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COMMUNICATIONS AND SEARCH AND
RESCUE
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Agenda item 18

NCSR 9/18
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**DEVELOPMENT OF SOLAS AMENDMENTS FOR MANDATORY CARRIAGE OF
ELECTRONIC INCLINOMETERS ON CONTAINER SHIPS AND BULK CARRIERS**

**Draft SOLAS amendments for the mandatory carriage of
electronic inclinometers on container ships and bulk carriers**

Submitted by Denmark, France, Germany, Netherlands and ICS

SUMMARY

Executive summary: This document includes an update on document MSC 103/20/10 proposing draft SOLAS amendments for the mandatory carriage of electronic inclinometers on container ships and bulk carriers, taking into account the consideration by correspondence during MSC 104 and further developments

Strategic direction, if applicable: 2

Output: 2.14

Action to be taken: Paragraph 10

Related documents: Resolutions MSC.277(85); MSC.333(90); MSC.363(92); MSC.1/Circ.1228; MSC 101/24, MSC 101/21/14, MSC 101/INF.9; MSC 103/20/10; MSC 104/1/2/Add.1 and MSC 104/18

Introduction

1 Document MSC 103/20/10 proposed draft SOLAS amendments for the mandatory carriage of electronic inclinometers on container ships and bulk carriers of 3,000 gross tonnage and upwards, including a proposal to exempt those SOLAS amendments from the four-year amendment cycle.

2 MSC 101 agreed to include an output on "Development of SOLAS amendments for mandatory carriage of electronic inclinometers on container ships and bulk carriers" in the post-biennial agenda of the Committee (MSC 101/24, paragraphs 21.20 and 21.21). Subsequently, MSC 104 decided to include the output in the 2022-2023 biennial agenda of the NCSR Sub-Committee and in the provisional agenda for NCSR 9 (MSC 104/18, paragraph 15.19). MSC 104 also referred document MSC 103/20/10 to NCSR for consideration and to advise the Committee, taking into account the comments by IACS set out in document MSC 104/1/2/Add.1, annex 1 (MSC 104/18, paragraph 17.26).

Consideration

3 This document aims at addressing the comments by IACS set out in document MSC 104/1/2/Add.1, annex 1, as well as introducing further updates in order to facilitate the work of the Sub-Committee.

4 Regarding the proposal made by IACS that the definition of "container ship" should be aligned with that in regulation 2(28) of MARPOL Annex VI, the co-sponsors are of the view that MARPOL Annex VI is related to a different risk profile than the proposed amendments, justifying a different definition. The risk addressed by inclinometers, when container ships are concerned, is not only eminent when the ship is designed "exclusively for the carriage of containers in holds and on deck" but in all cases where containers are stored on deck regularly. Using the phrase "primarily to carry containers" therefore is much more in line with the risk profile.

5 Regarding the comment made by IACS that a back-up should be provided in case of electronic failure, the co-sponsors agree that a back-up system would ensure that the ship's roll motion is determined, displayed and recorded also in critical situations. Therefore, the requirement of an independent back-up system has been included in the draft SOLAS amendments set out in annex 1.

6 The proposed draft SOLAS amendments in annex 1 also include the consequential amendments identified by IACS concerning the Cargo Ship Safety Equipment Certificate, the Cargo Ship Safety Certificate, Form E and Form C.

7 Regarding the proposed review of resolution MSC.277(85), which next to clarifying the definition of bulk carrier is addressing ships not falling into the category, the co-sponsors are of the view that it is not necessarily consequential and thus not covered by the scope of the output.

8 In discussing a possible exemption of the proposed SOLAS amendments from the four-year amendment cycle under exceptional circumstances in accordance with the Guidance (MSC.1/Circ.1481), the decision by MSC 104, agreeing to an ad hoc mid-term amendment cycle, i.e. entry into force on 1 January 2026 for draft amendments adopted before 1 July 2024, has to be taken into account. The goal of that decision is to minimize the disruption to the amendment cycle caused by the COVID-19 pandemic. The co-sponsors are of the view, that no specific solution for the proposed amendments under MSC.1/Circ.1481 is necessary. The proposed amendments in annex 1 therefore include an entry into force date of 1 January 2026.

9 In order to facilitate the consideration by the Sub-Committee, annex 2 includes a revised and updated draft check monitoring sheet.

Action requested of the Sub-Committee

10 The Sub-Committee is invited to note the information given in this document, consider the draft SOLAS amendments set out in annex 1 and take action, as appropriate.

ANNEX 1

PROPOSED AMENDMENTS TO THE INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA; 1974, AS AMENDED

CHAPTER V SAFETY OF NAVIGATION

Regulation 2 – Definitions

1 The following new paragraphs are added after the existing paragraph 7 with the associated footnote:

"8. *Bulk carrier* means a bulk carrier as defined in regulation XII/1.1.

9. *Container ship* means a ship which is intended primarily to carry containers*.

* The term 'container' should be considered as having the same meaning as defined and applied in the International Convention for Safe Containers (CSC), 1972, as amended."

Regulation 18 – Approval, surveys and performance standards of navigational systems and equipment and voyage data recorder

2 The following reference is added to the footnote corresponding to paragraph 2:

"*Performance standards for electronic inclinometers* (resolution MSC.363(92))"

Regulation 19 - Carriage requirements for shipborne navigational systems and equipment

3 The following new paragraph 2.12 is added after existing paragraph 2.11:

"2.12 Container ships and bulk carriers of 3,000 gross tonnage and upwards constructed on or after [~~1 July 2024~~ 1 January 2026] shall be fitted with:

.1 an electronic inclinometer, or other means, to determine, display and record the ship's roll motion and

.2 an independent back-up system to meet the functional requirements of paragraph 2.12.1."

APPENDIX

CERTIFICATES

FORM OF SAFETY EQUIPMENT CERTIFICATE FOR CARGO SHIPS

Particulars of ship

The following new type of ship is added after gas carrier:

"Container ship"

RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY (FORM E)

3 Details of navigational systems and equipment

The following items are added after existing item 15:

"16 Electronic inclinometer

17 Back-up arrangement for electronic inclinometer"

RECORD OF EQUIPMENT FOR CARGO SHIP SAFETY (FORM C)

5 Details of navigational systems and equipment

The following items are added after existing item 15:

"16 Electronic inclinometer

17 Back-up arrangement for electronic inclinometer"

**PROPOSED AMENDMENTS TO THE PROTOCOL OF 1988 RELATING TO THE
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974**

ANNEX

**MODIFICATIONS AND ADDITIONS TO THE ANNEX TO THE INTERNATIONAL
CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974**

APPENDIX

**MODIFICATIONS AND ADDITIONS TO THE APPENDIX TO THE ANNEX TO THE
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FORM OF SAFETY CERTIFICATE FOR CARGO SHIPS

Particulars of ship

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**PROPOSED AMENDMENTS TO THE PROTOCOL OF 1978 RELATING TO THE
INTERNATIONAL CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974,
AS AMENDED**

ANNEX

**MODIFICATIONS AND ADDITIONS TO THE ANNEX TO THE INTERNATIONAL
CONVENTION FOR THE SAFETY OF LIFE AT SEA, 1974**

APPENDIX

FORM OF SAFETY EQUIPMENT CERTIFICATE FOR CARGO SHIPS

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ANNEX 2

**CHECK/MONITORING SHEET FOR THE PROCESS OF AMENDING
THE CONVENTION AND RELATED MANDATORY INSTRUMENTS
(PROPOSAL/DEVELOPMENT)**

Part I – Submitter of proposal (refer to paragraph 3.2.1.1)

1	<i>Submitted by</i> MSC 101/21/14 Germany
2	<i>Meeting session</i> MSC 101
3	5 March 2019

Part II – Details of proposed amendment(s) or new mandatory instrument (refer to paragraphs 3.2.1.1 and 3.2.1.2)

1	<i>Strategic direction</i>
2	
2	<i>Title of the output</i>
	Development of SOLAS amendments for mandatory carriage of electronic inclinometers on container ships and bulk carriers
3	<i>Recommended type of amendments</i> (MSC.1/Circ.1481) (delete as appropriate)
	Four-year cycle of entry into force
4	<i>Instruments intended for amendment</i> (SOLAS, LSA Code, etc.) or developed (new code, new version of a code, etc.)
	SOLAS
5	<i>Intended application</i> (scope, size, type, tonnage/length restriction, service (International/non-international), activity, etc.)
	Container ships and bulk carriers of 3,000 gross tonnage and upwards
6	<i>Application to new/existing ships</i>
	New ships
7	<i>Proposed coordinating sub-committee</i>
	NCSR
8	<i>Anticipated supporting sub-committees</i>
	-
9	<i>Time scale for completion</i>
	One session.
10	<i>Expected date(s) for entry into force and implementation/application</i>
	1 July 2024
11	<i>Any relevant decision taken or instruction given by the Committee</i>
	To take into account that the new mandatory requirement should not apply retroactively to existing ships (MSC 101/24, paragraphs 21.20 and 21.21)

Part III – Process monitoring to be completed during the work process at the Sub-Committee and checked as part of the final approval process by the Committee (refer to paragraph 3.2.1.3)

1	The Sub-Committee, at an initial engagement, has allocated sufficient time for technical research and discussion before the target completion date, especially on issues needing to be addressed by more than one Sub-Committee and for which the timing of relevant Sub-Committee meetings and exchanges of the result of consideration needed to be carefully examined.	yes
2	The scope of application agreed at the proposal stage was not changed without the approval of the Committee.	yes
3	The technical base document/draft amendment addresses the proposal's issue(s) through the suggested instrument(s); where it does not, the Sub-Committee offers the Committee an alternative method of addressing the problem raised by the proposal.	yes
4	Due attention is to be paid to the <i>Interim Guidelines for the systematic application of the grandfather clause (MSC/Circ.765)</i> .	yes
5	All references have been examined against the text that will be valid if the proposed amendment enters into force.	yes
6	The location of the insertion or modified text is correct for the text that will be valid when the proposed text enters into force on a four-year cycle of entry into force, as other relevant amendments adopted might enter into force on the same date.	yes
7	There are no inconsistencies in respect of scope of application between the technical regulation and the application statement contained in regulation 1 or 2 of the relevant chapter, and application is specifically addressed for existing and/or new ships, as necessary.	yes
8	Where a new term has been introduced into a regulation and a clear definition is necessary, the definition is given in the article of the Convention or at the beginning of the chapter.	yes
9	Where any of the terms "fitted", "provided", "installed" or "installation" are used, consideration has been given to clarifying the intended meaning of the term.	yes
10	All necessary related and consequential amendments to other existing instruments, including non-mandatory instruments, in particular to the forms of certificates and records of equipment required in the instrument being amended, have been examined and included as part of the proposed amendment(s).	yes
11	The forms of certificates and records of equipment have been harmonized, where appropriate, between the Convention and its Protocols.	yes
12	It is confirmed that the amendment is being made to a currently valid text and that no other bodies are concurrently proposing changes to the same text.	yes
13	All entry-into-force criteria (building contract, keel laying and delivery) have been considered and addressed.	yes

14	Other impacts of the implementation of the proposed/approved amendment have been fully analysed, including consequential amendments to the "application" and "definition" regulations of the chapter.	yes
15	The amendments presented for adoption clearly indicate changes made with respect to the original text, so as to facilitate their consideration.	yes
16	For amendments to mandatory instruments, the relationship between the Convention and the related instrument has been observed and addressed, as appropriate.	n/a
17	The related record format has been completed or updated, as appropriate.	
