specific to passenger and ro-ro passenger ships.	ISWG-STCW 1/2/16

**Regulation I/15**  
**Section A-I/15**  
**Section B-I/15**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
103	Regulation I/15 - Transitional provision.	These regulations contain transitional provisions that have expired.	ISWG-STCW 1/2/25
104	Regulation I/15, paragraph 1 paragraph 2	The 1 January 2017 date has passed.  Transitional provisions will be necessary for any amendments to the STCW Convention and Code.	ISWG-STCW 1/2/16

**Regulation I/16**  
**Section A-I/16**  
**Section B-I/16**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
105	Regulation I/16, paragraph 2 Section A-I/16	The table in section A-I/16 should be revised in order to contain the required time periods/frames for each report that shall be submitted to the Secretary-General, as applicable.  The term "STCW Convention and Code" has been used in the table of section A-I/16, which does not seem consistent with the terms used in the Convention and STCW Code (Convention and STCW Code).	ISWG-STCW 1/2/5
106	Regulation I/16, Section A-I/16  Regulations I/7, I/8 and I/10 Sections A-I/7, A-I/8 and A-I/10 Sections B-I/7, B-I/8 and B-I/10	Incorporating STCW quality standard independent evaluations (regulation I/8) into the scope of the IMSAS audit scheme and cycle, reporting and monitoring of implementation under the Convention and Code will be streamlined and reduce administrative burden for Member States.	ISWG-STCW 1/2/28

**APPENDIX 3**  
**Chapter II**

**Regulation II/1**  
**Section A-II/1**  
**Section B-II/1**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
107	Chapter II	Including a specialized certificate for small vessels such as commercial yachts, and the corresponding competencies and the minimum KUP required for the certification.	ISWG-STCW 1/2/10
108	Tables A-II/1, A-II/2, A-II/3, A-I/4, A-II/5, A-III/1, A-III/2, A-III/3, A-III/4, A-III/5, A-III/6, A-III/7 and A-IV/2	The standards of competence detailed in the mentioned tables should be mapped with IMO or other instruments, thus cross-referencing competencies with necessities under other instruments. Addition of a fifth column in all the mentioned tables.	ISWG-STCW 1/2/19 Supported in principle with a note that different instruments should not downscale each other. Possibility to include other chapters.
109	Chapter II-VI Columns 3: All Competency Tables	<p>There is a need for standardized language to be used in column 3 of the Competence Tables in part A of the STCW Code.</p> <p>Currently, the tables identify over 40 different methods for demonstrating competence. Several tables contain KUPs and criteria for evaluating competence within column 3 (e.g. table A-VI/2-1).</p>	<p>ISWG-STCW 1/2/16 Develop a standardized list of methods of demonstrating competence (Column 3) to eliminate inconsistencies.</p> <p>Review all tables to remove KUPs or criteria for evaluating competence from column 3. Where found, revise columns 2 and 4 as needed to ensure requirements are in the appropriate columns.</p> <p>Consider development of guidance for this standardized list of methods for demonstrating competence to be included in part B-I/6.</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
110	Regulation II/1, paragraph 2.2  Section A-II/1 Paragraph 6.3	Inconsistent with the language used to describe the training record book requirements in other places throughout the Convention and Code.	ISWG-STCW 1/2/16  Revise the language to consistently describe the training record book requirements throughout to read: "documented in an approved training record book or similar document" to eliminate inconsistencies and to ensure administrations have flexibility, including the use of electronic documentation.
<b>Simulation and Seagoing Service further consideration is needed, risk-based analysis</b>			
111	Regulation II/1	There are no specific guidelines regarding the exact duration or methods of the approved seagoing service.	ISWG-STCW 1/2/30  Review the extent to which simulation training and other methods can substitute for the approved seagoing service related to onboard training.  Additionally, if possible, it is also necessary to review the requirements for training ships, the duration of training, and whether additional weight should be given to training on a training ship.
112	Regulation II/1	Addition of new paragraphs to regulation II/1 which allow for substitution of approved seagoing service by alternative measures such as simulator training.	ISWG-STCW 1/2/43, annex 2
113	Regulation II/1	The replacement of seagoing time with simulator training should remain a possibility for Parties to the Convention and not become a requirement. The	ISWG-STCW 1/2/10

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		amount of seagoing time required in general, as specified in the specific regulations and sections, could hereby remain with an added reference to the possibility of a limited replacement of seagoing time with simulator time.	
114	Tables A-II/1	Revise table to emphasize the need for more use of approved simulators during training, including various modern technologies used in the maritime industry and highlighting the Human Element.	ISWG-STCW 1/2/46
115	Regulation II/1 Table A-II/1, B-II/1  Tables III/1, A-III/1, B-III/1  Tables III/6, A-III/6, B-III/6	It is necessary to further review and revise the seagoing service requirements for crew promotion and evaluate their rationality and feasibility.	ISWG-STCW 1/2/25  Review tables and stipulate the minimum content and length of onboard training, then evaluate the effectiveness accordingly and determine the reasonable length of time for the "approved seagoing service".  Develop and provide guidance to Parties on implementing the provisions of onboard training.
116	Regulations II/1 – II/5 Sections A-II/1 – A-II/5	There is no option to use approved simulator training as an alternative to meeting a portion of seagoing service requirements.	ISWG-STCW 1/2/16
117	Table A-II/1, column 3	The required method for demonstrating competence needs to be reviewed with consideration to the use of alternative forms of training (i.e. digital or cloud based).	ISWG-STCW 1/2/26
118	Table A-II/1, column 3  Table A-II/2 Table A-II/3 Table A-II/5	It is necessary to review whether there is a need to add training equipment that utilizes digitalization and emerging technologies. Such as Immersive Reality Technology (IRT) <sup>1</sup> as Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR) <sup>2</sup> , and Metaverse.	ISWG-STCW 1/2/30

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
119	Regulation II/1, paragraph 2.2	Revise paragraph 2.2 to stipulate that every candidate for certification shall have completed not less than 12 months of combined simulator-based training and approved seagoing service of which not less than 6 months shall be seagoing service as part of an approved training programme which includes onboard training that meets the requirements of section A-II/1 of the STCW Code and is documented in an approved training record book.	ISWG-STCW 1/2/23
<b>Competence and KUPs</b>			
120	Table A-II/1, paragraph 3  Table A-II/2, paragraph 4  Table A-II/3, paragraph 3	Identified paragraphs refer to "the level of knowledge of the subjects listed in column 2 of table ...".  Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something.	ISWG-STCW 1/2/11  Cross references should be checked to be correct.
121	Table A-II/1 Table A-II/2 Table A-III/3	Review the navigation and associated equipment competencies and KUPs in line with modern practices.  Evaluate the inclusion of deck maintenance and instrument knowledge in the competencies to enhance operational safety. Only mentioned in table A-II/5, so it appears they cannot be performed by anyone other than the able seafarer deck without any reference to whom they must report.  Competencies for deck officers should include managing deck maintenance and repair to ensure comprehensive qualifications.	ISWG-STCW 1/2/19
122	Table A-II/1  Table A-II/2	Current provisions lack training requirements for the use of electronic nautical publications as they are widely used and are significantly different from traditional paper publications.	ISWG-STCW 1/2/25  Evaluate the need to add competency requirements for the use of electronic nautical publications and add as appropriate.
123	Table A-II/1 Table A-II/2, A-II/3, A-II/4, A-II/5, A-III/1,	21st century skills such as interpersonal skills, mentoring, information management, communication, situational awareness, ability to adapt to a changing	ISWG-STCW 1/2/19

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
	A-III/2, A-III/3, A-III/4, A-III/5, A-III/6 and A-III/7	work environment, multicultural environments and different cultures, stress management, workload management, etc., are not specifically addressed by the STCW Convention and Code	
124	Tables for Operational and Management Level	<p>New competences are proposed to cover the skills required for non-technical behavioural soft skills needed to operate in the 21st century.</p> <p>The KUPs would be based upon the main elements described in document MSC 101/INF.6 as below:</p> <ul style="list-style-type: none"> <li>.1 Team working;</li> <li>.2 Communications and influencing;</li> <li>.3 Situation awareness;</li> <li>.4 Decision-making;</li> <li>.5 Results focus; and</li> <li>.6 Leadership and managerial skills.</li> </ul> <p>Evaluate the need for support level requirements.</p>	ISWG-STCW 1/2/15
125	Table A-II/1	<p>Review requirements in terms of modernization for:</p> <ul style="list-style-type: none"> <li>- Celestial navigation (o)</li> <li>- Meteorology (o)</li> <li>- Visual signalling (o)</li> <li>- Combine bridge resource management and leadership and teamworking skill (o with further consideration)</li> </ul>	ISWG-STCW 1/2/30
126	Table A-II/1 Table B-II/1	Adjust the training on celestial navigation taking into consideration the compass errors.	ISWG-STCW 1/2/10
127		<p>Review the competence for determining a ship's position and update required methods, specifically:</p> <ul style="list-style-type: none"> <li>- Celestial</li> <li>- Loran</li> <li>- Decca</li> </ul>	ISWG-STCW 1/2/26  Evaluate the need to update KUPs for current technology.
128	Sections A-II/1 through A-II/5	Revision and development of new competences are needed to address advances in technology, modern terminology, taxonomy, and lessons learned. (e.g. prevalence of modern stability and celestial navigation software, integrated systems, etc.)	ISWG-STCW 1/2/16

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
129	Table A-II/1 Table B-II/1 Table A-II/2 Table A-II/3	References to celestial navigation, checking compass errors through the use of celestial bodies and the use of sextants should be deleted.	ISWG-STCW 1/2
130	Table A-II/1	Revise table to: <ul style="list-style-type: none"> <li>- enhance seafarers' understanding of marine Emergency Response and Communication, including in mass casualty situations.</li> <li>- highlight relevant practical ship stability context to seafarers and ensure the crucial understanding of the Human Element in ship operations.</li> <li>- highlights the latest and most relevant modern maritime/shipping operational practices, technological context, and the understanding of the Human Element.</li> <li>- reflect electronic chart provisions on modern ships, voyage optimization and modern technologies used in the maritime industry, including highlighting Human Element when evaluating the passage plans.</li> </ul>	ISWG-STCW 1/2/46
131	Table A-II/2 Table A-III/2	Mentoring is a competency which can be taught and examined just like any other competency. Proposed to include a competence for "Effective Mentoring" to ensure that all officers at the management level possess the competence to effectively mentor junior seafarers.	ISWG-STCW 1/2/14
132	Section B-II/1	Guidance does not consider new technology, modern terminology or taxonomy.	ISWG-STCW 1/2/16
<b>ECDIS</b>			
133	Table A-II/1 Table A-II/2	Consider consolidating ECDIS related competence requirements with those in A-II/2 to streamline training.	ISWG-STCW 1/2/19
134	Table A-II/1 Table A-II/2 Table A-II/3	Review the content for the operation and management of ECDIS taking into consideration the newly adopted IMO performance standards of ECDIS.	ISWG-STCW 1/2/25
135	Table A-II/1 Table A-II/2 Table A-II/3	In cases where training and assessment in the use of Radar, ARPA or ECDIS is not required, a limitation should be noted on the certificate.	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		However, section A-I/2 on "Certificates and endorsements" does not include specific provisions to ensure that those limitations identified in tables A-II/1, A-II/2 and A-II/3 are inserted in the endorsements when required.	
136	Table A-II/1 Table A-II/2	The use of limitations or "negative endorsements" for ECDIS and ARPA, which are only specified as part of the competency tables, has resulted in inconsistencies in both application and interpretation.	ISWG-STCW 1/2/16

**Regulation II/2**  
**Section A-II/2**  
**Section B-II/2**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
137	Regulation II/2	<p>Paragraph 4.1 is missing an "and" at the end to make it consistent with the text in regulations II/2, paragraph 2, III/2, paragraph 2.1 and III/3, paragraph 2.1.</p> <p>In addition, paragraph 4.3 is missing the word "education" to be aligned with all other similar paragraphs in chapters II and III.</p>	ISWG-STCW 1/2/11
<b>Simulation and Seagoing Service</b>			
138	Table A-II/2	Table A-II/2 should be revised to emphasize the need for more use of approved simulators during training, including various electronic resources and modern technologies used in the maritime industry	ISWG-STCW 1/2/46
<b>Competence and KUPs</b>			
139	Table A-II/2	<p>Compare requirements in Table A-II/2 for:</p> <ul style="list-style-type: none"> <li>- "General knowledge of tankers and tanker operations"</li> </ul> <p>With the requirements in:</p> <ul style="list-style-type: none"> <li>- Section A-V "special training requirements for personnel on certain types of ships"</li> </ul> <p>Identify duplications.</p>	<p>ISWG-STCW 1/2/25</p> <p>Identify duplicate requirements and remove from Table A-II/2 if appropriate</p>
140	Table A-II/2	<p>Review requirements for:</p> <ul style="list-style-type: none"> <li>- Celestial Navigation</li> <li>- Forecast weather and oceanographic conditions</li> <li>- International conventions and agreements</li> <li>- International Medical Guide for Ships or equivalent national publications</li> </ul>	ISWG-STCW 1/2/30
141	Table A-II/2 B-II/2	Adjust the training on celestial navigation taking into consideration the compass errors.	ISWG-STCW 1/2/10
142	Tables A-II/2	Current provisions lack training requirements for the use of electronic nautical publications as they are widely used and are significantly different from traditional paper publications.	<p>ISWG-STCW 1/2/25</p> <p>Evaluate the need to add competency requirements for the use of electronic nautical publications</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		According to the LSA Code, lifeboat and liferaft equipment do not contain wave-quelling oil, as its use is not good for marine environment protection	and add as appropriate.  Delete the description "Use wave oil" in table A-II/2
143	Table A-II/2	<p>Revise table to:</p> <ul style="list-style-type: none"> <li>- cover relevant modern shipping context, emerging technologies and modern equipment onboard, including an understanding of the Human Element and Data Science skills.</li> <li>- emphasize using relevant modern electronic resources, technologies, and a robust understanding of the Human Element. (O)</li> <li>- highlight the accuracy of position fixing and ensure seafarers' awareness of spoofing and jamming (o)</li> </ul>	ISWG-STCW 1/2/46
144	Section B-II/2	The guidance in this section references B-II/1, which may not be appropriate for management level deck officers. There may be additional guidance applicable to the management level.	ISWG-STCW 1/2/16  Evaluate if the guidance in B-II/1 is adequate for management level and revise as appropriate.

**Regulation II/3**  
**Section A-II/3**  
**Section B-II/3**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
145	Section A-II/3, paragraph 6.3	Inconsistent with the language used to describe the training record book requirements in other places throughout the Convention and Code.	ISWG-STCW 1/2/16  Revise the language to consistently describe the training record book requirements throughout to read: "documented in an approved training record book or similar document" to eliminate inconsistencies and to ensure administrations have flexibility, including the use of electronic documentation.
146	Regulation II/3	Due to emerging trends, ships of < 500 GT are now frequently engaged in international trade. The current STCW requirements for masters on such vessels are for up to 3,000 GT and relate to regulation II/2 within the same chapter. The possibility to introduce a new criterion within the STCW Code to allow for an unlimited license for masters and officers in charge of a navigational watch on vessels < 500 GT is to be reviewed.	ISWG-STCW 1/2/19
<b>Competence and KUPs</b>			
147	Table A-II/3	Column 4 "criteria for evaluating competence" includes the following text:  "Interpretation and analysis of information obtained from radar is in accordance with accepted navigational practice and takes account of the limits and accuracy levels of radar". In addition, column 3 for "methods for demonstrating competence" states "assessment of evidence obtained from approved radar simulator" as the method for the competence "plan and conduct a coastal passage and determine position in relation to the "knowledge,	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>understanding and proficiency" (KUP) item on "navigational aids and equipment".</p> <p>However, no specific KUP item on Radar navigation is included in column 2 of this table.</p>	
148	Table A-II/3	<p>Review requirements for:</p> <ul style="list-style-type: none"><li>- Search and Rescue</li></ul>	<p>ISWG-STCW 1/2/30</p> <p>Determine if reduction and combination of proposed topics is appropriate.</p>
149	Section B-II/3	<p>This section references B-II/1 directly. There may be additional relevant guidance applicable to the operational and management levels on "limited tonnage" ships.</p>	<p>ISWG-STCW 1/2/16</p> <p>Consider if guidance in B-II/1 is adequate for the "limited tonnage" operational and management levels and revise as appropriate.</p>

**Regulation II/4**  
**Section A-II/4**  
**Section B-II/4**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
150	Regulation II/4	<p>Paragraph 1 requires "every rating forming part of a navigational watch" to "be duly certificated".</p> <p>Article II(d) defines the term "certificated" as "properly holding a certificate".</p> <p>However, the above provisions do not specify the type of certificate the seafarers concerned should hold and they do not refer to the definition of "certificate of proficiency" given in regulation I/1, paragraph 1.31.</p> <p>In addition, the associated sections of the STCW Code do not specify the certificate these seafarers should hold and do not include any reference that would clarify the type of certificate that should be issued.</p>	ISWG-STCW 1/2/11

**Regulation II/5**  
**Section A-II/5**  
**Section B-II/5**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
<b>Expired Provisions</b>			
151	Regulation II/5, paragraphs 3, 4, 5, and 6	Transitional provisions designed to facilitate the transition from previous regulations to the new requirements introduced by the 2010 Manila amendments. As a result, they may no longer be applicable or necessary in the current regulatory context.	ISWG-STCW 1/2/36
152	Regulation II/5, paragraph 4 paragraph 5	Propose to remove paragraph 4 as it has not been applicable since 2012  Propose to remove paragraph 5 as it has not been applicable since 2017.	ISWG-STCW 1/2/44
153	Regulations II/5.4 and II/5.5 4	Transitional provisions have expired.  The International Labour Organization Certification of Able Seamen Convention, 1946 (No.74) was repealed at the 109th session of the International Labour Conference in June 2021.	ISWG-STCW 1/2/25
154	Regulation II/5, paragraphs 3, 4 and 5	The 1 January 2012 and 1 January 2017 dates have passed.	ISWG-STCW 1/2/16  Evaluate paragraph 3 in regulation II/5 to determine if the date needs to be updated to align with any new amendments or if the provision can be removed. Remove expired provisions in paragraphs 4 and 5 of regulation II/5.
155	Regulation II/5	Paragraph 1 requires "every able seafarer deck" to "be duly certificated".  Article II(d) defines the term "certificated" as "properly holding a certificate".  However, the above provisions do not specify the type of certificate the seafarers concerned should hold and they do not refer to the definition of "certificate of proficiency" given in regulation I/1, paragraph 1.31.  In addition, the associated sections of the STCW Code do not specify the certificate	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		these seafarers should hold and do not include any reference that would clarify the type of certificate that should be issued.	
156	Regulation II/5	<p>Paragraph 2.3 The wording "while qualified to serve as ..."</p> <p>Clarify what "while qualified" means and what is the difference between meeting the requirements for certification and being qualified for certification.</p>	ISWG-STCW 1/2/11
157	Regulation II/5, paragraph 2.3	The requirement to have seagoing service while qualified for RFPNW is unnecessarily burdensome to seafarers with prior navigational watchkeeping experience seeking ASD certification.	<p>ISWG-STCW 1/2/16</p> <p>Revise the provisions to allow seafarers to meet the seagoing service requirements without being qualified for RFPNW if they have served in a relevant capacity in the deck department.</p>
158	Regulation II/5 paragraphs 2.3.1 and 2.3.2	The seagoing service requirements are inconsistent with the correlating seagoing service requirements for able seafarer engine in regulation III/5.	<p>ISWG-STCW 1/2/16</p> <p>Consider the appropriateness of the amount of required seagoing service in paragraphs 2.3.1 and 2.3.2 in relation to those for able seafarer engine.</p>
159	Table A-II/5 Section B-II/5	Inconsistency in the options of column 3, Methods for Demonstrating Competence (training record book) between table A-II/5 and table B-II/5.	ISWG-STCW 1/2/44
160	Section B-II/5	<p>Provision is very limited. Additional, more detailed guidance may be appropriate.</p> <p>The language in this section is inconsistent with the language used to describe the training record book requirements in other places throughout the Convention and Code.</p>	<p>ISWG-STCW 1/2/16</p> <p>Revise the language to consistently describe the training record book requirements throughout to read: "documented in an approved training record book or similar document" to eliminate inconsistencies and to ensure administrations have flexibility, including the use of electronic documentation.</p>

## APPENDIX 4

### Chapter III

#### Regulation III/1

#### Section A-III/1

#### Section B-III/1

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
161	Chapter III Section A-III	Including a specialized certificate for small vessels such as commercial yachts, and the corresponding competencies and the minimum KUP required for the certification	ISWG-STCW 1/2/10
162	Regulation III/1	<p>the "12 months" and "36 months" referred to in the existing text in paragraph 2.2, might be understood as referring only to the "approved seagoing service" period and not to the "combined duration of workshop skills and approved seagoing service".</p> <p>In addition, the term "approved" associated to the "workshop skills training" is not stated as it is for the "seagoing service".</p>	ISWG-STCW 1/2/11
163	Regulation III/1, paragraph 2.2 Section A-III/1	The language is inconsistent with the language used to describe the training record book requirements in other places throughout the Convention and Code.	<p>ISWG-STCW 1/2/16</p> <p>Revise the language to consistently describe the training record book requirements throughout to read: "documented in an approved training record book or similar document" to eliminate inconsistencies and to ensure administrations have flexibility, including the use of electronic documentation.</p>
<b>Simulation and Seagoing Service</b>			
164	Regulation III/1 Regulation III/6 B-III/1 B-III/6	There are no specific guidelines regarding the exact duration or methods of the approved seagoing service.	<p>ISWG-STCW 1/2/30</p> <p>Review the extent to which simulation training and other methods can substitute for the approved seagoing</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
			<p>service related to onboard training (like previous decision)</p> <p>Additionally, if possible, it is also necessary to review the requirements for training ships, the duration of training, and whether additional weight should be given to training on a training ship.</p>
165	Regulation III/1	Addition of new paragraphs to regulation III/1 which allow for substitution of approved seagoing service by alternative measures such as simulator training.	ISWG-STCW 1/2/43, annex 2
166	Regulation III/1 A-III/1 B-III/1	The replacement of seagoing time with simulator training should remain a possibility for Parties to the Convention and not become a requirement. The amount of seagoing time required in general, as specified in the specific regulations and sections, could hereby remain with an added reference to the possibility of a limited replacement of seagoing time with simulator time.	ISWG-STCW 1/2/10
167	Regulation III/1, paragraph 2.2	<p>Seagoing service requirement is not clear.</p> <p>What is the purpose of the option articulated in regulations III/1, paragraph 2.2 since under paragraph 2.4, the candidate must still have completed approved education and training and meet the standard of competence specified in section A-III/1 of the STCW Code".</p>	ISWG-STCW 1/2/44
168	Regulation III/1, section B-III/1	Inconsistency in the existing title of regulation III/1 and the text in paragraph 1 refer to "officers in charge of an engineering watch in a manned engine-room or designated duty engineers in a periodically unmanned engine-room". While the provisions in regulation III/2, paragraph 2.1 and III/3, paragraph 2.1, refer to "officer in charge of an engineering watch".	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
169	Regulations III/1 - III/7  Sections A-III/1 A-III/7	There is no option to use approved simulator training as an alternative to meeting a portion of seagoing service requirements.	ISWG-STCW 1/2/16  Develop provisions for approved simulator training to be used as an alternative to a portion of seagoing service requirements.
170	Regulation III/1 Table A-III/1 B-III/1  Regulation III/6, A-III/6, B-III/6	It is necessary to further review and revise the seagoing service requirements for crew promotion and evaluate their rationality and feasibility.	ISWG-STCW 1/2/25  Review Tables and stipulate the minimum content and length of onboard training. then evaluate the effectiveness accordingly and determine the reasonable length of time for the "approved seagoing service"  Develop and provide guidance to Parties on implementing the provisions of onboard training.
171	Table A-III/1 Column 3	The required method for demonstrating competence need to be reviewed with consideration to the use of alternative forms of training (i.e. digital or cloud based)	ISWG-STCW 1/2/26
172	Table A-III/1 Column 3  Table A-III/2 Table A-III/6	It is necessary to review whether there is a need to add training equipment that utilizes digitalization and emerging technologies. Such as Immersive Reality Technology (IRT) <sup>1</sup> as Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR) <sup>2</sup> , and Metaverse	ISWG-STCW 1/2/30
<b>Competence and KUPs</b>		Section A-III/1 requires the addition of a new paragraph to include that an Administration may omit knowledge requirements for High Voltage installation for the engineer officer serving on ships without High Voltage installations, which are issued a certificate not valid for service on ships with High Voltage installations and renumbering of existing paragraphs.	ISWG-STCW 1/2/46

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>Table A-III/1 should be revised to align with the relevant modern shipping context and technologies, including analysis and fault finding in modern systems, robust understanding of the Human Element, and Data Science skills.</p> <p>Table A-III/1 should be revised to reflect modern propulsion and emission control systems and technologies.</p>	
174	Sections A-III/1 - A-III/7	<p>Revision and development of new competences is needed to address advances in technology, modern terminology, taxonomy, and lessons learned. (e.g. modern electrical and electronic control equipment and distribution systems, propulsion and machinery installations, etc.)</p>	ISWG-STCW 1/2/16
175	Table A-III/1	<p>In Table A-II/3, function 'Navigation at operational level', competence 'Respond to emergencies', requires in column 2 that "in addition, the following material should be included for certification as master ...".</p> <p>However, in section AIII/1 paragraph 5, specified in sections A-II/1, paragraph 3, AII/2, paragraph 4, A-II/3, paragraph 3, and A-III/2, paragraph 4, the text refers to "the level knowledge of the subjects listed in column 2" (supported in terms of cross reference)</p>	ISWG-STCW 1/2/11
176	Table A-III/1	<p>Addition of "Networking, configuring IPs, computer set-up, etc." to Function: Electrical, electronic and control engineering at the operational level</p> <p>Column 1 (Competence) Column 2 (KUP)</p>	ISWG-STCW 1/2/37
177	Table A-III/1 - item 1 column 3 .1	<p>In service experience cannot by itself be the only method of demonstrating a competence and should be coupled with an approved training or approved training programme</p>	<p>ISWG-STCW 1/2/44</p> <p>Propose to add approved training or an approved training programme as an additional method of demonstrating competence</p>
178	Regulation III/1,	<p>Duplication between the identified paragraph and the text in table A-III/1 under the function controlling the</p>	<p>ISWG-STCW 1/2/44</p> <p>Remove duplication from started</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
	paragraph 2.5	operation of the ship and care of persons on board at the operation level.	requirements for BT, PSC, AFF, Medical FA and MC.
179	Table A-III/1, column 2	Existing requirements do not take into consideration the advancements in technology.	ISWG-STCW 1/2/44 Propose to revise the KUPs to address advances in technology.
180	Table A-III/1 Table A-III/2, A-III/3, A-III/4, A-III/5, A-III/6 and A-III/7	21st Century skills such as interpersonal skills, mentoring, information management, communication, situational awareness, ability to adapt to a changing work environment, multicultural environments and different cultures, stress management, workload management, etc., are not specifically addressed by the STCW Convention and Code. Like previous	ISWG-STCW 1/2/19
181	Tables for Operational and Management Level	<p>New competences are proposed to cover the skills required for non-technical behavioural soft skills needed to operate in the 21st century.</p> <p>The KUPs would be based upon the main elements described in document MSC 101/INF.6 as below:</p> <ul style="list-style-type: none"> <li>.1 Team working;</li> <li>.2 Communications and influencing;</li> <li>.3 Situation awareness;</li> <li>.4 Decision-making;</li> <li>.5 Results focus; and</li> <li>.6 Leadership and managerial skills.</li> </ul> <p>Evaluate the need for support level requirements.</p>	ISWG-STCW 1/2/15
182	Table A-III/1	<p>Review and update requirements for:</p> <ul style="list-style-type: none"> <li>- basic knowledge related to the operation of marine diesel engines, marine gas turbines and marine boilers</li> <li>- maintenance work on ships</li> <li>- Combine ERM and L&amp;T under "Controlling the operation of the ship and care for persons on board"</li> </ul>	ISWG-STCW 1/2/30

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>Compare requirements in Table A-II/1 for:</p> <ul style="list-style-type: none"> <li>- Fire prevention</li> <li>- Life-saving</li> <li>- Medical aid</li> <li>- Leadership and teamworking</li> </ul> <p>With the requirements in table A-VI/2, A-VI/3, A-VI/4 identify unnecessary duplications.</p>	
183	Section B-III/1	<p>Paragraph 3 "to document the onboard training in a training record book" is redundant to the mandatory provision in section A-III/1, paragraph 2.3.</p> <p>In addition, the text that refers to "qualified assessors" as the persons responsible for documenting the onboard training in a training record book is incorrect.</p>	ISWG-STCW 1/2/11
184	A-III/1, A-III/2, A-III/3 and A-III/6	<p>There are no operational training requirements for anti-pollution equipment and systems, such as exhaust gas treatment devices and ballast water treatment devices.</p>	ISWG-STCW 1/2/25
185	Sections A-III/1, A-III/2 and A-III/3	<p>In cases where training and assessment in types of propulsion machinery/steam boilers is not required a limitation should be noted on the certificate.</p> <p>However, section A-I/2 on "Certificates and endorsements" does not include specific provisions to ensure that those limitations identified in sections A-III/1, A-III/2 and A-III/3 are inserted in the certificates and endorsements when required.</p>	ISWG-STCW 1/2/11
186	Section A-III/1, paragraph 10 (near-coastal voyages)	<p>Under this section, the certificate is limited to main propulsion machinery of less than 3,000 kW while the limitation is not specified in section A-III/2, paragraph 8.</p>	ISWG-STCW 1/2/37 Deletion of the limitation of 3,000 kW
187	Section B-III/1	<p>The provisions of section A-III/1, paragraph 2.1 requires onboard training that takes into account the guidance given in section B-III/1.</p> <p>However, the guidance referred to has not been provided in section B-III/1.</p>	ISWG-STCW 1/2/4 It is proposed that guidance related to the onboard training be included in sections B-III/1 of the STCW Code

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
188	Section A-III/1	<p>The provisions of section A-III/1, paragraph 2.1 requires onboard training that takes into account the guidance given in section B-III/1. Paragraph 2.1 requires the approved programme of onboard training ..... that takes into account the guidance given in section B-III/1.</p> <p>However, the guidance given in section B-III/1 concerning on board training is limited to recommend that the "onboard training should be adequately documented in a training record book by qualified assessors", which is already required, and not recommended, in paragraphs 2.2 and 2.3 of section A-III/1.</p>	ISWG-STCW 1/2/11
189	Section A-III/1	<p>The provisions in paragraph 7 provide for a limited certificate for service in ships in which steam boilers do not form part of their machinery.</p> <p>However, section A-I/2 on "Certificates and endorsements" does not include specific provisions to ensure that such limitation identified in section A-III/1 is inserted in certificates and endorsements when required. Like previous</p>	ISWG-STCW 1/2/11
190	Section A-III/1	<p>There is an inconsistency between paragraph 3 that that requires "ability" to undertake, at the operational level, the tasks, duties and responsibilities listed in column 1 of table A-III/1.</p> <p>However, the standard of competence of table A-III/1, requires the demonstration of competence, as well as with the provisions of paragraph 9 of this section, of regulation III/1 and of section A-I/6, which provide for the achievement of the standard of competence concerned.</p>	ISWG-STCW 1/2/11
191	Section A-III/1	<p>When referring to the KUPs listed in column 2 of the relevant tables of competence of the STCW Code, the text in section A-III/1, paragraph 5, refers to "the level of knowledge of the material listed in column 2 of table ...", while the texts in sections AIV/2, paragraph 4.2, A-VI/2, paragraphs 4.2, and 10.2 and A VI/6, paragraph 8.2 refer to "the material set out in column 2 of table ..."</p>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
192	Section B-III/1	Provision is very limited. Additional, more detailed guidance may be appropriate. (Similar to the format of section B-II/1) like previous	ISWG-STCW 1/2/16

**Regulation III/2**  
**Section A-III/2**  
**Section B-III/2**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
<b>Simulation and Seagoing Service</b>			
193	Regulation III/2	<p>There is an inconsistency between paragraph 2.1, which requires seagoing service to be performed as "officer in charge of an engineering watch", and paragraph 2.1.1, which requires seagoing service as "qualified engineer officer".</p>	ISWG-STCW 1/2/4
194	Regulation III/2	<p>The wording "as qualified engineer officer" in regulation III/2, paragraph 2.1.1 is inconsistent with the text in the previous paragraph 2.1, which requires candidates to have approved seagoing service in the capacity of an "officer in charge of an engineering watch on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more".</p> <p>In addition, it is redundant with the definition of the "engineer officer" given in regulation I/1, paragraph 1.7.</p> <p>Moreover, the text is not consistent with the existing text in paragraph 2.1.2.</p>	ISWG-STCW 1/2/11
195	Regulation III/2, paragraph 2.1	<p>The sea service requirement is not clear.</p> <p>"meet the requirements for certification as an officer in charge of an engineering watch on seagoing ships powered by main propulsion machinery of 750 kW propulsion power or more and have approved seagoing service in that capacity"</p>	<p>ISWG-STCW 1/2/44</p> <p>Propose to modify with the addition of "hold the certificate of competency" in order to provide clarity within the existing text:</p> <p>"meet the requirements for certification as an officer in charge of an engineering watch on seagoing ships powered by main propulsion machinery of 750 kW propulsion power or more, hold the certificate of competency, and have approved seagoing service in that capacity".</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
196	Regulation III/2, paragraph 2.1.2	<p>The seagoing service requirement is inconsistent with regulation III/3, paragraph 2.1.1.2.</p> <p>Should the seagoing service be served as a qualified second engineer or in the position of second engineer?</p>	<p>ISWG-STCW 1/2/44</p> <p>Propose to provide clarity with the existing text to eliminate confusion around requirement</p>
<b>Competence and KUPs</b>			
197	Table A-III/2	<p>Review requirements for:</p> <ul style="list-style-type: none"> <li>- Steam Turbine</li> <li>- Operation and management of marine diesel engines, marine gas turbines, marine boilers, marine gas turbines, heat transmission, mechanics, and hydromechanics.</li> <li>- International conventions and agreements that are not directly related to ship operations.</li> <li>- The term "engineering publication" is too broad and should be modified to "use the operation, maintenance, and repair manual" specific to ship operation.</li> </ul> <p>Compare requirements in table A-III/2 for:</p> <ul style="list-style-type: none"> <li>- Fire Prevention</li> <li>- Life-Saving</li> <li>- Medical Aid</li> </ul>	ISWG-STCW 1/2/30
198	Table A-III/2	<p>After a blackout, necessary action and restoration of power to MSB either by manual or automatic needs to be added in competence.</p> <p>Words "Software version" in column 2 to be rephrased as: "Blackout, power management systems, awareness of power management systems, droop"</p>	ISWG-STCW 1/2/37
199	Sections A-III/2 A-III/3	<p>Paragraph 5 states that "Training and experience to achieve ..... and the guidance given in part B of this Code"</p> <p>However, there is no guidance in part B.</p>	<p>ISWG-STCW 1/2/37</p> <p>Addition in part B / deletion of the reference</p>
200	Table A-III/2	Revise table to ensure they cover current and emerging seagoing technologies, practical problem-solving techniques, and best practices.	ISWG-STCW 1/2/46

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
201	Section A-III/2, paragraph 4	<p>Refer to "the level of knowledge of the subjects listed in column 2 of table ...".</p> <p>Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something</p>	ISWG-STCW 1/2/11
202	Table A-III/2, column 2:  Table A-III/2, column 3	<p>Existing requirements do not take into consideration the advancement in technology.</p> <p>Methods of demonstrating competence do not take into account approved education and training and other modern means for demonstrating competence.</p>	<p>ISWG-STCW 1/2/44</p> <p>Propose to revise the knowledge, understanding and proficiency to address advances in technology.</p> <p>Propose to update the language to enable the methods of demonstrating competence to take into account approved education and training and other modern means for demonstrating competence.</p>
203	Section B-III/2	No provisions currently exist for CE/2E 3000 kw or more.	ISWG-STCW 1/2/16  Evaluate the need for and develop guidance as appropriate.

**Regulation III/3**  
**Section A-III/3**  
**Section B-III/3**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
204	Regulation III/3	<p>Paragraph 2.1.2 The wording "while qualified to serve as ..."</p> <p>Clarify what "while qualified" means and what is the difference between meeting the requirements for certification and being qualified for certification.</p>	ISWG-STCW 1/2/11
205	Regulation III/3	<p>Paragraph 2.1.2 does not specify the capacity/rank at which the required seagoing service should be performed for certification as chief engineer officer</p> <p>Currently a candidate could fulfil the seagoing service requirement for certification as chief engineer officer certificate by accumulating 24 months of seagoing service as assistance engineer officer.</p>	ISWG-STCW 1/2/4
206	Regulation III/3, paragraph 2.1.2	There is inconsistency between regulation III/2, paragraph 2.1.2 and regulation III/3, paragraph 2.1.2 regarding the seagoing service to be served as a qualified engineer or in the position of second engineer.	ISWG-STCW 1/2/44 Modify the existing language in order to provide clarity around requirement
207	Regulation III/3	Paragraph 2.1, which refers to an "officer in charge of an engineering watch" does not include the expression "on a seagoing ship powered by main propulsion machinery of 750 kW propulsion power or more" immediately after, as it is stated in paragraph 2.1 of regulation III/2.	ISWG-STCW 1/2/11
208	Section B-III/3	No provisions currently exist.	ISWG-STCW 1/2/16 Evaluate the need for and develop guidance as appropriate.
209	Regulations III/2 and III/3	Revise to cover seagoing ships powered by main propulsion machinery of higher kW propulsion power.	ISWG-STCW 1/2/46

**Regulation III/4**  
**Section A-III/4**  
**Section B-III/4**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
210	Regulation III/4	<p>Paragraph 1 requires "every rating forming part of an engineering watch" to "be duly certificated".</p> <p>Article II(d) defines the term "certificated" as "properly holding a certificate".</p> <p>However, the above provisions do not specify the type of certificate the seafarers concerned should hold and they do not refer to the definition of "certificate of proficiency" given in regulation I/1, paragraph 1.31.</p> <p>In addition, the associated sections of the STCW Code do not specify the certificate these seafarers should hold and do not include any reference that would clarify the type of certificate that should be issued.</p>	ISWG-STCW 1/2/11
211	Regulation III/4, paragraph 2.2.2.1	Propose to modify the following text to include the addition of "and is documented in an approved training record book" in order to identify a means of assessing the requirement.	ISWG-STCW 1/2/44
212	Regulation III/4, paragraph 2.2.2	<p>Inconsistency with the term used for training in regulation III/4 paragraph 2.2.2.2 and section A-III/4, paragraph 3.</p> <p>"Special training, either pre-sea or on board ship, including an approved period of seagoing service which shall not be less than 2 months; and".</p> <p>Section A-III/4, paragraph 3: "The reference to practical test in evaluating the competence specified in column 3 may include approved shore-based training in which the students undergo practical testing".</p>	<p>ISWG-STCW 1/2/44</p> <p>Propose to modify the language so that one term with regard to specialized training is used consistently throughout the paragraph identified.</p>
213	Tables A-III/4  Table A-III/5 and A-III/7	<p>Personnel do not have specific competency requirement in relation to contributing to berthing, anchoring and other mooring operations as A-II/5: ratings as able seafarer deck have.</p> <p>However, it is very common practice for these personnel to assist during mooring</p>	ISWG-STCW 1/2/19

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		operations. Shipping companies address this by providing onboard familiarization, however, this is inconsistent across the industry and is a common deficiency reported by PSC. Like previous	
214	Section B-III/4	The reference in the title of this section to "an engineering watch in a manned engine-room or designated to perform duties in a periodically unmanned engine-room" is redundant since both activities are equivalent in terms of competence.	ISWG-STCW 1/2/11

**Regulation III/5**  
**Section A-III/5**  
**Section B-III/5**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
215	Table A-III/5	<p>Add a KUP for "Basic understanding of electronic control system on equipment, like main engine, auxiliary engine, purifiers".</p> <p>Under Competence Contribute to the monitoring and controlling of an engine-room watch.</p>	ISWG-STCW 1/2/36
216	Regulation III/5, paragraph 2.3	<p>Lack of clarity regarding the seagoing service and difficulty in assessing on board training and experience.</p>	<p>ISWG-STCW 1/2/44</p> <p>Propose to provide clarity to the existing language so that a means of how training should be documented (i.e. approved training record book) is identified.</p>
217	Regulation III/5, paragraph 2.3	<p>The requirement to have seagoing service while qualified for RFPEW is unnecessarily burdensome to seafarers with prior engine-room watchkeeping experience seeking ASE certification. Like previous</p>	<p>ISWG-STCW 1/2/16</p> <p>Develop provisions to allow seafarers to meet the "seagoing service requirements" if they have served in a relevant capacity in the engine department.</p>
218	Regulation III/5, paragraph 3	The 1 January 2012 date has passed.	ISWG-STCW 1/2/16
219	Regulations II/5.3	These regulations contain transitional provisions that have expired.	ISWG-STCW 1/2/25
220	Regulation III/5	<p>Paragraph 1 requires "every able seafarer engine" to "be duly certificated".</p> <p>Article II(d) defines the term "certificated" as "properly holding a certificate".</p> <p>However, the above provisions do not specify the type of certificate the seafarers concerned should hold and they do not refer to the definition of "certificate of proficiency" given in regulation I/1, paragraph 1.31.</p>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		In addition, the associated sections of the STCW Code do not specify the certificate these seafarers should hold and do not include any reference that would clarify the type of certificate that should be issued. Like previous	
221	Regulation III/5	<p>Paragraph 2.3 The wording "while qualified to serve as ..."</p> <p>Clarify what "while qualified" means and what is the difference between meeting the requirements for certification and being qualified for certification.</p>	ISWG-STCW 1/2/11
222	Table A-III/5 Column 3	Methods of demonstrating competence do not identify approved education and training and other modern means for demonstrating competence.	<p>ISWG-STCW 1/2/44</p> <p>Propose to update the language to enable the methods of demonstrating competence to identify approved education and training and other modern means for demonstrating competence.</p>
223	Section B-III/5	Provision is very limited. Additional, more detailed guidance may be appropriate.	<p>ISWG-STCW 1/2/16</p> <p>Evaluate the need for and develop guidance as appropriate.</p>

**Regulation III/6**  
**Section A-III/6**  
**Section B-III/6**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
224	Regulation III/6	The lack of career progression for electro-technical officers (ETOs), by creating a senior electro-technical officers certification to address ETOs and enhance leadership and operational efficiency on board modern ships and within the electro-technical department.	HTW 11/6/19
225	Regulation III/6, paragraph 2.2	The word "completed" is redundant.  In addition, the term "approved" associated to the "workshop skills training" is not stated as it is for the "seagoing service". Like previous	ISWG-STCW 1/2/11
226	Regulation III/6, paragraph 2.2 Section A-III/6	The language is inconsistent with the language used to describe the training record book requirements in other places throughout the Convention and Code.	ISWG-STCW 1/2/16
227	Regulation III/6, paragraph 3	The 1 January 2021 date has passed.	ISWG-STCW 1/2/16
228	Regulations III/6.3	These regulations contain transitional provisions that have expired.	ISWG-STCW 1/2/25
229	Regulation III/6, paragraph 2.2	Seagoing service requirement is not clear.  What is the purpose of the option regarding the extended seagoing service articulated in regulations III/6 paragraph 2.2 since under paragraph 2.3, the candidate must still "have completed approved education and training and meet the standard of competence specified in section A-III/6 of the STCW Code". Like previous	ISWG-STCW 1/2/44  Propose to modify the existing language to provide clarity with regard to the existing requirements.
230	Regulation III/6, paragraph 2.4	The purpose of paragraph 2.4 in regulation III/6 is unclear since these requirements are stated in table A-III/6 under the function 3, controlling the operation of the ship and care of persons on board at the operation level. Like previous	ISWG-STCW 1/2/44  Propose to provide clarity with regard to the purpose of the paragraph or remove the paragraph all together to reduce duplication.

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
231	Section A-III/6 Section B-III/6	<p>There is inconsistency with the scope of application of onboard training between paragraph 2.2 of regulation III/6 and paragraph 2 of section A-III/1.</p> <p>Paragraph 2.2 of regulation III/6 mandates only those candidates who choose to follow the shorter route (12 months) to follow an approved onboard training programme whereas section A-III/6, paragraph 2 are applicable to every candidate.</p> <p>Additionally, sections B-II/1 and B-V/1 of the STCW Code provide guidance regarding the onboard training, whereas section B-III/6 lacks such guidance.</p>	<p>ISWG-STCW 1/2/4</p> <p>It is proposed that guidance related to the onboard training be included in section B-III/6 of the STCW Code</p>
232	Section A-III/6	<p>Paragraph 5 indicates that "every candidate for certification shall be required to provide evidence of having achieved the required standard of competence tabulated in columns 3 and 4 of table A-III/6".</p> <p>However, those columns only provide the methods for demonstrating competence and the criteria for evaluating competence.</p>	<p>ISWG-STCW 1/2/11</p> <p>Similar provisions in sections A-III/1, A-III/2 and A-III/3 state that "every candidate for certification shall be required to provide evidence of having achieved the required standard of competence in accordance with the methods for demonstrating competence and the criteria for evaluating competence tabulated in columns 3 and 4 of table A-III/1, or A-III/2, or A-III/3", as appropriate.</p>
233	Table A-III/6, III/1, III/2, III/3	Add training on AI, 3D printing, and IoT within the competences.	ISWG-STCW 1/2/19
234	Table A-III/6 Column 3	Methods of demonstrating competence do not include approved education and training to be used as a method of demonstrating competence. Like previous	<p>ISWG-STCW 1/2/44</p> <p>Propose to amend the existing language to incorporate approved education and training as a means of demonstrating competence.</p>

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
235	Table A-III/6	Revise to cover current and emerging technologies, their use on seagoing ships and associated Human Element considerations. Like previous	ISWG-STCW 1/2/46
236	Section B-III/6	Provision is very limited. Additional, more detailed guidance may be appropriate. Like previous	ISWG-STCW 1/2/16  Evaluate the need for and develop guidance as appropriate.

**Regulation III/7**  
**Section A-III/7**  
**Section B-III/7**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
237	Regulations III/7.3.5	These regulations contain transitional provisions that have expired.	ISWG-STCW 1/2/25
238	Regulation III/7, paragraph 2.2	Difficulty in assessing onboard training and experience.	ISWG-STCW 1/2/44 Propose to provide clarity to the existing language so that a means of how training should be documented (i.e. approved training record book) is identified.
239	Regulation III/7, Paragraphs 2.2.2.1, 2.2.2.2 and 2.2.2.3	Existing language regarding required seagoing service is inconsistent and not in line with the training, experience or qualifications identified in the standard of competence specified in section A-III/7 of the STCW Code.	ISWG-STCW 1/2/44 Propose to amend the existing language in order to harmonize various requirements.
240	Regulation III/7, paragraph 3	The 1 January 2012 date has passed.	
241	Regulation III/7, section A-III/7	Paragraph 1 requires "every electrotechnical rating" to "be duly certificated". Article II(d) defines the term "certificated" as "properly holding a certificate". However, the above provisions do not specify the type of certificate the seafarers concerned should hold and they do not refer to the definition of "certificate of proficiency" given in regulation I/1, paragraph 1.31. In addition, the associated sections of the STCW Code do not specify the certificate these seafarers should hold and do not include any reference that would clarify the type of certificate that should be issued.	ISWG-STCW 1/2/11
242	Table A-III/7, column 3	Methods of demonstrating competence do not identify approved education and training and other modern means for demonstrating competence.	ISWG-STCW 1/2/44 Propose to update the language to enable the methods of demonstrating competence to identify approved education and training.



## APPENDIX 5

### Chapter IV

#### Regulation IV/1

##### Section A-IV/1

##### Section B-IV/1

#### Regulation IV/2

##### Section A-IV/2

##### Section B-IV/2

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
243	Chapter IV	Revision and development of new competences is needed to address advances in technology, modern terminology, taxonomy, and lessons learned. (e.g. prevalence of new satellite-based communications, etc.)	ISWG-STCW 1/2/16 Revise existing competences and develop new competences to address advances in technology, modern terminology and taxonomy, and lessons learned.
244	Section B-IV/1	Guidance may need to be updated based on potential changes to section A-IV/2.	ISWG-STCW 1/2/16
245	Section A-IV/2	Clarity regarding Radio Regulations is needed. (Note: The term appears 43 times throughout the Convention and Code but is only identified as the International Telecommunication Convention in paragraph 2 of section B-IV/2.)	ISWG-STCW 1/2/16 Clarify that the Radio Regulations refers to the International Telecommunication Convention in the definitions of radio operator and radio duties (regulation I/1, paragraphs 1.11 and 1.16).
246	Table A-IV/2, paragraph 3	Refers to "the level of knowledge of the subjects listed in column 2 of table ...". Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something like previous	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
247	Table A-IV/2	The required method for demonstrating competence need to be reviewed with consideration to the use of alternative forms of training (i.e digital or cloud based)	ISWG-STCW 1/2/26
248	Table A-IV/2	<p>Amendment to SOLAS chapter IV (January 2024.) In the said amendment, portable radio life-saving equipment has been taken out from SOLAS chapter III and added to SOLAS chapter IV.</p> <p>Amend Column 1 to add: "Transmit and receive information using GMDSS subsystems and equipment including portable radio lifesaving equipment (EPIRB-AIS, AIS-SART, portable VHF radio and Aeronautical VHF radio) and reserve source batteries and fulfilling the functional requirements of GMDSS".</p> <p>Include competency related to battery management, covering maintenance, monitoring, safe disposal, and replacement procedures.</p>	ISWG-STCW 1/2/38
249	Table A-IV/2	<p>Column 3 (Methods for demonstrating competence)</p> <p>It is necessary to review whether there is a need to add training equipment that utilizes digitalization and emerging technologies.</p> <p>such as Immersive Reality Technology (IRT)<sup>1</sup> as Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR)<sup>2</sup>, and Metaverse</p>	ISWG-STCW 1/2/30
250	B-IV/2	<p>Amendment to training related to the General Operator's Certificate:</p> <p>Additional topics suggested in paragraph 32 to include:</p> <ul style="list-style-type: none"> <li>- Emergency position-indicating radio beacons (EPIRB-AIS)</li> <li>- Search and rescue transmitter capable of operating on AIS frequencies (AIS-SART)</li> <li>- Search and rescue transponder capable of operating on X-band Radar frequencies (Radar SART)</li> </ul>	ISWG-STCW 1/2/38

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<ul style="list-style-type: none"> <li>- Aeronautical VHF for on-scene radio communications for SAR</li> <li>- Maritime Safety Information (MSI) and power supply systems and its uses</li> </ul> <p>Additional topics suggested in paragraph 35.4 to include:</p> <ul style="list-style-type: none"> <li>- 4.5 for use of NAVTEX receiver and EGC receiver.</li> <li>- 4.6 for use of AIS-SART, Radar SART, EPIRB-AIS and Aeronautical VHF radio.</li> <li>- 4.7 for operation, maintenance and replacement of reserve source batteries and its charging arrangement.</li> </ul>	
251	B-IV/2	<p>Amendment to training related to the Restricted Operator's Certificate:</p> <p>Additional topics suggested in paragraph 40 to include:</p> <ul style="list-style-type: none"> <li>- Emergency position-indicating radio beacons (EPIRB-AIS)</li> <li>- Search and rescue transmitter capable of operating on AIS frequencies (AIS-SART)</li> <li>- Search and rescue transponder capable of operating on X-band Radar frequencies (Radar SART)</li> <li>- Aeronautical VHF for on-scene radio communications for SAR</li> <li>- Maritime Safety Information (MSI) and power supply systems and its uses</li> </ul> <p>Additional topics suggested in paragraph 43.3 to include:</p> <ul style="list-style-type: none"> <li>- 3.5 for use of AIS-SART, Radar SART, EPIRB-AIS and Aeronautical VHF radio.</li> <li>- 3.6 for operation, maintenance and replacement of reserve source batteries and its charging arrangement".</li> </ul>	ISWG-STCW 1/2/38

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		Simulation of Emergency Communication Scenarios: Incorporate simulated emergency communication exercises into practical training.	
252	B-IV/2	<p>Amendment to training related to the First Class Radioelectronic Certificate:</p> <p>Additional topics suggested in paragraph 6 to include:</p> <ul style="list-style-type: none"> <li>- Emergency position-indicating radio beacons (EPIRB-AIS)</li> <li>- Search and rescue transmitter capable of operating on AIS frequencies (AIS-SART)</li> <li>- Search and rescue transponder capable of operating on X-band Radar frequencies (Radar SART)</li> <li>- Aeronautical VHF for on-scene radio communications for SAR</li> <li>- Maritime Safety Information (MSI) and power supply systems and its uses</li> </ul> <p>Additional topics suggested in paragraph 13.4 to include:</p> <ul style="list-style-type: none"> <li>- 4.5 for use of NAVTEX receiver and EGC receiver.</li> <li>- 4.6 for use of AIS-SART, Radar SART, EPIRB-AIS and Aeronautical VHF radio.</li> <li>- 4.7 for operation, maintenance and replacement of reserve source batteries and its charging arrangement</li> </ul> <p>Introducing modern considerations such as cybersecurity and troubleshooting of advanced communication systems</p>	ISWG-STCW 1/2/38
253	B-IV/2	<p>Amendment to training related to the Second Class Radioelectronic Certificate:</p> <p>Additional topics suggested in theory clause-20:</p> <ul style="list-style-type: none"> <li>- Search and rescue transmitter capable of operating on AIS frequencies (AIS-SART)</li> <li>- Search and rescue transponder capable of operating on X-band</li> </ul>	ISWG-STCW 1/2/38

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		<p>Radar frequencies (Radar SART)</p> <ul style="list-style-type: none"> <li>- Maritime Safety Information (MSI) and power supply systems and its uses</li> </ul> <p>Additional topics suggested in practical clause-27.4 to include:</p> <ul style="list-style-type: none"> <li>- 4.5 for use of NAVTEX receiver and EGC receiver.</li> <li>- 4.6 for use of AIS-SART, Radar SART, EPIRB-AIS and Aeronautical VHF radio.</li> <li>- 4.7 for operation, maintenance and replacement of reserve source batteries and its charging arrangement</li> </ul> <p>Add simulated emergency response scenarios + Hands on training involving all types of / latest GMDSS equipment.</p> <p>Add cybersecurity training for GMDSS</p>	
254	Section B-IV/2	<p>1. In the documentation system related to GMDSS, it is more accurate to use term "recognized satellite system";</p> <p>2. Resolution MSC.514(105), replaces A.814(19) with effect from 1 January 2024. Paragraphs 26.9, 34.9 and 42.7 of section B-IV/2 refer to footnote documents that expired on 1 January 2024.</p>	<p>ISWG-STCW 1/2/25</p> <p>1. Replace the phrase "satellite system" as used in paragraphs 4, 18 and 32 of section B-IV/2 with "recognized satellite system";</p> <p>2. Revise the footnote cited in paragraphs 26.9, 34.9 and 42.7.</p>

## APPENDIX 6

### Chapter V

#### Regulation V/1-1

##### Section A-V/1-1

###### Table V/1-1-1

###### Table V/1-1-2

###### Table V/1-1-3

#### Regulation V/1-2

##### Section A-V/1-2

###### Table V/1-2-1

###### Table V/1-2-2

#### Section B-V/1

##### Section B-V/1-1

##### Section B-V/1-2

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
255	Regulations V/1-1 - V/4  Sections A-V/1-1 - A-V/4	There is no option to use approved simulator training as an alternative to meeting a portion of seagoing service requirements.	ISWG-STCW 1/2/16  Develop provisions for approved simulator training to be an alternative to a portion of seagoing service requirements.  Amend appropriate sections in part A to establish a maximum amount of approved simulator training that can be used as an alternative to seagoing service.
256	Tables A-V/1-1-1 - A-V/4-2	Revision and development of new competences is needed to address advances in technology, modern terminology, taxonomy, and lessons learned. (e.g. tanker cargo operations)	ISWG-STCW 1/2/16  Revise existing and develop new competences to address advances in technology, modern terminology and taxonomy, and lessons learned.
257	Regulations V/1-1 and V/1-2	The language in paragraphs 4.2.2 and 6.2.2 (regulation V/1-1) and 4.2.2 (regulation V/1-2) is inconsistent with the language used to describe the training	ISWG-STCW 1/2/16  Revise the language to consistently

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		record book requirements in other places throughout the Convention and Code.	describe the training record book requirements throughout to read: "documented in an approved training record book or similar document" to eliminate inconsistencies and to ensure administrations have flexibility, including the use of electronic documentation.
258	Regulation V/1-1, paragraph 2.1	<p>Clarify Seagoing service requirement.</p> <p>What is the purpose of the option articulated in regulations V/1-1, paragraph 2.1 since the standard of competence cannot be met with only in service experience identified.</p>	<p>ISWG-STCW 1/2/44</p> <p>Propose to amend existing language to provide clarity for the requirements identified.</p>
259	Regulation V/1-1, paragraphs 3 and 5 Regulation V/1-2, paragraph 3	The phrase "any person with immediate responsibility" is ambiguous. Section B-V/1 provides guidance on the term, however, is open to different interpretations.	ISWG-STCW 1/2/19 Clarify the meaning
260	Regulation V/1-1, section B-V/1	The phrase the phrase "any person with immediate responsibility" is explained in section B-V/1. However, this definition can still lead to different interpretations.	ISWG-STCW 1/2/25
261	Regulation V/1-1	Clarify what "while qualified" means and what is the difference between meeting the requirements for certification and being qualified for certification.	ISWG-STCW 1/2/11
262	Table A-V/1-1-3	Amendments to the criteria for evaluating competence in table A-V/1-1-3 that would enhance the effectiveness of the competence and promote operational efficiency and safety onboard chemical tankers.	ISWG-STCW 1/2/17
263	Regulation V/1-1, paragraphs 4.2.1 and paragraph 4.2.2	<p>The seagoing service requirement including loads/discharges is an obstacle to seafarers.</p> <p>Options other than the minimum "three months of approved seagoing service on tankers" or "one month of onboard training</p>	ISWG-STCW 1/2/30

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		on tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations during that time" need to be considered to increase flexibility in mobility of seafarers across different ship types, for an example, tanker simulator training	
264	Regulation V/1-1	<p>Paragraphs. 2.1, 4.2.1 and 6.2.1 – Evaluate the implications of tankers being constructed as combination carriers (oil/chemical) and the resultant training requirements.</p> <p>Paragraphs 4.1 and 6.1 – A candidate for a certificate in advanced training on oil OR chemical tanker should meet the requirements for certification in basic training for oil OR chemical tankers, as appropriate.</p> <p>Paragraphs 4.2, 6.2– the phrase "while qualified for certification in basic training"; is ambiguous and open to interpretation.</p>	ISWG-STCW 1/2/19
265	Table V/1-1-1 Table V/1-1-2 Table V/1-1-3	The required method for demonstrating competence needs to be reviewed to determine whether there is a need to add training equipment that utilizes digitalization and emerging technologies such as: Immersive Reality Technology (IRT) <sup>1</sup> as Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR) <sup>2</sup> , and Metaverse.	ISWG-STCW 1/2/30
266	Table V/1-1-1 Table V/1-1-2 Table V/1-1-3	The required method for demonstrating competence needs to be reviewed with consideration to the use of alternative forms of training (i.e. digital or cloud-based)	ISWG-STCW 1/2/26
267	Section B-V/1	<p>The numbering of this section may be confusing as there is no section A-V/1.</p> <p>Paragraph 9, includes terms referring the "appropriate certificate, issued or endorsed or validated" is not aligned with the terms used in the annex to the Convention and in part A of the Code.</p>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		Paragraph 2.6 of section B-VI/1 does not include text relevant to fire-fighting involving water-reactive materials.	
268	Regulation V/1-2, paragraph 2.1	Clarify Seagoing service requirement.  What is the purpose of the option articulated in regulations V/1-2, paragraph 2.1 since the standard of competence cannot be met with only in service experience. Like previous	ISWG-STCW 1/2/44  Propose to amend existing language to provide clarity for the requirements identified.
269	Regulation V/1-2, paragraph 3	The phrase "any person with immediate responsibility" is ambiguous. Section B-V/1 provides guidance on the term, however, is open to different interpretations.	ISWG-STCW 1/2/19  Clarify the meaning
270	Regulation V/1-1, section B-V/1	The phrase the phrase "any person with immediate responsibility" is explained in section B-V/1. However, this definition can still lead to different interpretations.	ISWG-STCW 1/2/25
271	Table A-V/1-2-1	Amendments to the KUPs that would enhance the effectiveness of the KUPs and promote operational efficiency and safety on board the gas tankers.	ISWG-STCW 1/2/2
272	Regulation V/3	Paragraphs 4.2 – Examine the impact of the limited number of such ships on training requirements, especially as new fuels are incorporated under the IGF Code or other relevant instrument, this requirement is open to differing interpretations.  Paragraph 4.2 – the phrase "while qualified for certification in basic training"; is ambiguous and open to interpretation.	ISWG-STCW 1/2/19
273	Regulation V/1-2	The seagoing service requirement including loads/discharges is an obstacle to seafarers.  Options other than the minimum "three months of approved seagoing service on liquefied gas tankers" or "one month of onboard training on liquefied gas tankers, in a supernumerary capacity, which includes at least three loading and three unloading operations during that time" need to be considered to increase flexibility in mobility of seafarers across different ship types, for an example, tanker simulator training	ISWG-STCW 1/2/30
274	Table A-V/1-2-1	The required method for demonstrating competence needs to be reviewed to determine whether there is a need to add	ISWG-STCW 1/2/30

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
	Table A-V/1-2-2	training equipment that utilizes digitalization and emerging technologies such as: Immersive Reality Technology (IRT) <sup>1</sup> as Augmented Reality (AR), Virtual Reality (VR), Mixed Reality (MR) <sup>2</sup> , and Metaverse.	
275	Regulation V/1-1, Sections A-V/1-1, Tables A-V/1-1-1 and A-V/1-1-2, Section B-V/1	Training and qualification requirements for crude oil wash are not only based on the STCW Convention, but also on the Assembly resolution, originally adopted in 1979. It should be reviewed to what extent the resolution is still relevant and instruct the other IMO bodies accordingly. This is in line with the agreed principle that the Convention and Code remain the sole IMO instruments addressing standards for training and certification of seafarers. Additionally, it could be beneficial to combine all crude oil wash related training and qualification requirements into the STCW Convention and Code. That would address inconsistencies, duplications and different interpretations and also decrease the administrative burden.	HTW 11/6/1

**Regulation V/2**

**Section A-V/2**

**Table V/2-1**

**Table V/2-3**

**Section B-V/2**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
276	Regulation V/2 Section A-V/2	Add a new competence for effective use of the information provided by the onboard computers on passenger ships or shore-based support as well as cooperation and decision-making after a flooding casualty.	ISWG-STCW 1/2/10
277	Sections A-II/1, A-II/2, A-III/1 and A-III/3, or A-VI/3	Add requirements on the ability of seafarers on ro-ro passenger ships to cope with fires caused by new energy vehicles.	ISWG-STCW 1/2/25

**Regulation V/3**

**Section A-V/3**

**Table V/3-1**

**Table V/3-3**

**Section B-V/3**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
278	Regulation V/3.8	It is proposed that the necessity of obtaining the basic IGF CoP prior to attending advanced IGF training be reviewed to check	ISWG-STCW 1/2/26
279	Regulation V/3	<p>The seagoing service requirement including bunker operations is an obstacle to seafarers.</p> <p>For ships subject to IGF Code options other than the minimum "at least one month of approved seagoing service, including three bunkering operations on ships subject to IGF Code", "two of the three bunkering operations may be replaced by approved simulator training on bunkering operations" need to be considered to increase flexibility in mobility of seafarers across different ship types, for an example, tanker simulator training</p>	ISWG-STCW 1/2/30
280	Regulation V/3, paragraph 5	Requires candidates for certification in basic training for service on ships subject to the IGF Code to complete "basic training in accordance with provisions of section A-V/3, paragraph 1 of the STCW Code" but it does not require them to meet the standard of competence specified therein.	ISWG-STCW 1/2/11
281	Regulation V/3.8.2	It is proposed that alternative measures, including simulator but not limited to, in lieu of the "one month of approved seagoing service" requirement for obtaining the IGF advanced CoP be considered.	ISWG-STCW 1/2/26
282	Regulation V/3, paragraph 8.2	The seagoing service requirement does not provide flexibility for the use of onboard training in a supernumerary capacity.	<p>ISWG-STCW 1/2/16</p> <p>Amend the provision to allow seafarers to meet the seagoing service requirement of this section through onboard training in a supernumerary capacity. (e.g. similar to the provisions for</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
			tankers in paragraph 4.2.2 of regulations V/1-1 and V/1-2) Evaluate the appropriateness of including guidance in section B-V/3 to allow for alternative methods for meeting the requirements of regulation V/3.
283	Regulation V/3, paragraph 8	Does not require candidates for certification in advance training for service on ships subject to the IGF Code to meet requirements for certification in basic training for service on ships subject to the IGF Code.	ISWG-STCW 1/2/11
284	Regulation V/3, paragraph 8	<p>Provide an allowance for seagoing service to be fulfilled through approved simulator training on bunkering operations.</p> <p>With an option of having completed bunkering operations simulation, which includes road tanker to ship, bunker ship/barge to ship, port terminal to ship, and bunkering station mimic training in an approved training on bunkering operations, using simulator, immersive technology, and bunkering operation replica, as part of the training in regulation V/3, paragraph 8.1.</p>	ISWG-STCW 1/2/24
285	Regulation V/3, paragraph 8	Revision of paragraph 8 or addition of a new paragraph to provide more flexibility in order to allow substitution by simulator training for bunkering operations on board and seagoing service experience.	ISWG-STCW 1/2/43 Annex 3
286	Regulation V/3, paragraph 8.2	Revise to allow the seafarer to demonstrate an equivalent level of competency using other acceptable experience to an Administration for the issue of an advance certificate of proficiency for service on ships subject to the IGF Code.	ISWG-STCW 1/2/46
287	Regulation V/3, paragraph 8.2	The combined sea-time and operational requirement specified is difficult to achieve due to the scarcity of such specialized ships and is exasperated by the number of seafarers working on dual-fuel enabled ships that necessitate compliance with certification.	ISWG-STCW 1/2/19

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
288	Regulation V/3, paragraph 12	<p>Reword as follows:</p> <p>"Undertake appropriate refresher training or be required to provide evidence of having achieved the required standards of competence within the previous five years, in accordance with section A-I/11, paragraph 3a".</p>	<p>ISWG-STCW 1/2/39</p> <p>Proposed text for section A-I/11, paragraph 3a of the STCW Code: "Continued professional competence for ships operating with fuels listed under the IGF Code requirements as required under regulation I/11, paragraph 3a shall be established by: .1 approved seagoing service, performing duties appropriate to the IGF certificate or endorsement held, for a period of at least one month in total, during the preceding five years; or .2 successfully completing an approved relevant training course or courses"</p>
289	Regulation V/3, paragraph 12	The provision of "at intervals not exceeding five years" may be difficult to comply with it in the event of an inevitable situation such as a pandemic or exceptional circumstances	ISWG-STCW 1/2/30
290	Regulation V/3, paragraph 12	Inconsistency identified in the requirement to undertake appropriate refresher training or be required to provide evidence of having achieved the required standard of competence at intervals not exceeding five years.	<p>ISWG-STCW 1/2/44</p> <p>Amend Since the required standard of competence was met when the seafarer obtained the certificate of competency under paragraph 4 or under paragraph 6, propose to amend the language so that it can consider, at intervals not exceeding five years, that continued</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
			<p>professional competence be established by approved seagoing service.</p> <p>Additionally, regulation I/11, paragraph 1 should be amended to allow the introduction of a new provision similar to regulation I/11, paragraph 3 for masters, officers and rating and other personnel serving on board ships subject to the IGF Code.</p>
291	Section A-V/3	<p>The headings "basic training for ships subject to the IGF Code" and "advanced training for ships subject to the IGF Code" are not consistent with the text in paragraphs 1 and 2 since that text establishes the standard of competence, which comprises both training and assessment of competence.</p> <p>Paragraphs 1.1.1 and 2.1.1 provide that every candidate for a certificate in basic training or advanced training, as appropriate, shall have successfully completed the approved basic or advanced training required by regulation V/3, "in accordance with their capacity, duties and responsibilities as set out in table" A-V/3-1 or A-V/3-2, as appropriate.</p> <p>However, those tables do not specify any capacity, duties, or responsibilities.</p>	ISWG-STCW 1/2/11

**Regulation V/4**

**Section A-V/4**

**Table V/4-1**

**Table V/4-2**

**Section B-V/4**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
292	Regulation V/4 Section A-V/4	<p>Revise section A-V/4 to include minimum competences for all seafarers serving on board ships in polar waters.</p> <p>Introduce polar-specific familiarization for all other seafarers on board.</p> <p>Require A-V/4-1 Basic Training for all seafarers that have designated safety or pollution-prevention duties in the operation of the ship according to section A-VI/1 of the STCW Code, not only the master and deck officers.</p>	ISWG-STCW 1/2/45
293	Regulation V/4	<p>Requires candidate for advanced certification for ships operating in polar waters to have relevant approved seagoing service at the management level or while performing watchkeeping duties at the operational level "within polar waters or other equivalent approved seagoing service" and to complete relevant approved advanced training.</p> <p>However, it does not require candidates to complete the above requirements while qualified for certification in basic training for ships operating in polar waters</p>	ISWG-STCW 1/2/11
294	Regulation V/4, paragraph 2	<p>Existing language require training when in table A-V/4-1, Column 3: Methods of Demonstrating Competence indicates that all requirements could be achieved by one or more of the items listed in the table. As it is currently identified, one could argue that training would not be required and only in service experience could be accepted.</p>	<p>ISWG-STCW 1/2/44</p> <p>Clarity Requirement: Propose to amend existing language to provide clarity for the requirements identified.</p>
295	Regulations V/4.6 and V/4.7	These regulations contain transitional provisions that have expired.	ISWG-STCW 1/2/25
296	Regulation V/4, paragraph 6 paragraph 7	Propose to remove paragraphs 6 and 7 of regulation V/4 as the transition period ended 1 July 2020.	ISWG-STCW 1/2/44

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
297	Regulation V/4, paragraph 6 paragraph 7	The 1 July 2020 date has passed.	ISWG-STCW 1/2/16 Remove expired provisions.
298	Section B-V/4 (formerly B-V/g)	Section title does not align with mandatory provisions in section A. The mandatory provisions apply to masters and deck officers while the guidance applies to masters and officers (including engineer officers).	ISWG-STCW 1/2/16

**Section B-V/a**

**Section B-V/b**

**Section B-V/c**

**Section B-V/d**

**Section B-V/e**

**Section B-V/f**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
299	Section B-V/a	The guidance in paragraphs 1, 2 and 3 address areas for experience and familiarization of prospective masters and chief mates. This is more appropriately addressed under section B-I/14 Responsibilities of Companies. Note: The guidance in paragraph 2 should also be considered generally applicable to all officers with responsibility for navigational safety.	ISWG-STCW 1/2/16 Consider moving the guidance in paragraphs 1, 2 and 3 to section B-I/14. Consider refocusing these paragraphs on "ships of special design or with unusual manoeuvring characteristics," as the thresholds for "large ships" and "considerable deadweight or length" are subjective.
300	Section B-V/b Section B-V/c Section B-V/d Section B-V/e Section	There are no correlating mandatory provisions.	ISWG-STCW 1/2/16 Determine if mandatory provisions are necessary. Ensure guidance is aligned with the requirements of other

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
	B-V/f		IMO and relevant instruments. Incorporate specific references to all relevant instruments within the text of each provision to facilitate clarity and ease of use. (e.g. MODU Code, OSV Code, IMCA M117, etc.)

### New Sections Proposed in Regulation V

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
301		Special training requirements for persons working on dynamic positioning vessels.	ISWG-STCW 1/2/39
302		As Dynamic Positioning technology becomes more prevalent on conventional ships, exploring the potential for the STCW Convention to address training comprehensively for seafarers utilizing such technologies could be beneficial. Development of requirements on such ships to be placed within chapter V of the Convention, the associated competences and KUPs related to Dynamic Positioning to be placed within parts A and B of chapter V of the STCW Code.	ISWG-STCW 1/2/19
303		Paragraph 4 of section B-V/a (dynamically supported and high-speed craft) may be more appropriate for inclusion as its own section. (e.g. similarly to that of MOU and OSV)	ISWG-STCW 1/2/16  Develop a new, lettered guidance section for dynamically supported and high-speed craft. (Similar to the format of sections B-V/d and B-V/f.)

## APPENDIX 7

### Chapter VI

#### Regulation VI/1

#### Section A-VI/1

#### Table A-VI/1-1

#### Table A-VI/1-2

#### Table A-VI/1-3

#### Table A-VI/1-4

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
304	Chapter VI	STCW Code chapter VI requires under the various sections that seafarers be required to provide evidence of having achieved the required standard of competence to undertake the tasks, duties and responsibilities listed in the relevant columns of the tables every five years and to provide evidence of having maintained the required standard of competence.	ISWG-STCW 1/2/11  If a CoP for chapter VI training does not have an expiry date, it should be clarified what is meant by "every five years".  For example, if a training course is undertaken three years after the issue of the first CoP is this evidence valid to update the CoP for a further five years from the five-year anniversary date.
305	Regulation VI/1, paragraph 2	Revise to ensure clarity. (e.g. referring to generic certificates)	ISWG-STCW 1/2/16  Clarify that language regarding training "not included in the qualification for the certificate to be issued" refers to a Certificate of Competence in regulation VI/1.
306	Regulation VI/1 Regulation VI/3 Regulation VI/4	Inconsistent use of terminology: "a course in ... training", "the course in ... training" or "a course of training in ...".  Although regulations require candidates to meet the standards of competence specified in the Code, in addition to	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
	Regulation VI/6	<p>completing the relevant training, the text in regulations VI/1, paragraph 2, VI/3 paragraph 2, VI/4 paragraph 3, and VI/6 paragraphs 2 and 5 requires issuing a certificate of proficiency "indicating that the holder has attended a course ...", which is inconsistent.</p> <p>Stating in a certificate of proficiency that the holder has attended a course does not ensure that the holder also demonstrated his/her competence, because a simple attendance to a course does not involve any assessment or evaluation.</p>	
307	Regulation VI/1	Regulation VI/1 does not include a provision that the seafarer shall attend an approved training course while regulations VI/3, VI/4, VI/5 and VI/6 include a different wording.	HTW 11/6/1
308	Sections A-VI/1 - A-VI/6	Revision and development of new competences is needed to address advances in technology, modern terminology, taxonomy, and lessons learned. (e.g. advances in fire science, cybersecurity, enclosed lifeboats, etc.)	ISWG-STCW 1/2/16
309	Section A-VI/1	<p>Paragraph 1 The text refers to "familiarization training in personal survival techniques".</p> <p>However, the items listed immediately below also refer to "the use of portable fire extinguishers", "action upon a medical emergency" and "close and open the fire, weathertight and watertight doors", which go beyond the scope of the personal survival techniques.</p> <p>Regulation I/14, paragraph 1.5, the "familiarization training" is ship specific and is completed on board. Therefore, it is difficult to assume that all such training will be approved by the Administration.</p> <p>Moreover, as long as such "familiarization training" could be replaced by "sufficient information or instruction", which, according to paragraph 1 of this section, is not required to be approved, it is doubtful that the shipowners will apply for approval of such training.</p>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
310	Section A-VI/1, paragraph 3	<p>In light of practical operations and developments in emerging technologies, it is recommended to review the onboard training and qualification subjects as evidence of maintaining standards of competency.</p> <p>Add subjects that can be completed through onboard training under current conditions, such as "don and use the immersion suit".</p>	ISWG-STCW 1/2/25
311	Table A-VI/1-1 (PST)	Training in Free fall lifeboat and davit launched liferaft may be included in column 2.	ISWG-STCW 1/2/40
312	Section A-VI/1, paragraph 3	The requirement of "shall be required, every five years", may make it difficult to comply with it in the event of an inevitable situation such as a pandemic or exceptional circumstances.	ISWG-STCW 1/2/30
313	Sections A-VI/1.3, A-VI/1.4, A-VI/2.5, A-VI/2.6, A-VI/2.11, A-VI/3.5 and A-VI/3.6	Sections A-VI/1.4, A-VI/2.6 and A-VI/3.6 include the following text "Parties may accept onboard training and experience for maintaining the required standard of competence ...". However, this lacks clarity and instead it should be better to replace defined areas of approved refresher courses. Instead, it should be better to define standards for refresher courses including new developments. Sections A-VI/1.3, A-VI/2.5, A-VI/2.11 and A-VI/3.5 of the STCW Code provide that seafarers should every five years provide evidence of having maintained the required standards of competence. The refresher courses should also be approved by the Administration to ensure consistency and quality, as well as to continuously ensure new technologies and amendments are adequately addressed by training providers.	HTW 11/6/1
314	Table A-VI/1-3	The minimum standard of competence in elementary first aid in table A-VI/1-3 does not include rescue knowledge of personnel in enclosed spaces.	ISWG-STCW 1/2/25
315	Section B-VI/1	Fire fighting and prevention guidance needs to be updated to reflect advances in fire science and modern terminology. (i.e. use of fire tetrahedron, dangers of exposure to fire fighting chemicals, etc.)	ISWG-STCW 1/2/16 Revise fire fighting and prevention parts of section B-VI/1 to address modern

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
			terminology, advances in fire science and training.
316	A-V/1-1-1 A-V/1-1-2	The competence to "apply occupational health and safety precautions & measures" and associated KUPs should be added to table A-VI/1-2 (fire prevention and fire fighting)	ISWG-STCW 1/2/10

**Regulation VI/2**  
**Section A-VI/2**  
**Table A-VI/2-1**  
**Table A-VI/2-2**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
317	Regulation VI/2, paragraph 1 paragraph 2	<p>Specifies the requirements to be complied with by "every candidate for a certificate of proficiency in survival craft and rescue boats other than fast rescue boats" and for "every candidate for a certificate of proficiency in fast rescue boats", respectively.</p> <p>However, those candidates are not specified as they are in other regulations, for example, in regulation VI/3 for "seafarers designated to control fire-fighting operations [...]" or in regulation VI/4, paragraphs 1 and 2 for "seafarers designated to provide medical first aid [...]" or for "seafarers designated to take charge of medical care [...]", respectively.</p> <p>Moreover, the provisions of regulations II/1 paragraph 2.6, II/3 paragraphs 4.5 and 6.4, III/1 paragraph 2.5 and III/6 paragraph 2.4 require the candidates concerned to meet the standard of competence specified in section A-VI/2 paragraphs 1 to 4, in survival craft and rescue boats other than fast rescue boats. However, the provisions of regulation VI/2, paragraph 1 are not consistent with the above provisions, since regulation VI/2, paragraph 1 requires candidates not only to meet the standard of competence specified in section A-VI/2, paragraphs 1 to 4, but also to have approved seagoing service or/and attend an approved training course.</p>	ISWG-STCW 1/2/11
318	Section A-VI/2, paragraph 2 paragraph 8	<p>Refer to "the level of knowledge of the subjects listed in column 2 of table ...". Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something.</p>	ISWG-STCW 1/2/11
319	Section A-VI/2	<p>The heading of this section "mandatory minimum requirements for the issue of certificates of proficiency certification in</p>	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		survival craft, rescue boats and fast rescue boats" is not consistent with the requirements provided below since these are requirements for certification of having met the competences concerned and not for merely issuing the relevant certificate supported.	
320	Section A-VI/2, paragraphs 5 and 11	The requirement of "shall be required, every five years", may make it difficult to comply with it in the event of an inevitable situation or exceptional circumstances such as a pandemic.	ISWG-STCW 1/2/30
321	Table A-VI/2-1	Chapters III and IV of SOLAS have been revised to include devices such as AIS EPIRB and AIS SART and may be incorporated the KUPs for the competence "Use locating devices, including communication and signalling apparatus and pyrotechnics". support	ISWG-STCW 1/2/40

**Regulation VI/3**  
**Section A-VI/3**  
**Table A-VI/3**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
322	Regulation VI/3, paragraph 2	Revise to ensure clarity. (i.e. referring to generic certificates)	ISWG-STCW 1/2/16  Clarify that language regarding training "not included in the qualification for the certificate to be issued" refers to a Certificate of Competence
323	Section A-VI/3	There is no competence related to fire-fighting involving water-reactive materials.	ISWG-STCW 1/2/11
324	Section A-VI/3, paragraph 2	Refers to "the level of knowledge of the subjects listed in column 2 of table ...".  Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something.	ISWG-STCW 1/2/11
325	Table A-VI/3	Add KUP for the competence "Control fire-fighting operations aboard ships" after "Fire fighting involving dangerous goods", it may be added "Electric vehicles with lithium-ion batteries and batteries with similar risks".	ISWG-STCW 1/2/40

**Regulation VI/4**  
**Section A-VI/4**  
**Table A-VI/4-1**  
**Table A-VI/4-2**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
326	Regulation VI/4	<p>It has been observed that there is no direct reference to Medical Care competencies for Masters and Officers under chapter II, leading to inconsistencies in the application of Medical Care training.</p> <p>Additionally, the KUPs associated with Medical Care may require a review to ensure they reflect current practices and needs onboard.</p>	ISWG-STCW 1/2/19
327	Regulation VI/4, paragraph 1 paragraph 2	<p>No requirement for seafarers designated to provide medical first aid or medical care on board ship to complete approved training, but only to demonstrate meeting the relevant standard of competence.</p> <p>This is not consistent with paragraph 3 of regulation VI/4, which refers to "training in medical first aid or medical care".</p> <p>There is also an inconsistency in the methods of demonstration competence listed in column 3 of tables A-VI/4-1 and A-VI/4-2, which refer to "practical instruction".</p>	ISWG-STCW 1/2/11
328	Regulation VI/4, paragraph 3	Revise to ensure clarity. (i.e. referring to generic certificates)	ISWG-STCW 1/2/16  Clarify that language regarding training "not included in the qualification for the certificate to be issued" refers to a Certificate of Competence
329	Regulation VI/4	Inconsistency with the MLC (Guideline B4.1.1 – Provision of Medical Care), which recommends that "that seafarers responsible for medical care should undergo, at approximately five year intervals, refresher courses to enable them to maintain and increase their knowledge and skills and to keep up-to-date with new developments".	ISWG-STCW 1/2/11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
330	Section A-VI/4 Section B-VI/4 Table A-VI/4-2	It is not consistent with the requirements of paragraph 3 of guideline B4.1 in the MLC 2006 Convention: "Persons referred to in paragraph 1 of this Guideline and such other seafarers as may be required by the competent authority should undergo, at approximately five year intervals, refresher courses to enable them to maintain and increase their knowledge and skills and to keep up-to-date with new developments".	ISWG-STCW 1/2/25
331	Section A-VI/4, Paragraph 2 paragraph 5	Refer to "the level of knowledge of the subjects listed in column 2 of table ...". Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something	ISWG-STCW 1/2/11
332	Section B-VI/4	Addition of footnote referencing alternative medical guides used by Administrations, some of which address topical issues.	ISWG-STCW 1/2/19
333	Section B-VI/4	There is no provision for guidance on update or refresher training for seafarers qualified in accordance with regulation VI/4.1 (medical first aid). It is therefore relevant to address whether the Code should provide for guidance on update or refresher training for seafarers qualified in accordance with section A-VI/4, paragraphs 1 to 3. This should include consideration of regulation I/11 in promoting the formulation of a structure of refresher and updating courses for which medical first aid should be included at an appropriate level. It should also consider the guidance noted in model course 1.14. and a review of the model course to take into account advances in methodology for training delivery and in medical standards. Medical treatment, use of medical equipment and best medical practice is subject to change due to ongoing advances in medical science for the benefit of all. Update training should be provided to those seafarers or persons who are required to be qualified in accordance with STCW regulation VI/4, and designated to apply immediate first aid in the event of an accident or illness on board.	HTW 11/6/1

**Regulation VI/5**  
**Section A-VI/5**  
**Table A-VI/5**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
334	Regulation VI/5	<p>The heading of this regulation refers to "mandatory minimum requirements for the issue of certificates of proficiency for ship security officers". However, only paragraph 2 includes the requirements for the issue of the corresponding certificate of proficiency while the requirements for certification as a ship security officer are established in paragraph 1.</p>	ISWG-STCW 1/2/11
335	Section A-VI/5	<p>The heading of this section "mandatory minimum requirements for the issue of certificates of proficiency certification for ship security officers" is not consistent with the requirements provided below since these are requirements for certification of having met the competences concerned and not for merely issuing the relevant certificate.</p> <p>Paragraph 2 refers to "the level of knowledge of the subjects listed in column 2 of table ...". Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something</p>	ISWG-STCW 1/2/11
336	Section A-VI/5	<p>Due to the nature of geo-political relations and tensions as well as sophistication of methods and security breach causing devices, there might be a need to review the KUPs so that they are not only aligned with the ISPS Code but also deemed to be appropriate for current and possibly future times.</p>	ISWG-STCW 1/2/19

**Regulation VI/6**  
**Section A-VI/6**  
**Table A-VI/6-1**  
**Table A-VI/6-2**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
337	Regulation VI/6	<p>Training leading to certification consists of three levels of training: security awareness training, training for seafarers with designated security duties and training for ship security officers, with the training for ship security officer being the highest level.</p> <p>The requirements were drafted so that the higher levels of training would include the competencies of the lower levels of training.</p> <p>Although the familiarization training or instruction in regulation VI/6, paragraph 1 addresses all seafarers, the obligation to be trained in security awareness should address only those seafarers who are not qualified as ship security officer or as a seafarer with designated security duties.</p> <p>Because the training requirements in section A-VI/5 for ship security officer do not include any reference to the standards of competence in tables A-VI/6-1 (security awareness) and A-VI/6-2 (security designated duties), and the training requirements in section A-VI/6, paragraphs 6 to 8 for seafarers with designated security duties do not contain any reference to the standards of competence in table A-VI/6-1 (security awareness), it is recommended not to use wording such as "where training in [...] is not included in the qualification for the certificate to be issued" in provisions where the referred training is not specifically included in any other qualification under the Convention.</p>	ISWG-STCW 1/2/11
338	Regulation VI/6, paragraph 2 paragraph 5	Revise to ensure clarity. (i.e. referring to generic certificates)	<p>ISWG-STCW 1/2/16</p> <p>Clarify that language regarding training "not included in the qualification for the</p>

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
			certificate to be issued" refers to a Certificate of Competence
339	Section A-VI/6	The existing provision in paragraph 4 referring to ship security awareness training is applicable to "seafarers without designated security duties". Although holders of certificates of proficiency as "ship security officer" or "seafarer with designated security duties" can be considered qualified in security awareness, they might not be assigned to any security designated duties on board a specific ship or during a specific voyage. However, the existing text of paragraph 4 makes the security awareness training mandatory for seafarers already qualified as "ship security officers" or as "seafarers with designated security duties".	ISWG-STCW 1/2/11
340	Section A-VI/6, paragraph 4.2.2 paragraph 7	Refer to "the level of knowledge of the subjects listed in column 2 of table ...". Nevertheless, the items listed in column 2 of the tables refer not only to knowledge but also to understanding and proficiency, many of them referring to abilities to do something	ISWG-STCW 1/2/11
341	Section A-VI/6-1 Section A-VI/6-2	Due to the nature of geo-political relations and tensions as well as sophistication of methods and security breach causing devices, there might be a need to review the KUPs so that they are not only aligned with the ISPS Code but also deemed to be appropriate for current and possibly future times.	ISWG-STCW 1/2/19
342	Section A-VI/6, paragraph 5 paragraph 9	Propose to remove transitional provisions that ended 1 January 2014.	ISWG-STCW 1/2/44
343	Section A-VI/6, paragraph 5 paragraph 9	The 1 January 2014 date has passed.	ISWG-STCW 1/2/16

## APPENDIX 8

### Chapter VII

#### Regulation VII/1 Section A-VII/1

#### Regulation VII/2 Section A-VII/2

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
344	Regulation VII/1 Section A-VII/1  Regulation VII/2 Section A-VII/2	Ensure that the crew on board is upskilled and that a more holistic view on the operation of a modern ship is facilitated allowing more flexibility for everybody's gain	ISWG-STCW 1/2/10
345	Regulation VII/1 Section A-VII/1  Regulation VII/2 Section A-VII/2	Chapter VII does not cover electro-technical officers and ratings in sections A-III/6 and A-III/7, nor does it provide reasons or supplementary provisions. The possibility of additional combinations of alternative certificates should be considered.	ISWG-STCW 1/2/25
346	Regulation VII/1 Section A-VII/1  Regulation VII/2 Section A-VII/2	Including a specialized certificate for small vessels such as commercial yachts, and the corresponding competencies and the minimum knowledge, understanding and proficiency (KUP) required for the certification	ISWG-STCW 1/2/10
347	Section A-VII/2, paragraph 1.2	The language is inconsistent with the language used to describe the training record book requirements in other places throughout the Convention and Code.	ISWG-STCW 1/2/16

**Regulation VII/1**  
**Section A-VII/1**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
348	Regulation VII/1	The text in paragraph 1 of regulation VII/1 refers to chapters II and III. However, the text in sub-paragraph 1.1 and in regulation VII/2, paragraph 1, refer to section A-IV/2 and chapter IV as well.	ISWG-STCW 1/2/11
349	Section A-VII/1	<p>Every candidate for certification at the operational level under the provisions of chapter VII of the annex to the Convention shall be required to complete relevant education and training and meet the standard of competence for all the functions prescribed in either table A-II/1 or table A-III/1.</p> <p>Functions specified in table A-II/1 or A-III/1 respectively may be added provided the candidate completes, as appropriate, additional relevant education and training and meets the standards of competence prescribed in those tables for the functions concerned.</p> <p>Table A-II/1 or A-III/1 specified for second time may be deleted.</p>	ISWG-STCW 1/2/41
350	Regulations VII/1, VII/2 and VII/3 Sections A-VII/1 and A-VII/2 Sections B-VII/1, B-VII/2 and B-VII/3	<p>Review the suitability of non-maritime graduates to enter the maritime workforce and enhancing the possibilities for alternative certification.</p> <p>The requirements of the maritime industry for certain shipboard positions can be partly met by graduates of non-maritime establishments and persons from shore-based industries. To attract and retain such persons, instead of maritime administrations granting exemptions under various STCW regulations, consideration should be given to whether and how the guidelines established under STCW could provide a more specific framework for assessing their training needs commensurate with the role on board.</p>	HTW 11/6/26

**Regulation VII/2**  
**Section A-VII/2**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
351	Section A-VII/2	<p>The text in section A-VII/2, paragraph 2.2 does not include reference to table A-II/2 next to the reference to A-II/1.</p> <p>In addition, a candidate for qualification as person having "command or the responsibility for the mechanical propulsion of the ship" may perform the seagoing service not only at operational level but also at management level as "person other than having command or responsibility for the mechanical propulsion of the ship".</p> <p>Therefore, the duties performed during the seagoing service should relate to functions set out in the tables of competence at operational and management level for both deck and engine departments.</p> <p>Furthermore, reference to the requirements of regulation VII/1, paragraph 1.3 is not included in the existing text in regulation A-VII/2, paragraph 2, to keep consistency.</p>	ISWG-STCW 1/2/11
352		<p>Paragraph 2 currently appears to be leading to interpretation issues and may be further clarified.</p> <p>Consider inclusion of table(s)/flow chart(s) in part B to the Code.</p> <p>Provision of flexibility in acquisitions/ additions of functions may be considered under chapter VII.</p>	ISWG-STCW 1/2/41

## APPENDIX 9

### Chapter VIII

#### Regulation VIII/1 Section A-VIII/1

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
353	Regulation VIII/1 Section A-VIII/1.10	Refers to drug and alcohol abuse. Section A-VIII/1, paragraph 10 refers to standard for preventing alcohol abuse only. However, there is no minimum standard for drug abuse or definition of what constitutes drug abuse.	ISWG-STCW 1/2/10
354	Regulation VIII/1 Section A-VIII/1	The provisions of resting hours are duplicated in the MLC, 2006 and there is a different ratification status of the MLC, 2006 and the STCW Convention.	ISWG-STCW 1/2/10
355	Regulation VIII/1 Section A-VIII/1	Include means of establishing the Blood Alcohol Content (BAC) and ensure it is aligned/clarified with the MLC, 2006 and ISM Code.	ISWG-STCW 1/2/10
356	Section A-VIII/1, paragraph 2 paragraph 3	Align the wording of the section A-VIII/1, paragraphs 2 and 3 with the text of MLC Standard A.2.3.5 (Rest Periods).	ISWG-STCW 1/2/27 Annex 2
357	Section A-VIII/1	Section A -VIII/1 – Recommendations in respect of fatigue in part B, in particular for the vessels on short voyages, may be included in part A.	ISWG/STCW 1/2/42

#### Regulation VIII/2 Section A-VIII/2

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
358	Regulation VIII/2 Section A-VIII/1 B-VIII/2.	The terms "stand by" or "on call" in regulation VIII/2, sections A-VIII/1 and B-VIII/2 are subject to different interpretations, and there is no quantified standard for the interruption to normal rest time or for adequate compensative rest in the case of standby.	ISWG-STCW 1/2/25
359	Regulation VIII/2 Sections A-VIII/2 and B-VIII/2	The current provisions are rather detailed and prescriptive in nature and may not offer sufficient room for innovations with regard to shipboard technologies and operations (such as automation).	HTW 11/6/26
360	Regulation VIII/2	Noting the outcome of analysis of six consolidated audit summary reports	MSC 109/22, paragraph 15.11

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		(CASRs), regulation VIII/2 should be reviewed to ensure those provisions remain appropriate and effective.	
361	Section A-VIII/2	In 2023, IMO issued the Interim guidelines on safe operation of onshore power supply (OPS) service in port for ships engaged on international voyages (MSC.1/Circ.1675). With the increasing use of OPS, it is suggested to add precautions for the use of OPS in part 5, section AVIII/2, such as: when using OPS, ships should pay attention to the fixation of shore power cables, especially when the tide changes or at berths with large tide ranges, and measures should be taken to ensure that the OPS is in normal working condition.	ISWG-STCW 1/2/25
362	Section A-VIII/2 Section B-VIII/2	Revision and development of new competences is needed to address advances in technology, modern terminology, taxonomy, and lessons learned (e.g. modern navigational tools, weather routeing, integrated systems, etc.).	ISWG/STCW 1/2/16 Revise and update these sections to align with other instruments and guidelines, and to address advances in technology, modern terminology, taxonomy and lessons learned.
363	Section A-VIII/2.5 and 2.6 (part 2)	Ensure that different types of ECDIS are taken into consideration.	ISWG-STCW 1/2/10
364	Section A-VIII/2.8.5	Watchkeeping personnel shall also understand the limitations of the equipment. It applies to current and possible new technology.	ISWG-STCW 1/2/10 Revise the provision to include familiarization of the limitations of current or future equipment
365	Section A-VIII/2, part 4-1	Include a definition of look-out, helmsperson and small ships, taking into account the technological development and the Principles of minimum safe manning (resolution A.1047(27)).	ISWG-STCW 1/2/10
366	Section A-VIII/2, part 4-1	Under the subtitle of "Look-out" there are four paragraphs (paragraphs 14 through 17) and 19 sub-paragraphs that specify the purpose, personnel, duty arrangements and factors to be	ISWG-STCW 1/2/25

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		considered for maintaining a proper look-out. As an integral and indispensable part of a proper look-out, look-out information processing, though invisible and intangible, is equally important. Incidents have shown that seafarers' flawed look-out information processing skills is a weak link in the safety chain for ensuring maritime safety. However, the above-mentioned paragraphs of the Convention contain only general requirements for look-out information collecting and processing, without specific standards and guidance for seafarers.	
367	Section A-VIII/2	<p>1. The lack of requirements for ship security in part 4 of section A-VIII/2 "Principles applying to watchkeeping generally" is not consistent with paragraph 2.5 under regulation VIII/2.</p> <p>2. In paragraph 34 of part 4-1 under section A-VIII/2, "Principles to be observed in keeping a navigational watch", there is an ambiguity in the understanding of error determination for standard compass, which easily leads to inconsistency in practice; in paragraph 51 "If the master considers it necessary, a continuous navigational watch shall be maintained at anchor." the meaning of the word "necessary" is unclear.</p>	<p>ISWG-STCW 1/2/25</p> <p>1. Add a new paragraph on ship security after paragraph 12 of part 4, section A-VIII/2</p> <p>2. Revise or add an exemption to the frequency of compass determination</p> <p>3. Provide a non-exhaustive list of conditions for when "necessary" applies, such as strong wind and waves, or sea areas with a heavy traffic of ships.</p>
368	Section VIII/2, paragraphs 16 and 17	The hours of daylight vary geographically and seasonally, this should be added as an additional relevant factor.	ISWG-STCW 1/2/11
369	Section A-VIII/2, part 1, paragraphs 1 and 2	The Code, at present, stipulates only the following: 1 The officer in charge of the navigational or deck watch shall be duly qualified in accordance with the provisions of chapter II or chapter VII appropriate to the duties related to navigational or deck watch keeping. 2 The officer in charge of the engineering watch shall be duly qualified in accordance with the provisions	ISWG/STCW 1/2/42

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		of chapter III or chapter VII appropriate to the duties related to engineering watch keeping. "Chapters IV and relevant sections of chapter V" may be added after chapter VII in sub-paragraph 1 "Relevant sections of chapter V" may be added after chapter VII in sub-paragraph 2, section A-VIII/2, part 1, paragraphs 1 and 2 – Certification.	
370	Section A-VIII/2, part 2, paragraphs 3 and 4 - Voyage Planning – General requirements	The Code, at present, stipulates only the following: 3 The intended voyage shall be planned in advance, taking into consideration all pertinent information, and any course laid down shall be checked before the voyage commences. 4 The chief engineer officer shall, in consultation with the master, determine in advance the needs of the intended voyage, taking into consideration the requirements for fuel, water, lubricants, chemicals, expendable and other spare parts, tools, supplies and any other requirements. It is proposed that food supplies and medical facilities may also be added. Also, any specific protection or safety equipment, if specified in any of the other IMO instruments such as IMSBC, IBC, IGC Codes, etc., for cargo being carried on that voyage may also be included.	ISWG/STCW 1/2/42
371	Section A-VIII/2, part 2, paragraphs 5 and 6	Paragraph 5 reads as follows: "Prior to each voyage, the master of every ship shall ensure that the intended route from the port of departure to the first port of call is planned using adequate and appropriate charts and other nautical publications necessary for the intended voyage, containing accurate, complete and up-to-date information regarding those navigational limitations and hazards which are of a permanent or predictable nature and which are relevant to the safe navigation of the ship" (a) Paragraph 5 may be amended to read .....from 'berth in departure port' to 'berth in the first port of call'..... Also to include environmental and weather considerations. (b) Paragraph 5 may also be amended to include 'ENCs' Paragraph 6 reads as follows: When the route planning is	ISWG/STCW 1/2/42

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		verified, taking into consideration all pertinent information, the planned route shall be clearly displayed on appropriate charts and shall be continuously available to the officer in charge of the watch, who shall verify each course to be followed prior to using it during the voyage (b) Paragraph 6 may also be amended to include "ENCs"	
372	Sections A-VIII/2.22.5 .2 and 34.2 (part 4-1)	Refer only to gyro- and magnetic compasses.  Include more types of compasses.	ISWG-STCW 1/2/10
373	Section A-VIII/2.34	"the standard compass error is determined at least once a watch" while in 34.3 "the automatic pilot is tested manually at least once a watch". This might be an unnecessary requirement when length of watch varies e.g. from 30 minutes to 12 hours.	ISWG-STCW 1/2/10  Ensure that the provisions take into consideration and are compatible with different lengths of watch
374	Section A-VIII/2.36	Section A-VIII/2.36 (part 4-1) could highlight other devices that could be beneficial, apart from the echo-sounder, or to remove all-together this mention.	ISWG-STCW 1/2/10  Include more devices or delete any reference to echo-devices
375	Section A-VIII/2, part 3, paragraph 8.9 - Watchkeeping Principles in General	Paragraph 8.6 reads as follows: "Watches shall be carried out based on the following bridge and engine-room resource management principles: .6 watchkeeping personnel shall understand information and how to respond to information from each station/installation/equipment"; It is proposed To add at the end in the line – "and be aware of the limitations of such station/installation/equipment, including the fact that such station/installation/equipment may be prone to cyber attack"	ISWG/STCW 1/2/42
376	Section A-VIII/2, part 4-1, paragraph 16	Section A -VIII/2, part 4-1, paragraph 16 stipulates the conditions for sole look out. It is stated that "The officer in charge of the navigational watch may be the sole look-out in daylight provided that, on each such occasion:...." It may be considered to include functional BNWAS also as one of the conditions	ISWG/STCW 1/2/42

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
377	Section A-VIII/2, part 4-2, paragraph 53	<p>Section A -VIII/2, part 4-2, paragraph 53 stipulates "The officer in charge of the engineering watch is the chief engineer officer's representative and is primarily responsible, at all times, for the safe and efficient operation and upkeep of machinery affecting the safety of the ship and is responsible for the inspection, operation and testing, as required, of all machinery and equipment under the responsibility of the engineering watch." It is proposed that the text may be replaced by the following: The officer in charge of the engineering watch is the chief engineer officer's representative and is responsible at all times for the safe and efficient operation of all machinery, under the responsibility of the engineering watch and specifically of machinery affecting the safety of the ship. The logic behind the proposal is that an engineer, in particular a junior engineer may only work on the machinery that is assigned to him/her and does not, suo moto, starts maintenance on machinery that may be beyond his/ her capacity/ brief.</p>	ISWG/STCW 1/2/42
378	Section A-VIII/2, part 4-2, paragraph 58.4	<p>Section A-VIII/2, part 4-2, paragraph 58.4 stipulates "Prior to taking over the engineering watch, relieving officers shall satisfy themselves regarding at least the following. .4 the condition and level of fuel in the reserve tanks, settling tank, day tank and other fuel storage facilities;" It is proposed to add "ME Lub Oil Sump"</p>	ISWG/STCW 1/2/42
379	Section B-VIII/2, parts 2, 3 and 4	<p>There are no provisions covering ECDIS in part B of the STCW Code. ECDIS differs significantly from paper charts when it comes to planning and executing a voyage.</p>	ISWG-STCW 1/2/10
380	Section B-VIII/2, part 4.3 (radio watch)	<p>Update the provisions on GMDSS taking into consideration CP, ITU Radio Regulations</p>	ISWG-STCW 1/2/10

## APPENDIX 10

### VIOLENCE AND HARASSMENT, INCLUDING SEXUAL HARASSMENT, BULLYING AND SEXUAL ASSAULT

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
381	Regulation I/14	<p>Lacks provision for the responsibility of companies to ensure a maritime workplace is safe from violence and harassment.</p> <p>Addition of companies' responsibilities under regulation I/14 to include establishing and implementing policies on zero tolerance for violence and harassment, including sexual harassment, bullying and sexual assault, protection against non-retaliation or blacklisting of victim-seafarers, and a grievance mechanism that ensures safe zones for victims, enabling them to file complaints without fear.</p>	ISWG-STCW 1/2/22
382	Regulation I/14	<p>There are no provisions to require company policies and procedures for prevention of and response to violence and harassment, including sexual harassment, bullying and sexual assault.</p>	ISWG-STCW 1/2/16
383	Section A-I/14 Section A-I/16	<p>A-I/14 "Responsibilities of companies" may include a more specific provision on the matter of violence and harassment, including sexual harassment, bullying and sexual assault.</p> <p>Section A-I/16 of the STCW Code should reflect "prevention of violence and harassment, including sexual harassment, bullying and sexual assault" in the area of "fitness for duty and watchkeeping arrangements" pending until after IMSAS-related decision has been made.</p>	ISWG-STCW 1/2/10
384	Table A-II/1, A-II/2, A-II/3, A-III/1, A-III/2, A-III/3, A-III/6	<p>There are no competence requirements for operational or Management level prevention of and response to violence and harassment, including sexual harassment, bullying and sexual assault.</p>	ISWG-STCW 1/2/16  Develop competences to address the prevention of and response to violence and harassment, including sexual harassment, bullying and sexual assault.
385	Part B, chapter II	<p>Include a nominated contact ashore, who is independent of the company providing the training at sea, with whom the</p>	ISWG-STCW 1/2/27, annex 4

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		prospective officer can make contact at any time during the normal working day of the student's Flag Administration in order to raise significant concerns regarding their onboard training, health and safety, including concerns regarding violence and harassment, including sexual harassment, bullying and sexual assault.	
386	Table A-II/2	Table A-II/2 should be revised to emphasize the understanding of Human Element and how to lead for safety, compliance with SASH requirements, psychological safety, and the factors that enhance and impact seafarers' well-being and mental health.	ISWG-STCW 1/2/46
387	Tables A-II/1, A-II/2, A-III/1, A-III/2 and A-III/6	The role of management, particularly in preventing and addressing incidents of harassment and bullying, is critical and goes beyond the scope of basic safety training. Therefore, there is a clear need for an additional, specialized training programme to address these gaps.	ISWG-STCW 1/2/30
388	Chapters II and III	Ensuring that the provisions include training to prevent violence and harassment, including sexual harassment, bullying and sexual assault, in the training for any new CoC and CoP as well as for the revalidation of certificates issued under existing provisions.	ISWG-STCW 1/2/10
389	Table A-II/2 Table A-III/2	Lack of competence in maintaining occupational health protection of seafarers on board ship. Addition of competence under tables A-II/2 and A-III/2 under the function "Controlling the operation of the ship and care for persons onboard at the management level" to include maintaining occupational health protection of seafarers onboard ship.	ISWG-STCW 1/2/22
390	Tables A-II/1, A-II/2, A-II/3, A-II/4, A-II/5, A-III/1, A-III/2, AIII/3, A-III/4, A-III/5, A-III/6 and	Consideration could be given to incorporating awareness and prevention training for violence and harassment within chapters II and III i.e. in particular, the function "Controlling the operation of the ship and care for persons on board at the operational/management level" for seafarers achieving or revalidating their Certificate of Competency. For all seafarers (chapters 2 and 3).	ISWG-STCW 1/2/19

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
391	A-III/7 Section A-VI/1, paragraph 3	There is currently no requirements for all seafarers to maintain the standard of competence for contributing to the prevention of and response to violence and harassment, including sexual harassment, bullying and sexual assault in table A-VI/1-4 every five years.	ISWG-STCW 1/2/16 Revise section A-VI/1 to include a requirement to maintain the standard of competence, every 5 years, in table A-VI/1-4 for prevention of and response to violence and harassment, including sexual harassment, bullying and sexual assault.
392	Tables A-VI/4-1 and A-VI/4-2	There are no competence requirements for response to violence and harassment, including sexual harassment, bullying and sexual assault, mental health, or women's health emergencies.	ISWG-STCW 1/2/16 Develop competences in tables A-VI/4-1 and A-VI/4-2 to address response to violence and harassment, including sexual harassment, bullying and sexual assault, mental health, and women's health emergencies.

## APPENDIX 11

### MENTAL HEALTH, PSYCHOLOGICAL SAFETY AND GENDER AND CULTURAL DIVERSITY

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
393	Regulation I/5	Lacks provision for the responsibility of each Party in promoting a psychologically safe maritime work environment. Addition of a provision under regulation I/5 about the responsibilities of each Party in promoting a psychologically safe maritime work environment	ISWG-STCW 1/2/22
394	Chapters II and III, part A Table A-VI/1-4	Proposed that a new competence be added to tables A-II/1 and 2 and A-III/ 1 and 2 titled: Gender and Cultural Sensitivity	ISWG-STCW 1/2/13
395	Table A-II/2 Table A-II/3 Table A-III/2 Table A-III/3 Table A-VI/1-4 Table A-VI/1-3	At a management level, the inclusion of educational requirements to enable comprehensive mental health management of subordinate seafarers through recognition, assessment, and onboard responding and supporting techniques using leadership and managerial skills.	ISWG-STCW 1/2/30
396	Table A-VI/1-3, Table A-VI/1-4	There are no competence requirements for mental health awareness.	ISWG-STCW 1/2/16 Develop competences in tables A-VI/1-3 and A-VI/1-4 to address mental health.
397	Table A-VI/1-3 (EFA):	"Signs/symptoms arising due to mental health and emotional and psychological issues of self and fellow seafarers on board" may be added to column 2, sub-paragraph 2.	ISWG-STCW 1/2/40
398	Section A-VI/1-4	Table A-VI/1-4 Under the requirements for safety familiarization, basic training, and instruction for all seafarers, the inclusion of education requirements that equip seafarers with the skills to recognize and manage their own mental health.	ISWG-STCW 1/2/30
399	Table A-VI/1-4	Lack of mental health requirements for seafarers in the standard of competence in personal safety and social responsibilities.	ISWG-STCW 1/2/25
400	Table A-VI/1-4	In column 2, row 5 - under the competency "Contribute to effective human relationships on board ship", at the end of	ISWG-STCW 1/2/40

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
		the line "Importance of maintaining good human and working relationships aboard ship" it may be added "Due regards be given to gender and cultural diversity that may prevail on the ship".	
401	Table A-VI/1-4 (PSSR)	"Understand and take necessary actions to maintain mental health and emotional and psychological well-being" may be added as a new competency in column 1 as row 7.	ISWG-STCW 1/2/40
402	Table A-VI/1-4	"Introduction to practices, such as Yoga, to promote mental and physical health and emotional and psychological well-being" may be added as column 2, to the aforesaid proposed new competency.	ISWG-STCW 1/2/40
403	Section A-VIII/2, part 3, paragraph 8.2 and part 4-1, paragraph 17.5	<p>Paragraph 8.2 reads as follows:          "Watches shall be carried out based on the following bridge and engine-room resource management principles:          .2 any limitation in qualifications or fitness of individuals shall be taken into account when deploying watchkeeping personnel;"</p> <p>Paragraph 17.5 reads as follows: "In determining that the composition of the navigational watch is adequate ..... Following factors ..... .5 the fitness for duty of any crew members on call who are assigned as members of the watch" (a)</p> <p>Paragraph 8.2 and 17.5 may be amended to include after fitness, 'including mental health and emotional and psychological well-being' to be revisited under chapter VIII.</p>	ISWG/STCW 1/2/42
404	Section A-VIII/2, part 4-1, paragraph 17	It may be considered to add following factors to those listed in paragraph 17, i.e. the factors to be considered "In determining the composition of the navigational watch.... Following factors ..... .5 the fitness for duty of any crew members on call who are assigned as members of the watch" (a) paragraphs 8.2 and 17.5 may be amended to include after fitness, "including mental and emotional well-being".	ISWG/STCW 1/2/42

**APPENDIX 12**  
**BALLAST WATER MANAGEMENT**

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
405	Tables A-II/1, A-II/2, A-II/3, A-III/1, A-III/2, A-III/3, and A-III/6	In order to facilitate the implementation of the BWM Convention, amendments to the minimum standard of competence for officer, engineer officer, and rating in the STCW Code A are required.	ISWG-STCW 1/2/30
406	Tables A-II/1, A-II/2, A-II/3, A-III/1, A-III/2, A-III/3, and A-III/6	The standards of competence detailed in the above-mentioned tables should include new competencies and KUPs related to ballast water management as detailed in HTW 7/12 (China and ICS).	ISWG-STCW 1/2/19 HTW 7/12
407	Table A-III/1	Function: Marine engineering at the operational level Column 1 (Competence) - Operate fuel, lubrication, ballast and other pumping systems and associated control systems Column 2 (KUP) - Proposed to add after Oily-water separators (or similar equipment) requirements and operation, "Ballast water treatment systems requirement and operation" Inclusion of BWTS in KUP Column.	ISWG-STCW 1/2/37
408	Table A-II/1, A-II/2, A-II/3, A-III/1, A-III/2, A-III/3	There are no competence requirements for operational or management level compliance with the Ballast Water Management Convention and BWMS Code.	ISWG-STCW 1/2/16  Develop competences to address the implementation of the Ballast Water Management Convention.

**APPENDIX 13**  
**CYBERSECURITY**

<b>Gap Number</b>	<b>Gap areas in the Convention and Code</b>	<b>Gap description</b>	<b>Reference to documents and remarks</b>
409	Chapter II, III, IV and VI	With the development of new technologies, cybersecurity has an increasing significant impact on the safe operation of ships. The existing provisions of the STCW Convention only have partial and incomplete requirements on the knowledge and skills of computer network and cybersecurity for electro-technical officers at the operational level. Therefore, it is necessary to enhance the requirements for cybersecurity knowledge and skills for other deck officers and engineer officers.	ISWG-STCW 1/2/25
410	Chapter II, III, IV and VI	It is proposed that provisions be developed to incorporate cybersecurity training requirements for seafarers in the above sections. Reference could be drawn from resources such as the Guidelines on maritime cyber risk management (MSC-FAL.1/Circ.3/Rev.2).	ISWG-STCW 1/2/26
411	Chapter II, III, IV and VI	With the advent of advanced digital technology in newly built ships and the increasing number of IT and OT (Operational Technology) devices in their operational equipment, the incidence of cybersecurity incidents on ships is on the rise. The scale of these incidents has a significant impact on both the safety and economic aspects of maritime industry. New competence and KUPs in tables A-II/1, A-II/2, and A-II/3. New competence and KUPs in tables A-III/1, A-III/2, and A-III/6. New paragraph in section A-VI including competence and KUPs of STCW Code	ISWG-STCW 1/2/30
412	Chapter II, III, IV and VI	Cybersecurity is commonly addressed within the Safety Management System of many companies, however there is a need to specify the minimum standards of competency in this area along with the development of associated KUPs. Evaluate the most effective placement of cybersecurity training within the relevant chapters to ensure comprehensive coverage. i.e. within the tables of chapters II, III and IV and/or chapter VI.	ISWG-STCW 1/2/19

Gap Number	Gap areas in the Convention and Code	Gap description	Reference to documents and remarks
413	Chapter II, III, IV and VI	<p>Table A-II/1 should be revised to cover cybersecurity considerations, best practices and the Human Element, including Data Science skills.</p> <p>Table A-II/2 should be revised to cover cybersecurity considerations, best practices and the Human Element, including Data Science skills.</p> <p>Table A-III/2 should be revised to include cybersecurity considerations, best practices, the Human Element and Data Science skills.</p>	ISWG-STCW 1/2/46
414	Chapter II, III, IV and VI	Inclusion of awareness of cybersecurity measures may be considered in table A-VI/5 and A-VI/6 depending upon the level of competence.	ISWG-STCW 1/2/40
415	Chapter II, III, IV and VI	Ensure that the provision addresses cybersecurity awareness and consider including transitional provisions for the already certified seafarers	ISWG-STCW 1/2/10
416	Chapter II, III, IV and VI	There are no competence requirements for Maritime Cybersecurity.	ISWG-STCW 1/2/16 Develop competences in tables A-VI/5, A-VI/6-1 and A-VI/6-2 to address maritime cybersecurity.