

SUB-COMMITTEE ON SHIP SYSTEMS AND
EQUIPMENT
6th session
Agenda item 5

SSE 6/5/1
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**CONSEQUENTIAL WORK RELATED TO THE NEW CODE FOR SHIPS
OPERATING IN POLAR WATERS**

Comments on the report of the Correspondence Group on Life-Saving Appliances

Submitted by IACS

SUMMARY

Executive summary: This document provides comments on the report of the Correspondence Group on Life-Saving appliances related to "Consequential work related to the new Code for ships operating in polar waters"

*Strategic direction,
if applicable:* Other work

Output: OW 43

Action to be taken: Paragraph 14

Related documents: SSE 5/17 and SSE 6/5

Introduction

1 This document is submitted in accordance with 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.1) and provides comments on the report of the Correspondence Group on Life-Saving Appliances contained in document SSE 6/5 (Norway).

Background

2 SSE 5 re-established the Correspondence Group on Life-Saving Appliances (LSA) related to "Consequential work related to the new Code for ships operating in polar waters" to further develop, with a view towards finalization, the draft interim guidelines on life-saving appliances and arrangements for ships operating in polar waters (hereafter referred to as the "draft interim guidelines"); and also to consider suitable regulatory options to address future new test and performance criteria (SSE 5/17, paragraph 6.18).

3 IACS participated in the work of the Correspondence Group and would like to extend its deepest appreciation to the coordinator and the other participants for the constructive discussions in the Group. However, IACS does have some comments on document SSE 6/5 and the proposed text in annex 1 to that document, as discussed below.

Discussion

4 Regarding paragraph 14 of document SSE 6/5:

"With reference to sub-paragraph .2 of the ToR, the recommendation of the Group was that the draft interim guidelines be finalized at SSE 6",

it is the view of IACS that the draft interim guidelines need to be further reviewed. Indeed, IACS notes that in the Correspondence Group's report a number of issues are identified that remain to be resolved. Consequently, IACS supports the establishment of a working group at SSE 6 to further consider this issue, including the development of outline headings of the polar survival guidance.

5 IACS considers that most of the numerical values, such as the calorific values for food rations, width of survival craft seats, long-term CO₂ levels in survival craft, etc., which will be needed by designers, operators and Administrations, should be justified and finalized only after completing scientific studies or research. Therefore, IACS considers that in the event that it is not possible to provide a scientific justification for whatever reasons, then the development of some principles for deciding numerical values in IMO instruments, without carrying out relevant scientific studies or researches, will be necessary.

6 Regarding the application to new and existing ships, IACS considers that as the Polar Code is applicable to both new and existing ships, then these draft interim guidelines should also apply to new and existing ships.

7 Regarding the capacity of survival craft, IACS notes that the capacity of survival craft and how much additional space is needed to ensure survivability were discussed in the Correspondence Group and different values were proposed. One proposal was to reduce the capacity by a fixed percentage, e.g. 20%. However, it has not been justified that 20% is the correct value and the number may be different if the expected time before rescue is more than five days. It is also noted that the Group agreed that further research was necessary in this regard. IACS considers that the draft interim guidelines proposed in annex 1 to document SSE 6/5 represent a reasonable interim solution, which will not interfere with the design of existing survival craft. IACS supports a proposed reduction in capacity by 20% but suggests that, at the same time, a larger seat width of 530 mm to accommodate people in polar clothes and immersion suits be stipulated.

8 Regarding the "heat loss/body core temperature" issue, IACS would prefer a minimum inside temperature of 10°C to be recommended. This, taken together with internal heaters, polar clothing and any structural insulation, should mean that the core body temperature can be maintained until the time of transfer of persons to a rescuing vessel and before the onset of hypothermia.

9 The understanding of IACS is that the maximum expected time before rescue has to be determined by the operational assessment (Polar Code, part 1-A, section 1.5) for each vessel. The maximum expected time before rescue is therefore different for each vessel and will be route specific, based on factors, such as ice class, seasonal changing of ice strength, icebreaker support, ice type, thickness and concentration. As per the definitions in the Polar Code, IACS proposes to use the term "maximum expected time of rescue" in the draft interim guidelines, rather than "expected time of rescue".

10 Regarding paragraph 3.2.1 of the draft interim guidelines in annex 1 to document SSE 6/5, it should be noted that gloves for immersion suits and thermal protective aids (TPA) are already required by paragraphs 2.3.1.1.3 and 2.5.2.1 of the LSA Code, respectively. Also, paragraphs 4.1.5.1.18 and .19 of the LSA Code require that food rations and water shall be packed in such a way so they can be easily opened with gloved hands. The remaining issue is the term "tasks" and in this regard, IACS proposes the following alternative version of paragraph 3.2.1:

"insulated immersion suit or thermal protective aid provided with gloves should be provided with separate gloves, which shall be permanently attached to the suit/protective aid;"

IACS could also support the replacement of "or" by "and" in the above text.

11 Regarding paragraph 3.2.5 of the draft interim guidelines, IACS is of the opinion that it is also important to consider the expected conditions in the survival craft, e.g. condensation and humidity levels, etc. In this regard, IACS suggests the following modification:

"protective clothing of a material with thermal properties suitable for use on the planned route and type of survival craft, such as wool, including woollen clothing (head protection, neck and face protection, gloves, socks, mitts, boots, long underpants and sweater);"

12 Regarding paragraphs 6.4 and 6.5 of the draft interim guidelines, IACS suggests that survival craft likely to be exposed to ice accretion during the survival phase have at least two mallets (wooden, rubber, plastic or equivalent) to remove the ice as part of the equipment in the survival craft. Such mallets should be made of a non-metallic material to avoid damage to the survival craft and its equipment. IACS considers that survival craft could be provided with electrical trace heating around the hatches to keep the hatches clear of ice accretion. Trace heating could be exempted where the lifeboat internal atmosphere is maintained above 10°C by the use of cabin heaters. However, it is recognized that the installation of trace heating may represent a challenge, as it will require significant maintenance and testing, and a significant amount of power to melt the ice (possibly requiring the engine to run continuously). An alternative measure could be a procedure to open and close the hatches regularly to eliminate possible ice accretion.

13 Regarding paragraph 7.2 of the draft interim guidelines, IACS considers that attention should also be drawn to the fact that batteries have limited capacities in cold weather (Polar Code, part I-A, paragraph 10.3.2.3). Consideration could be given to including a recommendation that sufficient fuel be provided to run the engine while idle/disengaged to recharge the batteries via alternators.

Action requested of the Sub-Committee

14 The Sub-Committee is invited to consider the comments and proposals above and take action, as appropriate.