

SUB-COMMITTEE ON BULK LIQUIDS AND
GASES
17th session
Agenda item 8

BLG 17/8/6
14 December 2012
Original: ENGLISH

**DEVELOPMENT OF INTERNATIONAL CODE OF SAFETY FOR SHIPS
USING GASES OR OTHER LOW-FLASHPOINT FUELS**

Specific requirements for low-flashpoint fuels other than natural gas

Submitted by the Community of European Shipyards' Associations (CESA)

SUMMARY

Executive summary: This document comments on the report of the correspondence group (BLG 17/8/1) and highlights the importance of ongoing work regarding the development of specific requirements for low-flashpoint fuels other than natural gas. In particular specific draft requirements for low-flashpoint diesel fuels are proposed.

Strategic direction: 5

High-level action: 5.2.1

Planned output: 5.2.1.3

Action to be taken: Paragraph 11

Related documents: BLG 17/8/1; BLG 14/17; MSC 87/26 and BLG 12/7/2

Introduction

1 This document is submitted in accordance with paragraph 4.10.5 of the *Guidelines on the organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.4/Rev.2) and comments on document BLG 17/8/1.

2 CESA appreciates the work done by the correspondence group and recognizes the progress made in the development of the International Code of safety for ships using gases and other low-flashpoint fuels. CESA does not object the view expressed and the way forward proposed in paragraph 12 of BLG 17/8/1, namely following a two-step approach with step 1 finalizing and implementing the part related to natural gas and step 2 finalizing the requirements for other low-flashpoint fuels "as soon as possible but at a later stage".

3 The shipbuilding industry is highly interested in having a standard for ships using low-flashpoint fuels as soon possible and therefore we appreciate all efforts to finalize the part for natural gas within the given time frame.

4 At the same time, our industry is in urgent need of clear guidance on how to deal with other low-flashpoint fuels. In this context, we would like to reiterate, amongst others, document BLG 12/7/2 (CESA) highlighting the dynamic development in the use of gas as ship's fuel regarding ship types, ship size and fuel types and document BLG 14/6/2 (Sweden) as the basis for the decision at the fourteenth session of this Sub-Committee to broaden the scope to low-flashpoint fuels other than gas, which has been confirmed by MSC 87.

Types of low-flashpoint fuels

5 Section 2.2 "Definitions" of the Code contains a definition of fuel listing eight different low-flashpoint fuels. In view of CESA, it is essential to stress that this list should be considered part of the ongoing work in step 2, in particular as there was not time to discuss alternative fuels in more detail.

6 One of the fuels not yet discussed and therefore not part of this list are diesel having a low-flashpoint. CESA proposes to add such diesel fuels, which could be used as a fuel with high energetic density in fuel cell systems with reformers. In addition low-flashpoint diesel are of significance to broaden the low-sulphur fuel options required in Sulphur Emission Control Areas in the near future. In order to facilitate the ongoing work, CESA would like to propose a new part A-8 providing the possible requirements for such kind of fuels. This proposal is attached as annex 1 to this document.

7 Since it can be anticipated that with the rapid development of the state of the art also other low-flashpoint fuels will become relevant for marine applications, it should also be considered how new fuels could be added to the IGF Code in practical manner. In cases of new fuels having properties (almost) similar to fuels already addressed in the Code, it should be possible to add them without adding new parts necessitating a formal amendment to the Code.

Approval of installations for low-flashpoint fuels other than LNG

8 While CESA appreciates the need to conclude the work on LNG in a first step, it is nevertheless of utmost importance for the shipbuilding industry to have instruments available allowing for the use of other low-flashpoint fuels at the same time, e.g. the use of fuel cells for the energy supply is a reasonable option to avoid exhaust emissions from generators in ports. The Code itself already provides the necessary tools for the approval of such installations.

9 Following the decision of BLG 14 about the structure of the Code, namely to follow a goal-oriented approach, it was agreed that, in addition to referring to the related functional requirements, the purpose of the various requirements should be stated in the body of the Code. In the Code as presented in document BLG 17/8/1, section 3 "Goals and Functional Requirements" implements this decision. In addition, each section provides for goal and functional requirements for that specific section.

10 In the view of CESA based on this structure, the Code provides a sound basis for flag State Administrations to approve installations for low-flashpoint fuels other than LNG and CESA would like to urge the Sub-Committee to invite Administrations to make use of the instruments available in the Code for the approval of installations using low-flashpoint fuels other than LNG.

Action requested of the Sub-Committee

11 The Sub-Committee is invited to consider the views presented and take action as appropriate.

ANNEX

SPECIFIC REQUIREMENTS FOR SHIPS USING DIESEL FUEL WITH FP<60°C

1 In addition to the requirements in SOLAS chapter II-2 for the fuel system components, installation and energy converters the requirements in the following paragraphs shall apply.

2 In addition to part A, the following paragraphs of part A-1 apply to ships using diesel fuel with FP<60°C as fuel:

| Subject | Paragraphs | Comments |
|----------------------------------|------------------------|---|
| Material and general pipe design | 5.1, 5.2 | Requirements of (liquid) gases do not apply |
| Power generation | 6.9 | Except gas piping |
| Fuel storage | 7.1, 7.2 | |
| Fuel supply to consumers | 8.1, 8.2 | |
| Bunkering | 9.1, 9.2, 9.4 | |
| Ship design and arrangements | 10.1, 10.2, 10.6, 10.7 | See additional requirements 3.1 below |
| Fire safety | 11 | |
| Explosion protection | 12 | |
| Ventilation | 13.1, 13.2, 13.3 | |

3 Additional requirements for ships using diesel fuel with FP<60°C as fuel:

3.1 Containment for low-flashpoint diesel oil

3.1.1 Requirements

3.1.1.1 Tanks for low-flashpoint diesel oil shall be structural tanks and located such that adjacent spaces have temperatures minimum of 10 degrees below the flashpoint.

3.1.1.2 Piping systems in tanks and their cofferdams shall have no connections with piping systems in the rest of the ship, apart from fuel pipes which shall be arranged as specified in other parts of this Code.

3.1.1.3 Piping in areas with temperatures less than 10 degrees below the flashpoint like category A machinery spaces are to be double walled with ventilation.

3.1.1.4 Areas containing fuel pipes or adjacent to tanks are to be suitably ventilated to prevent aggregation of fuel vapours.

3.1.1.5 Ventilation pipes for tanks are to be fitted with an approved type of vent head with a pressure-vacuum valve and flame arrester. The outlet is to be located in a safe position away from ignition sources.

3.1.1.6 Drip trays as in section 10.7 are to be drained to a suitable collection tank separated from machinery space drains.