

Isle of Man Ship Registry Technical Advisory Notice

Guidance on Training Requirements for Seafarers Working Onboard Vessels Using Low-flashpoint Fuels Other Than LNG

Ref: TAN 003-24
Issued: 19 Apr 2024

1. Introduction

The transition towards a greener future in the maritime industry from traditional carbon-heavy 'dirty' fuels to 'cleaner' low-carbon or carbon-neutral fuels is moving forwards at a rapid pace. With many vessels now being designed or retro-fitted to take advantage of these fuels, either running entirely on gas (single fuel) or with engines capable of running on gas and oil fuels (dual-fuel).

Due to the rapid pace of this transition, there are no current regulations from IMO covering the training required for seafarers working on board such vessels. This notice serves as interim guidance for training requirements of seafarers working on board Manx ships until training requirements are finalised by the IMO.

2. Types of Alternative Fuel

There are several types of alternative fuels ("IGF fuels") in various stages of development throughout the industry, in particular, this notice focuses on vessels using the below substances as marine fuel:

- Ammonia
- Biofuels
- Methanol / Ethanol
- Dimethyl Ether (DME)
- Hydrogen
- LNG/LPG

The Isle of Man Ship Registry notes that some vessels are also being designed 'fully-electric' i.e. they use batteries as their primary source of power. Such vessels are outside the scope of this notice as it pertains to training requirements, however operators are encouraged to contact the Ship Registry if they have any questions relating to this area.

3. The IGF Code

The International Code of Safety for Ships using Gases or other Low-flashpoint Fuels (IGF Code) provides an international standard for ships, other than vessels covered by the IGC Code, operating with gas or low-flashpoint liquids as fuel and is currently the only international standard providing a framework for the use of alternate fuels on ships.

The IGF Code applies to ships to which part G of SOLAS Chapter II-1 applies, that is, all ships using low flash-point fuels:

.1 for which the building contract is placed on or after 1 January 2017;



.2 in the absence of a building contract, the keels of which are laid or which are at a similar stage of construction on or after 1 July 2017; or

.3 the delivery of which is on or after 1 January 2021.

With the exception of gas carriers complying with the IGC code, any ship that converts to using low-flashpoint fuels on or after 1 January 2017 shall be treated as a ship using low-flashpoint fuels on the date the conversion commenced.

The IOMSR recognises that many dual-fuel engines, whilst capable of running on low-flashpoint fuel, currently run solely on marine fuel oil and the vessel does not carry any low-flashpoint fuel onboard.

For the avoidance of any doubt, the IOM Ship Registry interprets the requirements of SOLAS Chapter II-1 Part G to apply to any vessel actually carrying low-flashpoint fuel (that is not cargo) on board, irrespective of whether it is currently in use or not, and thus, the STCW training requirements detailed below will apply.

In this sense, where a vessel is capable of using fuel subject to the IGF code but is not carrying IGF fuel, then the vessel does not necessarily fall within the scope of the IGF code handling requirements and standard training requirements for the fuel being used, i.e. MDO/HFO, would apply. However, if carrying IGF fuel (in use or not) the training requirements specific to the IGF fuel type will be necessary.

The code is still under active development and as such only focuses upon the use of LNG as fuel. Other alternate fuels, such as LPG, ammonia or hydrogen, fit within the framework of the code but it should be recognised that the rules pertaining to their use and safe handling are still under development. As such, seafarers trained in the requirements of the IGF code should not be deemed "fully competent" with respect to the use of such fuels on board ships until the guidelines are fully developed.

4. STCW Requirements

There are two levels of training available for seafarers working on board vessels using fuels subject to the IGF code:

- 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

Both the Basic and Advanced qualifications are subject to the STCW requirement for refresher training. This means that seafarers holding these qualifications shall, at intervals not exceeding 5 years, undertake refresher training or be required to provide evidence of having achieved the required standard of competence within the previous 5 years.

A Certificate of Proficiency (CoP) is issued to seafarers who have completed the necessary training and hold the prerequisite experience to obtain the CoP. Seafarers on board a ship subject to the IGF code must hold a CoP relevant to their job role and responsibilities.

Seafarers responsible for designated safety duties associated with the care of, use of or emergency response to, the fuel on board ships subject to the IGF code must hold a basic CoP. This requires the seafarer to complete the basic training course for the IGF code; there are no specific sea-going experience requirements for the basic CoP.

Masters, engineering officers and all personnel with immediate responsibility for the care and use of fuels and fuel systems on ships subject to the IGF Code must hold an advanced CoP.



With immediate responsibility being defined as 'a person in a decision-making capacity with respect to handling of fuel addressed by the IGF Code or other fuel-related operations'.

To obtain an advanced CoP, the seafarer must complete the advanced training course for the IGF code and complete at least 1 month of approved seagoing service (with a minimum of 3 bunkering operations) on board ships subject to the IGF Code. Two of the three bunkering operations may be replaced by approved simulator training on bunkering operations.

Alternatively, seafarers who have qualified and certificated for service on liquefied gas tankers can be considered as having met the training requirements for service on ships subject to the IGF Code (although a CoP must still be applied for and obtained from the relevant authority), subject to the following criteria and the actual IGF fuel being used:

- Seafarers holding a CoP in Basic or 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;
- Seafarers holding a CoP in Advanced Training for liquefied gas tanker cargo operations are considered as having met the requirements for Advanced Training for service on ships subject to the IGF Code, provided they have:
 - Completed seagoing service of 3 months in the previous 5 years on board ships subject to the IGF Code, or on tankers carrying fuels covered by the IGF Code as cargo, or on ships using gases/low flashpoint fuel as fuel; and
 - Participated in conducting 3 cargo operations onboard a liquefied gas tanker; or completed a minimum of 3 bunkering operations on a ship subject to the IGF Code. Two of those three bunkering operations may be replaced by approved simulator training on bunkering operations.

In addition to the above, all seafarers serving on board ships subject to the IGF Code must, prior to being assigned shipboard duties, receive appropriate ship and equipment familiarisation as specified in Regulation I/14 paragraph 1.5 of the STCW Convention.

5. IOMSR Policy

As noted above, with the exception of LNG, the IGF code cannot yet be considered to fully address the training requirements for other alternate fuels that may fall within the framework of the code.

In the absence of specific STCW training requirements, the Ship Registry has determined that for the seafarers working on board ships using a fuel subject to the IGF code that is not LNG, the seafarer should complete a safety and awareness training course specific to the IGF fuel that is used on board the ship.

The Ship Registry does not maintain an approved provider list for such training courses but expects that such a course should cover concepts such as:

- Properties of the fuel;
- Comparisons with LNG;
- Hazards and risks of the fuel;
- Safety precautions of the fuel;
- Fire behaviour and emergency response; and
- Safe handling and practical considerations of the fuel.

Please note - The Isle of Man Ship Registry cannot give legal advice. Where this document provides guidance on the law it should not be regarded as definitive. The way the law applies to any particular case can vary according to circumstances - for example, from vessel to vessel. You should consider seeking independent legal advice if you are unsure of your own legal position.

