INTERNATIONAL MARITIME ORGANIZATION

E

SUB-COMMITTEE ON SHIP DESIGN AND CONSTRUCTION
4th session
Agenda item 8

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MANDATORY INSTRUMENT AND/OR PROVISIONS ADDRESSING SAFETY STANDARDS FOR THE CARRIAGE OF MORE THAN 12 INDUSTRIAL PERSONNEL ON BOARD VESSELS ENGAGED ON INTERNATIONAL VOYAGES

Draft Code of Safety for Ships Carrying more than 12 Industrial Personnel

Submitted by Germany

SUMMARY

Executive summary:	This document provides the draft text of a new mandatory code addressing the carriage of more than 12 industrial personnel on board vessels engaged on international voyages
Strategic direction:	5.2
High-level action:	5.2.1
Output:	5.2.1.4
Action to be taken:	Paragraph 12
Related documents:	MSC 96/WP.7 and MSC 96/25

Background

1 The Maritime Safety Committee, at its ninety-sixth session, agreed that for a long-term solution regarding the carriage of more than 12 industrial personnel, a new SOLAS chapter shall be developed to address this specific group of persons. It was further agreed, that to complete the regulatory regime, a new mandatory code should be developed, in order to provide specific technical requirements.

2 Following the above decisions, MSC 96 established the Working Group on Carriage of Industrial Personnel and instructed it, besides others, to further consider the development of a new mandatory code.

3 Subsequently, the working group prepared the outline of the draft new Code containing specific chapters for ships (technical issues) and for personnel (i.e. industrial personnel).

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Discussion

4 Germany intends to give the outline prepared by the working group at MSC 96, consisting of headlines only, more substance, as set out in the annex, to facilitate the discussion at SDC 4.

5 Following general agreement by MSC 96, the 2000 HSC and the 2008 SPS Codes were used as a basis for the development of the draft text proposed in the annex. Consequently, two types of provisions were included, namely those for offshore service vessels built as conventional ships and those built as high-speed craft.

6 The draft "Personnel chapters" propose specific requirements for industrial personnel, based on the outcome of MSC 96.

7 In the proposed draft "Ship chapters", offshore service vessels are divided into high-speed craft and conventional ships. Very few issues have regulations that apply for both ship types.

8 As stated in paragraph 5 above, the 2008 SPS and the 2000 HSC Codes shall form the basis for the technical discussion. In terms of the SPS Code, the proposed text of the draft new Code follows the same approach as the 2008 edition of the SPS Code, i.e. to provide requirements only when deviating from the base standard. Since the basis for the 2008 SPS Code itself is SOLAS, this part of the draft Code applies to conventional offshore service vessels. Bearing in mind that the 2008 SPS Code is not a mandatory instrument, references were made to SOLAS only. For offshore service vessels being high-speed craft according to the definition in SOLAS regulation X/1, the proposed text of the draft Code references the 2000 HSC Code.

9 Following the decisions taken at MSC 96, the proposed draft Code aims to achieve a level of safety equivalent to the 2008 SPS Code or the 2000 HSC Code, respectively.

10 Germany would like to draw special attention to paragraph 7.8 of the proposed draft Code regarding the operation of the shipboard crane at sea. In this context, the draft amendments to the 2008 IS Code, to be discussed at MSC 97 under agenda item 3, may be worth considering. Should it be evaluated, on the basis of experience with the new 2008 IS Code recommendations for lifting operations, if these recommendations are appropriate for substituting the requirements proposed in paragraph 7.8?

Proposal

11 Germany proposes to use the text of the draft Code, set out in the annex, as a basis for the technical discussion at SDC 4.

Action requested of the Sub-Committee

12 The Sub-Committee is invited to note the above discussion and, in particular, the proposal in paragraph 11, to consider whether the draft Code, set out in the annex, can be used as a starting point for further discussion at the working group, if established, and to take action as deemed appropriate.

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ANNEX

DRAFT INTERNATIONAL CODE OF SAFETY FOR SHIPS CARRYING MORE THAN 12 INDUSTRIAL PERSONNEL

General

1 The purpose of this Code is to provide international standards to comply with the goals and functional requirements described in regulations [to be developed] of chapter [XV] of the SOLAS Convention.

2 Vessels and craft complying with this Code are deemed to comply with the goals and functional requirements of SOLAS chapter [XV].

Application

1 This Code applies to all ships carrying more than 12 industrial personnel regardless of their size.

2 This Code shall not apply to ships owned or operated by a Contracting Government and used, for the time being, only in Government non-commercial service. However, ships owned or operated by a Contracting Government and used, for the time being, only in Government non-commercial service, are encouraged to act in a manner consistent, so far as reasonable and practicable, with this chapter.

3 Nothing in this Code shall prejudice the rights or obligations of States under international law.

Definitions

For the purpose of this Code, the terms used have the meanings defined in the following paragraphs. Terms used, but not defined, in this Code shall have the same meaning as defined in SOLAS.

1 *High-speed craf*t is a craft as defined in SOLAS regulation X/1.3;

2 C*onventional vessel* means every offshore service vessel that is not a high-speed craft by definition in SOLAS regulation X/1.2;

3 *High Speed Craft Code (HSC Code)* means the Code as defined in SOLAS regulation X/1.2;

4 *Industrial personnel* means every person on board an offshore service vessel that fulfils chapters 1 to [3][4] of this Code;

5 *Intact Stability Code (IS Code)* means the 2008 Intact Stability Code, as amended;

6 *Offshore service vessel* is a vessel intended to carry more than 12 industrial personal and that is not a passenger ship;

7 *Recognized Organization* means [to be developed];

8 *SOLAS* means the International Convention for the Safety of Life at Sea, 1974, as amended.

[to be continued]

Personnel chapters

1 Medical

1.1 All industrial personnel shall meet appropriate medical standards. The standard in the STCW Code, section A-I/9, applicable to engineers, or equivalent, may be used as a standard.

2 Training

All industrial personnel shall:

2.1 prior to joining the ship, receive appropriate safety training, meeting the standard in paragraph 2.1 of section A-VI/1 of the STCW Code. [Administrations may accept other industrial training standards such as those of the Global Wind Organization (GWO), Offshore Petroleum Industry Training Organization (OPITO), Basic Offshore Safety Induction and Emergency Training (OPITO accredited), if they consider these appropriate alternatives];

2.2 receive on board ship specific safety familiarization training or instruction that includes but is not limited to the layout of the ship, and handling of the safety equipment, as appropriate. The standard in paragraph 1 of section A-VI/1 of the STCW Code or equivalent, should be used as the standard;

2.3 be familiarized with specific safety procedures, as appropriate, to ensure the safety of the ship and persons on board for the purpose of industrial activities; including but not limited to transfer procedures on and off the ship while at sea.

3 Personal protective equipment

3.1 All industrial personnel shall be accounted for in the life-saving equipment and equipped with personal protective clothing and equipment suitable for the safety risks to be encountered while on board the ship or transferred off or on to the ship at sea.

[4 Experience

[to be developed]**]**

Ship chapters

5 Rules to be applied

<u>High-speed craft</u>

5.1 High-speed craft shall comply with SOLAS regulation X/3[1], unless otherwise stated below.

[1] Regulations for HSC cargo-ships shall be applied.

Conventional vessels

5.2 Conventional vessels shall comply with the requirements of the 1974 SOLAS Convention, as amended[2], unless otherwise stated below.

6 Structure

High-speed craft

6.1 Any high-speed craft carrying industrial personnel, notwithstanding the number of industrial personnel carried, shall comply with chapter 3 of the HSC Code.

Conventional vessels

6.2 Any conventional vessel, notwithstanding the number of industrial personnel carried, shall comply with SOLAS regulation II-1/3-1.

All vessels carrying more than 12 industrial personnel

6.3 Regardless if built as a high-speed craft or a conventional vessel, the area that is in direct contact with the offshore structure, when industrial personnel board or leave the offshore structure, shall be constructed and protected in a way that enables it to withstand the loads it is subjected to and that prevents contact damage. The requirements of the Recognized Organization (RO) whose supervision the ship is under [in accordance with regulation 3.1 of the Code] have to be met.

7 Stability and subdivision

High-speed craft

7.1 For high-speed craft that carry more than 12, but not more than [60] industrial personnel, parts A and C of chapter 2 of the HSC Code shall apply, with the following alterations.

7.1.1 The provisions of regulation 2.6.9 of the 2000 HSC Code regarding the extent of bottom damage in areas vulnerable to raking damage shall not apply to offshore service vessels having a length *L* of less than 45 m.

7.1.2 The location of a damage according to regulations 2.6.7 and 2.6.10 of the 2000 HSC Code shall be assumed anywhere within the first third of the vessel measured from the forward perpendicular. For the remaining length of the vessel damage should be assumed at any position between two transverse watertight bulkheads.

7.2 High-speed craft carrying more than [60] industrial personnel, shall comply with parts A and B of chapter 2 of the HSC Code.

Conventional vessels

7.3 Conventional vessels shall in general comply with the provisions of section 2.5 of part B of the Intact Stability Code. The subdivision and damage stability shall generally comply with SOLAS chapter II-1.

[2] Regulations for cargo-ships shall be applied.

7.4 Regarding the subdivision index *R*, conventional vessel carrying not more than [60] industrial personnel, the *R*-value is assigned as 0.8 *R*.

7.5 Regarding the subdivision index *R*, conventional vessel carrying more than [60] industrial personnel, the *R*-value is assigned as *R* according to SOLAS regulation II-1/6.

7.6 For conventional vessels to which 7.4 applies, SOLAS regulations II-1/8 and II-1/8-1 shall be applied. Additionally, parts B-2, B-3 and B-4 of SOLAS chapter II-1 should be applied as though the vessel is a passenger ship. SOLAS regulations II-1/14 and II-1/18 are not applicable.

7.7 For conventional vessels to which 7.5 applies, parts B-2, B-3 and B-4 SOLAS chapter II-1 should be applied as though the vessel is a cargo ship, except regulations 9, 13, 19, 20, 21 and 35-1, which apply as though the ship is a passenger ship. SOLAS regulations II-1/8 and II-1/8-1 need not to be applied and SOLAS regulations II-1/14 and II-1/18 are not applicable.

<u>All vessels carrying more than 12 industrial personnel</u>

7.8 Additional stability requirements for the operation of the shipboard crane at sea

7.8.1 For the operation of a shipboard crane at sea, the requirements of the Recognized Organization (RO) whose supervision the ship is under have to be met.

7.8.2 Unless the requirements of supervising RO not saying otherwise the following requirements [shall/should] be met.

.1 The lever arm curves of the ship have to be calculated on the wave crest. The wave length is to be assumed to be equal to the ship's length and the wave height is to be calculated with *L*/20.

.2 The difference between the curves of the righting lever arms and the heeling lever arms caused by the weight at the crane hook and lateral wind pressure of 300 N/m^2 must be at least 0,05 m.

Heeling moment due to weight at the hook: $M_k = P \cdot y \cdot \cos(\varphi)$

Where:

P = weight at hook

y = distance of suspension point of weight from centerline

φ = heeling angle

8 Machinery installations

<u>High-speed craft</u>

8.1 High-speed craft that carrying more than 12, but not more [60] industrial personnel, shall comply with parts A and C of chapters 9 and 10 of the HSC Code.

8.2 High-speed craft carrying more than [60] Industrial Personnel, shall comply with parts A and B of chapters 9 and 10 of the HSC Code.

Conventional vessels

8.3 Conventional vessels carrying more than 12 but not more than [60] industrial personnel shall comply with part C of SOLAS chapter II-1, except regulation 29.6.1.1, which shall not apply.

8.4 Conventional vessels carrying more than [60] industrial personnel shall comply with part C of SOLAS chapter II-1, except regulation 29.6.1.2, which shall not apply.

9 Electrical installations

High-speed craft

9.1 High-speed craft that carry more than 12, but not more [60] industrial personnel, shall comply with parts A and C of chapters 11 and 12 of the HSC Code.

9.2 High-speed craft carrying more than [60] industrial personnel, shall comply with parts A and B of chapters 11 and 12 of the HSC Code.

Conventional vessels

9.3 Conventional vessels carrying more than 12 but not more than [60] industrial personnel shall comply with part D of SOLAS chapter II-1, except regulation 42 and 42-1, which shall not apply.

9.4 Conventional vessels carrying more than [60] industrial personnel shall comply with part D of SOLAS chapter II-1, except regulation 43, which shall not apply.

10 Fire safety

High-speed craft

10.1 Any high-speed craft carrying industrial personnel, notwithstanding the number of industrial personnel, shall comply with parts A and B of chapter 7of the HSC Code. Part C of chapter 7of the HSC Code shall not apply.

10.2 Any high-speed craft carrying industrial personnel, notwithstanding the number of industrial personnel, that is intended to transport dangerous goods, in addition to paragraph 10.1, shall comply with part D of chapter 7 of the HSC Code.

Conventional vessels

10.3 Conventional vessels carrying more than 12 but not more than [60] industrial personnel shall comply with SOLAS chapter II-2 for passenger ships carrying not more than 36 passengers.

10.4 Conventional vessels carrying more than [60] industrial personnel shall comply with SOLAS chapter II-2 for passenger ships carrying more than 36 passengers.

11 Life-saving appliances

11.1 Where in chapter 8 of the HSC Code or chapter III of SOLAS the term "passenger" is used, it should be read to mean "industrial personnel" for the purpose of this Code.

High-speed craft

11.2 High-speed craft that carry more than 12 industrial personnel shall comply with chapter 8 of the HSC Code, with regard to the following alterations:

.1 regulation 3.8.5.1 of the HSC Code shall not apply;

.2 regulations 8.7.6 and 8.7.8 of the 2000 HSC Code shall not apply;

.3 SOLAS regulation III/20.4 shall apply to the maintenance of the falls;

.4 immersion suits shall be available for all persons on board; and

.5 Open reversible liferafts in accordance with annex 11 to the HSC Code shall not be used.

Conventional vessels

11.3 Conventional craft carrying more than 12 but not more than [60] industrial personnel shall comply with the requirements contained in chapter III of SOLAS for cargo ships other than tankers engaged in international voyages, with the following alteration:

.1 offshore service vessels having a length less than 45 m shall carry a rescue boat according to SOLAS regulation III/31.2, or shall be equipped with efficient means for rapidly recovering survivors from the water according to SOLAS regulation III/26.4.

11.4 Conventional craft carrying more than [60] industrial personnel shall be comply with the requirements contained in chapter III of SOLAS for passenger ships engaged in international voyages which are not short international voyages.

12 Vessels carrying dangerous goods

High-speed craft

12.1 When transporting dangerous goods, all high-speed craft carrying more than 12 industrial personnel shall comply with part D of chapter 7 of the HSC Code.

Conventional vessels

12.2 When transporting dangerous goods, all conventional vessels carrying more than 12 industrial personnel shall comply with the requirements of SOLAS chapter VII.

13 Periodically unattended machinery spaces

13.1 For any vessel carrying more than 12 industrial personnel, part E of SOLAS chapter II-1 shall apply. If a vessel is carrying more than [60] industrial personnel, the Administration should specially consider if the machinery spaces may be periodically unattended, and, if so, whether additional requirements are necessary.

[14 Accommodation and escape measures

[to be developed]**]**

[15 Remote control, alarm and safety systems

[to be developed]**]**

[16 Radiocommunications

[to be developed]**]**

17 Safety of navigation

High-speed craft

17.1 All high-speed craft carrying more than 12 industrial personnel should comply with chapter 13 of the HSC-Code.

17.2 The equipment with the night vision appliance, as requested by section 13.10 of the HSC Code, is under the decision and satisfaction of the Administration. For a daily operated vessel it is recommended to be not requested.

Conventional vessel

17.3 All vessels carrying more than 12 industrial personnel shall comply with the requirements of SOLAS chapter V.

[18 Directional control systems

[to be developed]**]**

[19 Handling, controllability and performance

[to be developed]**]**

[20 Anchoring, mooring, towing and berthing

[to be developed]**]**

[21 Stabilization systems

[to be developed]**]**

[22 Cargo handling

[to be developed]**]**

23 Personnel transfer

23.1 Measures for the safe transfer to and from offshore structures shall be provided for all offshore service vessels.

[to be further developed]

[24 Inspection and maintenance requirements

[to be developed]**]**

[25 Security

[to be developed]**]**

[26 Operational requirements

[to be developed]**]**

27 Safety Management

27.1 All vessels carrying more than 12 industrial personnel shall comply with the requirements of SOLAS chapter IX.

ANNEX 1

[Form of Certificate]

[to be developed]