

SUB-COMMITTEE ON CARRIAGE OF  
CARGOES AND CONTAINERS  
7th session  
Agenda item 12

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## BIENNIAL STATUS REPORT AND PROVISINAL AGENDA FOR CCC 8

### On the need to accelerate the development of safety provisions for alternative fuels and innovative energy converters

Submitted by CESA

#### SUMMARY

*Executive summary:* This document highlights the need to accelerate the development of safety provisions for alternative fuels and innovative energy converters in order to meet GHG and other emission targets of the Organization in time. Owing to the wide range of candidate fuels, these goals cannot be achieved without the allocation of additional resources and significant increase in development efficiency. In this context CESA welcomes the analysis of the CCC workload and proposals for improved arrangements provided by the Chair.

*Strategic direction,  
if applicable:* 2

*Output:* 2.3

*Action to be taken:* Paragraph 15

*Related documents:* CCC 7/3/Rev.1, CCC 7/3/10, CCC 7/12; MSC 102/12; CCC 6/14; BLG 17/8/6 and BLG 16/6

#### General

1 This document is submitted in accordance with the provisions of paragraph 6.12.5 of 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.5/Rev.2)* and comments on document CCC 7/12 (Chair) considering the workload and arrangements of the Sub-Committee.

#### Background

2 At its sixth session, the Sub-Committee endorsed a new work plan for the next phase of the development of the IGF Code. The Sub-Committee also endorsed the change of status of the existing output on "Amendments to the IGF Code and development of guidelines for low-flashpoint fuels" to be "continuous" to avoid constant extensions of target completion dates.

3 CCC 6 also considered the request to allocate more resources to meet the target completion dates in the new work plan with a view to reaching the emission control targets. After brief consideration of several options to further progress the development of the IGF Code, such as more CCC meeting days or an intersessional group, the Chair of the Sub-Committee agreed to prepare, in consultation with the Secretariat, a document on the workload and arrangements of the Sub-Committee, for submission to CCC 7 for consideration. The Sub-Committee also noted that interested Member States and international organizations could submit comments and proposals on the work plan to MSC 102.

4 Owing to COVID-19 induced time constraints, MSC 102 was not in the position to consider the CCC work plan in substance. The Committee, however, noted the view that the work on low-flashpoint fuels should be accelerated and prioritized through the provision of additional resources, taking into account the existing regulatory framework established by the IGF Code and the urgent need to rapidly develop safety provisions for alternative fuels to further the decarbonization of shipping.

5 CESA supports the new work plan to be pursued as a continuous output and highlights the need to accelerate the development of safety provisions for alternative fuels in order to meet ambitious emission targets as soon as necessary. CESA would, however, emphasize the urgent need to increase the development speed as soon as possible.

#### **Status of rule development for alternative fuels and innovative energy converters**

6 Alternative fuels and innovative energy converters (e.g. fuel cells) offer by far the largest potential for GHG emission reduction. Only with zero-carbon or climate-neutral fuels and suitable high efficiency energy converters will the reduction to net-zero GHG emissions be possible. Since many of the candidates are low-flashpoint fuels or fuels with other safety hazards than fire and explosion adequate safety requirements are of utmost importance.

7 While technology for alternative fuels and relevant energy converters are maturing rapidly and the fuels are becoming more widely available, the related rule development is too slow to ensure that the wide portfolio of new fuels and technologies can be utilized on board early enough to successfully implement the ambitious goals of the IMO GHG Strategy.

8 Currently the CCC Sub-Committee appears to be a significant bottleneck for the rapid greening of shipping:

- .1 the development of mandatory regulations for gas-fueled ships (IGF Code) took more than 10 years and still provides prescriptive requirements for LNG and CNG only;
- .2 the development of "Interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel" lasted from CCC 1 to CCC 6;
- .3 the development of IGF Code provisions for the safety of ships using low-flashpoint oil fuels had already been proposed in 2012 (ref. BLG 17/8/6 by CESA) and has just started recently at CCC 6; and
- .4 the development of Guidelines for fuel cell installations processed extremely slow since 2011 (BLG 16/6) however has now yielded mature draft interim guidelines after the additional effort of a two-phase Correspondence Group and an informal technical exchange by means of an intersessional videoconference.

9 Based on this experience, the proposed new workplan – promising to finalize mandatory fuel cell provisions as well as IGF Code amendments/interim guidelines for three fuels within just five years – seems to be highly ambitious and requires a significant increase in the development of efficiency and allocation of additional resources in order to be fulfilled. In addition, it should be noted that with hydrogen and ammonia more alternative fuels have already been earmarked for possible inclusion into the work plan.

#### **Future arrangements of the Sub-Committee to accelerate relevant rule development**

10 CCC 7/12 clearly documents the current high workload of the Sub-Committee, which is to a large extent related to the intensified use of IGF and IGC Codes that most likely will further expand with the increasing demand for low-/zero-emission or climate-neutral marine fuels.

11 So far, acceleration of rule development is hampered by the limitation to one CCC Working Group/Correspondence Group only that is tasked to perform two complex and tedious activities which are of equal importance for maintaining a safety standard for ships using low-flashpoint fuels:

- .1 maintaining and revising the LNG/CNG related provisions of the existing IGF Code, which is a time-consuming exercise, because a significant number of draft amendments and draft unified interpretations are submitted each year; and
- .2 developing regulations for new fuels and energy converters, a complex task for which usually only half of the working time remains available once the IGF Code review work has been performed.

12 Therefore, it is an adequate and timely proposal to increase the duration of CCC Sub Committee sessions to eight meeting days with the successful NCSR approach of maintaining four days of interpretation in plenary. CESA prefers option 1 in order to maintain the maximal WG/DG allowance.

13 In order to fully rectify the current bottleneck situation, the increase of working days might not be sufficient. In addition, CESA recommends distributing the low-flashpoint fuel related work of the Sub-Committee on the parallel Working Group/Correspondence Group by allocating the amendments interpretation of existing instruments to one group and the development of safety provisions for the use of new alternative fuels and energy converters to another group.

14 Based on the COVID-19 induced new ability of the Organization to also work virtually, the allocation of an intersessional working group and/or informal expert groups could significantly increase the development speed.

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

15 The Sub-Committee is invited to consider the assessment and proposals provided in paragraphs 12, 13 and 14 and take action as appropriate.