Amendments to the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW), 1978, were developed to support the requirement for training in the International Code of Safety for Ships Using Gases or Other Low-flashpoint Fuels (IGF Code).¹

The purpose of this document is to provide information and guidance on the special training requirements for personnel on ships subject to the IGF Code. It is intended to assist shipowners and operators with preparations for compliance with the IGF Code and the associated training and certification requirements in the STCW Convention, 1978, as amended.

BACKGROUND

The IGF Code established an international standard for ships using gases or other low-flashpoint fuels² for propulsion, and entered into force on 1 January 2017. It contains mandatory provisions for the arrangement, installation, control and monitoring of machinery, equipment and systems using low-flashpoint fuels, focusing currently on LNG.

The IGF Code applies to ships using low-flashpoint fuels for which the building contract is placed on or after 1 January 2017, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2017 (in the absence of a building contract), or the delivery of which is on or after 1 January 2021.

Ships which commence a conversion on or after 1 January 2017 to use low-flashpoint fuels (or use additional or different low-flashpoint fuels other than those for which the ship was originally certified) will also be required comply with the IGF Code (see SOLAS regulation II-1/56).

A functional requirement in the IGF Code (see Part D, section 19) provides that companies shall ensure that seafarers on board ships using gases or other low-flashpoint fuels shall have completed training to attain the abilities that are appropriate to the capacity to be filled and duties and responsibilities to be taken up, taking into account the provisions given in the STCW Convention, 1978, as amended. As such, new mandatory minimum requirements in the STCW Convention and Code for the training and qualifications of relevant personnel on ships subject to the IGF Code entered into force on 1 January 2017.

¹ International Code of safety for ships using gases or other low-flashpoint fuels (IGF Code) was adopted by the Maritime Safety Committee of the IMO by resolution MSC.391(95). It is defined in SOLAS regulation II-1/2.29 and established by a new part G of SOLAS chapter II-1 (specifically SOLAS regulation II-1/56 and regulation II-1/57).
² Low-flashpoint fuel means gaseous or liquid fuel having a flashpoint lower than otherwise permitted under SOLAS regulation II-2/4.2.1.1.
FAMILIARIZATION AND TRAINING REQUIREMENTS

New mandatory minimum requirements for the familiarization and training of Masters, officers, ratings and other personnel on ships subject to the IGF Code are established by Regulation V/3 of the STCW Convention and detailed in Section A-V/3 of the STCW Code.

All personnel serving on board ships subject to the IGF Code are to receive, prior to being assigned shipboard duties, appropriate ship and equipment specific familiarization. The training and qualification requirements apply to Masters, officers, ratings and other personnel on ships subject to the IGF Code, in accordance with their capacity, duties and responsibilities on board. Only personnel on ships subject to the IGF Code are addressed by Regulations V/3.

The new requirements establish two levels of training and resulting certification:

- Certificate in Basic Training for service on ships subject to the IGF Code
- Certificate in Advanced Training for service on ships subject to the IGF Code

A Certificate of Proficiency (CoP) will be issued to persons qualified in accordance with the requirements.

Applicable personnel are required to have successfully completed the required level of training and hold the appropriate CoP prior to being assigned shipboard duties. CoPs may be issued by training providers and there is no requirement that they be issued by Administrations.

CoPs issued under Regulation V/3 are not required to be issued with endorsements attesting to the recognition of the certificate (i.e. flag State endorsement). This differs from the requirements for CoPs issued to Masters and officers in accordance with the provisions of Regulations V/1-1 and V/1-2 (special training for oil, chemical and liquefied gas tankers), which require endorsement by the flag State.

BASIC TRAINING

Seafarers responsible for designated safety duties associated with the care, use or emergency response to the fuel on board ships subject to the IGF Code are to hold the CoP in Basic Training. Every candidate for the CoP in Basic Training for service on ships subject to the IGF Code is to have completed an approved course. There are no special seagoing service or experience requirements for this level of training.

ADVANCED TRAINING

Masters, engineer officers and all personnel with immediate responsibility for the care and use of fuels and fuel systems on ships subject to the IGF Code, are to hold the CoP in Advanced Training.

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3 It should be noted that “emergency response” duties, as referenced amongst the designated duties associated with the requirement for Basic Training for service on ships subject to the IGF Code, are not included in the operations associated with the Advanced Training for service on ships subject to the IGF Code.
A person/personnel with “immediate responsibility” is defined in Section B-V/3 as “a person being in a decision-making capacity with respect to handling of fuel addressed by the IGF Code or other fuel-related operations.”

Every candidate for the CoP in Advanced Training for service on ships subject to the IGF Code, whilst holding the CoP in Basic Training for service on ships subject to the IGF Code, is to have:

- Completed an **approved advanced training course** and meet the standard of competence specified in the STCW Code; and

- Completed at least **1 month of approved seagoing service** that includes a minimum of **3 bunkering operations** on board ships subject to the IGF Code, where two of the three bunkering operations may be replaced by approved simulator training on bunkering operations.

### CONTINUED PROFESSIONAL COMPETENCE REQUIREMENTS

Personnel holding CoPs in accordance with Regulation V/3 shall, at **intervals not exceeding 5 years**, undertake appropriate refresher training or be required to provide evidence of having achieved the required standard of competence within the previous 5 years.⁴

### RECOGNITION OF QUALIFICATIONS RELATED TO LIQUEFIED GAS TANKERS

Personnel who have been qualified and certificated for service on liquefied gas tankers in accordance with **Regulation V/1-2** (Basic Training for liquefied gas tanker cargo operations and Advanced Training for liquefied gas tanker cargo operations) are to be considered as having met the requirements for service on ships subject to the IGF Code, as appropriate (see paragraphs 6 and 9 of Regulation V/3).

- Personnel holding a CoP in Basic Training for liquefied gas tanker cargo operations or a CoP in Advanced Training for liquefied gas tanker cargo operations are considered as having met the requirements for Basic Training for service on ships subject to the IGF Code.

- Personnel holding a CoP in Advanced Training for Cargo Operations on liquefied gas tankers are considered as having met the requirements for Advanced Training for service on ships subject to the IGF Code, provided specific seagoing service and experience requirements are met:
  - Completed seagoing service of 3 months in the previous 5 years on board: ships subject to the IGF Code; tankers carrying as cargo, fuels covered by the IGF Code; or ships using gases or low-flashpoint fuel as fuel.

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⁴ It should be noted that the requirements for undertake appropriate refresher training or the evidence required to demonstrate having achieved the required standard of competence within the previous 5 years will be determined by Administrations. Detailed provisions on demonstrating continued professional competence of those qualified in accordance with Regulation V/3 are not set out in the STCW Code. This contrasts with the detailed provisions on demonstrating continued professional competence for personnel on tankers as set out in paragraph 3 of Section A-I/11.
- Participated in conducting 3 cargo operations onboard a liquefied gas tanker; or completion of a minimum of 3 bunkering operations on a ship subject to the IGF Code, where two of the three bunkering operations may be replaced by approved simulator training on bunkering operations.

EXISTING QUALIFICATIONS FOR SERVICE ON GAS-FUELLED SHIPS

Administrations are to compare the standards of competence required of persons serving on gas-fuelled ships before 1 January 2017 with the standards of competence in Section A-V/3, and determine the need, if any, for requiring these personnel to update their qualifications (see paragraph 10 of Regulation V/3). As such, Administrations may recognize existing qualifications for service on gas-fuelled ships, or require that relevant personnel update their qualifications.

COMPLIANCE

With the IGF Code and the entering into force at the same time as the supporting training requirements in the STCW Convention, 1978, as amended, there is potential for difficulties ensuring ships are manned with personnel on board who are appropriately qualified and certificated.

However, the nature of the applicability of the IGF Code has meant that most owners and operators of ships that will be subject to the IGF Code should be able to plan, to some extent, for the training of personnel to align with the anticipated delivery of newbuilds or conversion of their ship(s).

PREPARATIONS BY SHIPOWNERS AND OPERATORS

Companies operating ships subject to the IGF Code

Operators of ships subject to the IGF Code are required to ensure their ships are manned with appropriately qualified and certificated personnel, who may be:

- Personnel qualified and certificated in accordance with the new training requirements for service on board ships subject to the IGF Code (Regulation V/3), having successfully completed approved training and provided evidence of meeting seagoing service and experience requirements (as applicable);

- Personnel qualified and certificated in accordance with existing national training requirements for service on board ships using gases or low-flashpoint fuels as fuel that have undergone updating training (see Regulation V/3, paragraph 10), or who have exchanged such a certificate to obtain certification in accordance with the new training requirements for service on board ships subject to the IGF Code (Regulation V/3); and

- Personnel qualified and certificated in accordance with the training requirements for service on board liquefied gas tankers (Regulation V/1-2) who have had their qualifications and experience recognized.

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5 Ships using low-flashpoint fuels for which the building contract is placed on or after 1 January 2017, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2017 in the absence of a building contract, or the delivery of which is on or after 1 January 2021. Some ships for which the building contract is placed before 2017 may be delivered as IGF Code compliant ships if this is stipulated in the building contract between the shipowner and shipyard.
to have met the requirements for certification in accordance with the new training requirements for service on board ships subject to the IGF Code (Regulation V/3), and hold an appropriate certificate.

To ensure applicable personnel are qualified and certificated to operate ships subject to the IGF Code, companies should consider, *inter alia*, the following efforts and actions:

- Consider the certificates held by applicable personnel employed or engaged to identify those who require training, specifically the appropriate training level and certificate required;
- Consider the existing training completed, certificates held or previous seagoing service by applicable personnel to identify appropriate qualification routes to obtain the required certification;
- Consider approaches to ensuring applicable personnel are able to obtain seagoing service and experience, i.e. on ships subject to the IGF Code, on tankers carrying as cargo, fuels covered by the IGF Code, or on ships using gases or low-flashpoint fuel as fuel;
- Consider existing or introduce arrangements or procedures for ensuring applicable personnel are able to record seagoing service and experience in a manner or format acceptable to the relevant Administrations;
- Consider the availability of approved training courses and issuance of certificates, consulting with the relevant Administrations and training providers, as necessary, to ensure the timely approval and availability of courses;
- Facilitate the attendance of applicable personnel at training courses and completion of relevant seagoing service and experience to meet the requirements for certification; and
- Identify and prepare for any foreseeable issues associated with delays in implementation, approval of training courses or the issuance of certificates.6

**Companies operating existing ships that use gases or low-flashpoint fuels as fuel**7

Existing ships that use gases or other low-flashpoint fuels as fuel are not required to comply with the IGF Code, nor are they required to be manned by personnel qualified and certificated in accordance with Regulation V/3 of the STCW Convention, 1978, as amended. This is due to the provision of SOLAS, 1974, as amended, concerning the application of the IGF Code (see SOLAS regulation II-1/56), and the fact that Regulation V/3 of the STCW Code is explicitly tethered to the IGF Code by stating that:

> “This regulation applies to masters, officers and ratings and other personnel serving on board ships subject to the IGF Code”.

Companies operating existing ships using gases and low-flashpoint fuels as fuel (i.e. those not subject to the IGF Code) may still be subject to requirements concerning the qualifications of personnel. For

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6 It should be noted that the relevant IMO Model Courses are not anticipated to be available until July 2018.

7 Existing ships using low-flashpoint fuels for which the building contract was placed before 1 January 2017, which do not fall within the application of the IGF Code.
example, Administrations may apply the *Interim guidance on training for seafarers on ships using gases or other low-flashpoint fuels* (STCW.7/Circ.23, amended by STCW.7/Circ.23/Add.1) or other national requirements for training emanating from the *Interim guidelines on safety for natural gas-fuelled engine installations in ships* (MSC.285(86)).