

SUB-COMMITTEE ON SHIP SYSTEMS AND
EQUIPMENT
11th session
Agenda item 19

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ANY OTHER BUSINESS

Differences between the LSA Code and ISO Standard 18813 on Ships and marine technology - Survival equipment for survival craft and rescue boats

Submitted by IACS

SUMMARY

Executive summary: This document highlights minor discrepancies between the LSA Code and ISO Standard 18813 (2006 and 2022 versions).

Strategic direction, if applicable: Not applicable

Output: Not applicable

Action to be taken: Paragraph 6

Related documents: MSC 109/21

Background

1 MSC 109 considered document MSC 109/21 (ISO), providing an update on the revised ISO International Standard 18813:2022 and proposing amendments to the corresponding footnotes of paragraphs 4.1.5.1.18 and 4.1.5.1.19 of the LSA Code, referring to the ISO standard. Having considered the document, the Committee:

- .1 instructed SSE 11 to further consider document MSC 109/21 (ISO), taking into account the comments, as well as the guidance, in particular, in resolution A.911(22); and
- .2 invited ISO to provide detailed information to the SSE Sub-Committee on the differences between the previous and revised versions of the ISO standard concerned.

Discussion and proposals

2 IACS notes that the requirements for food rations and emergency drinking water have not changed between the 2006 and 2022 versions of ISO 18813.

3 Despite the unchanged provisions between the 2006 and 2022 versions of ISO 18813, IACS also notes that discrepancies persist when comparing these versions with the LSA Code requirements, as outlined below.

Paragraph 4.1.5.1.18 of the LSA Code

4 For food rations, ISO 18813 allows a moisture content of maximum 3 to 7%, while the LSA Code states the maximum of 5%. Further, the LSA Code specifies that the rations may be packed in permanently sealed metal containers, while ISO 18813 requires the packing to be hermetically sealed (a can). IACS suggests updating paragraph 4.1.5.1.18 of the LSA Code to ensure consistency (modifications in grey shading), as follows:

"4.1.5 Equipment

.1 The normal equipment of every liferaft shall consist of:

...

.18 a food ration consisting of not less than 10,000 kJ (2,400 kcal) for each person the liferaft is permitted to accommodate. These rations shall be palatable, edible throughout the marked life, and packed in a manner which can be readily divided and easily opened, taking into account immersion suit gloved hands.*

* Note: A typical suitable composition is:

Ration unit: 500-550 g

Energy: Minimum 10,000 kJ

Moisture: Maximum 5 3 – 7 %

Salt (NaCl): Maximum 0.2%

Carbohydrates: 60-70% weight = 50-60% energy

Fat: 18-23% weight = 33-43% energy

Protein: 6-10% weight = 5-8% energy

The rations shall be packed in permanently hermetically sealed packaging (can) metal containers or vacuum packed in a flexible packaging material with a negligible vapour transmission rate (<0.1 g/m² per 24 hours at 23°C/85% relative humidity) when tested to a standard acceptable to the Administration. Flexible packaging materials shall be further protected by outer packaging if needed to prevent physical damage to the food ration and other items as a result of sharp edges. The packaging shall be clearly marked with date of packing and date of expiry, the production lot number, the content in the package and instructions for use. Food rations complying with the requirements of an international standard acceptable to the Organization* are acceptable in compliance with these requirements;"

Paragraph 4.1.5.1.19 of the LSA Code

5 For emergency drinking water, the LSA Code requires spill proof protection for portions of 125 ml or more, while ISO 18813:2022 requires spill proof protection for portions of more than 125 ml. IACS suggests replacing the words "less than 125 ml" with words "up to 125 ml" in paragraph 4.1.5.1.19 of the LSA Code for consistency (modifications in grey shading), as follows:

"4.1.5 Equipment

4.1.5.1 The normal equipment of every liferaft shall consist of:

- .19 1.5 l of fresh water for each person the liferaft is permitted to accommodate, of which either 0.5 l per person may be replaced by a de-salting apparatus capable of producing an equal amount of fresh water in 2 days or 1 l per person may be replaced by a manually powered reverse osmosis desalinators, as described in paragraph 4.4.7.5, capable of producing an equal amount of fresh water in 2 days. The water shall satisfy suitable international requirements for chemical and microbiological content, and shall be packed in sealed watertight containers that are of corrosion resistant material or are treated to be corrosion resistant. Flexible packaging materials, if used, shall have a negligible vapour transmission rate (<0.1 g/m² per 24 hours at 23°C / 85% relative humidity when tested to a standard acceptable to the Administration, except that individually packaged portions within a larger container need not meet this vapour transmission requirement. Each water container shall have a method of spill proof reclosure, except for individually packaged portions of less than up to 125 ml. Each container shall be clearly marked with date of packing and date of expiry, the production lot number, the quantity of water in the container, and instructions for consumption. The containers shall be easy to open, taking into account immersion suit gloved hands. Water for emergency drinking complying with the requirements of an international standard acceptable to the Organization* is acceptable in compliance with these requirements;"

Action requested of the Sub-Committee

6 The Sub-Committee is invited to consider the foregoing and to take action, as appropriate.
