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110th session
Agenda item 18

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WORK PROGRAMME

Proposal for a new output to revise MSC-MEPC.3/Circ.4/Rev.1

**Submitted by Bahamas, Bangladesh, Malaysia, Marshall Islands,
United Arab Emirates, IACS, INTERCARGO, InterManager and Nautical Institute**

SUMMARY

Executive summary: A review and reclassification of 7,602 historical reportable occurrences has highlighted shortcomings in the taxonomy used in MSC-MEPC.3/Circ.4/Rev.1 on *Revised harmonized reporting procedures – Reports required under SOLAS regulations I/21 and XI-1/6, and MARPOL, articles 8 and 12* which now forms the basis of reports made to the Marine Casualties and Incidents (MCI) module in GISIS. In this context, this document proposes a new output to review the circular, which was issued in 2014, as soon as practicable.

*Strategic direction,
if applicable:* 7

Output: Not applicable

Action to be taken: Paragraph 20

Related documents: MSC-MEPC.3/Circ.4/Rev.1 and III 10/18 (paragraph 4.46.1)

Background

1 Circular MSC-MEPC.3/Circ.4/Rev.1 was issued in 2014 and, provides the taxonomy with relevant features for reporting through the Marine Casualties and Incidents (MCI) module in the Organization's Global Integrated Shipping Information System (GISIS), in particular with the enhancement of the MCI module in 2023/24.

2 As part of a project to modernize its casualty and incident data management, the Bahamas conducted a data cleansing exercise. This involved reviewing and reclassifying 7,602 reportable occurrences spanning 12 years (10 years of historical data plus 2 years of contemporary reports) using the taxonomy in the annex to MSC-MEPC.3/Circ.4/Rev.1.

3 This comprehensive review coincides with discussions which took place at the tenth session of the Sub-Committee on Implementation of IMO Instruments (III), where the Working Group on Lessons Learned and Safety Issues Identified from the Analysis of Marine Safety Investigation Reports was tasked with considering document III 10/4/3 (InterManager), which requested the III Sub-Committee to take note of its report on *Analysis of accidents within enclosed spaces, falls and occurrences involving survival and rescue craft onboard ships* and consider additional sub-categories within the GISIS MCI module.

4 During its deliberations, the Working Group brought up the potential review and revision of MSC-MEPC.3/Circ.4/Rev.1. In this regard, it was noted that this would require a new output. Following the Group's recommendation, III 10 invited interested Member States and international organizations to submit proposals for a new output to revise MSC-MEPC.3/Circ.4/Rev.1 as per MSC-MEPC.1/Circ.5/Rev.5 (III 10/18, paragraph 4.46.1), soon to be MSC-MEPC.1/Circ.5/Rev.6, subject to concurrent approval by MEPC 83.

Need

5 The extensive data reclassification exercise conducted by the Bahamas revealed limitations in the current taxonomy that should be addressed to improve the quality and utility of the reporting of casualty events. These limitations, combined with the outcome of III 10's Working Group on Lessons Learned and Safety Issues Identified from the Analysis of Marine Safety Investigation Reports, demonstrate the need to update the appendices of the annex to MSC-MEPC.3/Circ.4/Rev.1 and by extension the GISIS MCI module to ensure:

- .1 complete and accurate capture of all types of casualties and incidents;
- .2 additional detail to support more meaningful analysis and facilitate the identification of trends; and
- .3 alignment with current marine safety investigation practices.

6 The Bahamas and co-sponsors consider these improvements as essential for maintaining the effectiveness of GISIS as a tool for improving maritime safety through data-driven decision-making.

Analysis of the issue

7 The exercise carried out by the Bahamas highlighted shortcomings with the contents of several tables in the appendices of the annex to MSC-MEPC.3/Circ.4/Rev.1, including but not limited to table 4 – Casualty event and table 12 – Ship operation/Task operation when attempting to capture the fundamental aspects of the reportable event, as outlined below:

- .1 high-level classification gaps and inconsistent granularity: while many of the tables present incredibly specific options, there are several significant omissions at the highest level (for example, there is no means to record a death resulting from an oxygen-deficient or toxic atmosphere) and a lack of useful granularity in some areas;
- .2 outdated terminology: in areas such as table 2, the language used to describe Safety recommendation focus does not reflect current practices or guidance provided for the analysis of quality of marine safety investigation reports; and

- .3 limited analytical framework: the exercise also identified that the prescribed approach for recording casualty analysis data (MSC-MEPC.3/Circ.4/Rev.1, annex, appendix 3) is overly reductive – fostering a simplistic approach to identifying contributory factors that also does not align with the current language employed in the conduct of no-blame investigations, especially from a human factors perspective.

8 The identified issues directly inform the scope of the proposed output, which aims to address these specific shortcomings through a comprehensive revision of the circular MSC-MEPC.3/Circ.4/Rev.1.

Analysis of implications

9 The proposed output is not expected to involve any additional costs to the maritime industry or additional legislative and administrative burdens.

10 A completed checklist for identifying administrative requirements and burdens (draft revised version of MSC-MEPC.1/Circ.5/Rev.5, annex 6) (MSC 109/22, paragraph 19.14 and annex 26) is set out in annex 1 to this document.

Benefits

11 The proposed revision of MSC-MEPC.3/Circ.4/Rev.1 would deliver the following benefits:

- .1 enhanced data quality: a more comprehensive and precise taxonomy would ensure that reporting of casualty events would better reflect the actual circumstances of casualties and incidents, leading to more accurate trend analysis and targeted safety improvements; and
- .2 strengthened safety analysis and enhanced GISIS MCI module utility: a more robust analytical framework would support better identification of systemic issues and contributory factors, leading to more effective safety recommendations and preventive measures, thus enhancing the values of the utility of the GISIS MCI module as a tool for maritime safety analysis and decision-making.

IMO's objectives

12 The proposed revision of MSC-MEPC.3/Circ.4/Rev.1 is directly relevant to the Organization's goal of improving maritime safety and environmental protection by ensuring accurate and comprehensive collection and analysis of data concerning marine casualties. This data is crucial for identifying trends, understanding the causes of accidents, and developing effective recommendations and preventative measures.

13 The proposal fully supports strategic direction 8 (Ensure organizational effectiveness) of the Organization's Strategic Plan for the six-year period 2024 to 2029, which includes the consideration of means for strengthening the Organization's technical and analytical capabilities to collect, manage, analyse and report on relevant information and data. Furthermore, since one of the specific limitations that would be addressed relates to the accurate recording of information concerning accidents within enclosed spaces, the proposal also supports strategic direction 6 (Address the human element).

14 Moreover, the proposal for a new output of the Circular MSC-MEPC.3/Circ.4/Rev.1 would support strategy direction 7 as information from different sources, including GISIS, should be considered as feedback into the regulatory processes of the Organization to allow it to make informed decisions on reviewing existing regulations and developing new ones.

Output

15 The Bahamas and co-sponsors propose the establishment of a new output with the title "Revision of MSC-MEPC.3/Circ.4/Rev.1 on casualty-related matters – reports on marine casualties and incidents" with the following scope of work:

- .1 address high-level omissions of data;
- .2 improve granularity in key areas;
- .3 update language to reflect current best practices and guidance for marine safety investigation reports; and
- .4 promote a more comprehensive approach to identifying contributory factors, aligning with current no-blame investigation practices as per the principles of the Code of the International Standards and Recommended Practices for a Safety Investigation Into a Marine Casualty or Marine Incident (Casualty Investigation Code).

Human element

16 The completed Checklist for considering and addressing the human element (draft revised version of MSC-MEPC.1/Circ.5/Rev.5, annex 5, appendix) (MSC 109/22, paragraph 19.14 and annex 26) is included in annex 2.

Urgency and road map

17 While prompt completion of the proposed review of MEPC.3/Circ.4/Rev.1 would be preferable, the co-sponsors acknowledge its connection to the ongoing full review of GISIS.

18 Accordingly, it is proposed that the new output be included in the 2026-2027 biennial agenda of the III Sub-Committee, with the two sessions to complete the work. It is also proposed that the new output, if approved, be added to the provisional agenda of III 12.

19 This proposed timeline envisages that the work will commence at III 12 and be completed in 2027 by III 13. If III 13 takes place after MSC 113 in 2027 (as is typically the case during Assembly years), the draft revision of MEPC.3/Circ.4/Rev.1 will be considered by MSC 114 and MEPC 87 in 2028 with a view to approval. Therefore, it is the view of the co-sponsors that sufficient time will be provided for the full review of GISIS, which is under way, to have been completed, thus allowing for any amendments to the appendices of circular MEPC.3/Circ.4/Rev.1 to be incorporated into GISIS after 2028.

Action requested of the Committee

20 The Committee is invited to note the information provided above, and consider the proposal for a new output on "Revision of MSC-MEPC.3/Circ.4/Rev.1 on casualty-related matters – Reports on marine casualties and incidents", as outlined in paragraph 15, and take action as appropriate.

ANNEX 1

CHECKLIST FOR IDENTIFYING ADMINISTRATIVE REQUIREMENTS

This checklist should be used when preparing the analysis of implications required in submissions of proposals for inclusion of outputs. For the purpose of this analysis, the term "administrative requirement" is defined in accordance with resolution A.1043(27), as an obligation arising from a mandatory IMO instrument to provide or retain information or data.

Instructions:

- (A) If the answer to any of the questions below is **YES**, the Member State proposing an output should provide supporting details on whether the requirements are likely to involve start-up and/or ongoing costs. The Member State should also give a brief description of the requirement and, if possible, provide recommendations for further work, e.g. would it be possible to combine the activity with an existing requirement?
- (B) If the proposal for the output does not contain such an activity, answer **NR** (Not required).
- (C) For any administrative requirement, full consideration should be given to electronic means of fulfilling the requirement in order to alleviate administrative burdens.

| | | |
|--|-----------|--|
| 1. Notification and reporting? Reporting certain events before or after the event has taken place, e.g. notification of voyage, statistical reporting for IMO Members Description of administrative requirement(s) and method of fulfilling it: (if the answer is yes) | NR | Yes <input type="checkbox"/> Start-up <input type="checkbox"/> Ongoing |
| 2. Record keeping? Keeping statutory documents up to date, e.g. records of accidents, records of cargo, records of inspections, records of education Description of administrative requirement(s) and method of fulfilling it: (if the answer is yes) | NR | Yes <input type="checkbox"/> Start-up <input type="checkbox"/> Ongoing |
| 3. Publication and documentation? Producing documents for third parties, e.g. warning signs, registration displays, publication of results of testing Description of administrative requirement(s) and method of fulfilling it: (if the answer is yes) | NR | Yes <input type="checkbox"/> Start-up <input type="checkbox"/> Ongoing |
| 4. Permits or applications? Applying for and maintaining permission to operate, e.g. certificates, classification society costs Description of administrative requirement(s) and method of fulfilling it: (if the answer is yes) | NR | Yes <input type="checkbox"/> Start-up <input type="checkbox"/> Ongoing |
| 5. Other identified requirements? Description of administrative requirement(s) and method of fulfilling it: (if the answer is yes) | NR | Yes <input type="checkbox"/> Start-up <input type="checkbox"/> Ongoing |

ANNEX 2

CHECKLIST FOR CONSIDERING AND ADDRESSING THE HUMAN ELEMENT

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-----|--|-----------------|---|---|---|
| | Workload | | Other relevant references may be added Strike out references that are not relevant | If answer to question is "yes" identify considerations. If answer is "no" make proper justification | Identify how human element considerations should be addressed in the output |
| 1 | Does the "output" affect workload? | | | | |
| 1.1 | On board, especially in the already intensive phases of the voyage and port operations to: | No | | This proposal is for a new output for a revision of MSC-MEPC.3/Circ.4/Rev.1 to address high-level omissions of data, improve granularity in key areas, update language to reflect current best practices and guidance for marine safety investigation reports and promote a more comprehensive approach to identifying contributory factors, aligning with current no-blame investigation practices. The proposal does not call for change to any IMO instrument that will have a direct effect on the workload of seafarers, managers or other parts of the industry. | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-------|---|-----------------|---------------------|---|-------------------|
| | | | | As noted in paragraph 11 of the proposal, the proposed revision of MSC-MEPC.3/Circ.4/Rev.1 would deliver enhanced data quality, strengthen safety analysis and enhance GISIS MCI module utility; this aligns with ongoing work to improve GISIS and efforts could correlate with the output to review the Casualty Investigation Code, if approved. | |
| 1.1.1 | Operations including navigation, cargo and engineering | No | | As above. | Not applicable. |
| 1.1.2 | Maintenance of the ships structure and its equipment | No | | As above. | Not applicable. |
| 1.1.3 | Onboard administration in support of the ships' management systems | No | | As above. | Not applicable. |
| 1.1.4 | Onboard administration related to regulation involving flag States, classification societies, port State and other bodies such as charterers and port authorities | No | | As above. | Not applicable. |
| 1.1.5 | Increased workload or time pressure on personnel if involved in implementation of changes prior to the implementation date | No | | As above. | Not applicable. |
| 1.2 | Ashore, in a manner that would affect the ships operation to: | No | | This proposal is for a new output for a revision of MSC-MEPC.3/Circ.4/Rev.1 to address high-level omissions of data, improve granularity in key areas, update language to reflect current best practices and guidance | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-------|---|-----------------|---------------------|---|-------------------|
| | | | | <p>for marine safety investigation reports and promote a more comprehensive approach to identifying contributory factors, aligning with current no-blame investigation practices.</p> <p>The proposal does not call for change to any IMO instrument that will have a direct effect on the workload of seafarers, managers or other parts of the industry.</p> <p>As noted in paragraph 11 of the proposal, the proposed revision of MSC-MEPC.3/Circ.4/Rev.1 would deliver enhanced data quality, strengthen safety analysis and enhance GISIS MCI module utility; this aligns with ongoing work to improve GISIS and efforts could correlate with the output to review the Casualty Investigation Code, if approved.</p> | |
| 1.2.1 | Companies' administration | No | | As above. | Not applicable. |
| 1.2.2 | Flag State, port State and classification societies administration such that certification and other processes are compromised or delayed | No | | As above. | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|------------|--|-----------------|---|--|--|
| | Decision-making | | <i>Other relevant references may be added</i> <i>Strike out references that are not relevant</i> | <i>If answer to question is "yes" identify considerations. If answer is "no" make proper justification</i> | <i>Identify how human element considerations should be addressed in the output</i> |
| 2 | Does the "output" impact decision-making on board the ship? | | | | |
| 2.1 | By confusion with existing requirements and regulations | No | | <p>This proposal is for a new output for a revision of MSC-MEPC.3/Circ.4/Rev.1 to address high-level omissions of data, improve granularity in key areas, update language to reflect current best practices and guidance for marine safety investigation reports and promote a more comprehensive approach to identifying contributory factors, aligning with current no-blame investigation practices.</p> <p>The proposal does not call for change to any IMO instrument that will have a direct effect on the workload of seafarers, managers or other parts of the industry.</p> | Not applicable |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-----|---|-----------------|---------------------|---|-------------------|
| | | | | As noted in paragraph 11 of the proposal, the proposed revision of MSC-MEPC.3/Circ.4/Rev.1 would deliver enhanced data quality, strengthen safety analysis and enhance GISIS MCI module utility; this aligns with ongoing work to improve GISIS and efforts could correlate with the output to review the Casualty Investigation Code, if approved. | |
| 2.2 | By changing responsibilities as laid out in the ISM Code | No | | As above. | Not applicable. |
| 2.3 | By creating complexity in its implementation and/or in the safety management systems | No | | As above. | Not applicable. |
| 2.4 | By requiring increased mental effort, such as the need to find, transform and analyse data or result in the need to make judgements based on incomplete information | No | | As above. | Not applicable. |
| 2.5 | By limiting the time available to establish situational awareness, decide, communicate (possibly across time zones) or check | No | | As above. | Not applicable. |
| 2.6 | By increasing reliance on judgement and administrative controls to manage major risks such as oil spills and collisions | No | | As above. | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|------------|--|-----------------|---|--|--|
| | Living and working environment | | <i>Other relevant references may be added</i> <i>Strike out references that are not relevant</i> | <i>If answer to question is "yes" identify considerations. If answer is "no" make proper justification</i> | <i>Identify how human element considerations should be addressed in the output</i> |
| 3 | Does the "output" affect the living and working environment? | | | | |
| 3.1 | By interfering with existing arrangements for abandonment, fire-fighting and other emergency plans or procedures | No | | <p>This proposal is for a new output for a revision of MSC-MEPC.3/Circ.4/Rev.1 to address high-level omissions of data, improve granularity in key areas, update language to reflect current best practices and guidance for marine safety investigation reports and promote a more comprehensive approach to identifying contributory factors, aligning with current no-blame investigation practices.</p> <p>The proposal does not call for change to any IMO instrument that will have a direct effect on the workload of seafarers, managers or other parts of the industry.</p> | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-----|--|-----------------|---------------------|---|-------------------|
| | | | | As noted in paragraph 11 of the proposal, the proposed revision of MSC-MEPC.3/Circ.4/Rev.1 would deliver enhanced data quality, strengthen safety analysis and enhance GISIS MCI module utility; this aligns with ongoing work to improve GISIS and efforts could correlate with the output to review the Casualty Investigation Code, if approved. | |
| 3.2 | By introducing new materials that could create an explosion, fire, environmental or occupational health risk | No | | As above. | Not applicable. |
| 3.3 | By introducing new high energy sources such as high-voltage, high pressure fluids | No | | As above. | Not applicable. |
| 3.4 | By affecting access or egress and causing lack of ventilation in working spaces | No | | As above. | Not applicable. |
| 3.5 | By affecting the habitability of accommodation spaces due to noise, vibration, temperatures, dust and other contaminants | No | | As above. | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|------------|--|-----------------|---|--|--|
| | Operation and maintenance | | <i>Other relevant references may be added</i> <i>Strike out references that are not relevant</i> | <i>If answer to question is "yes" identify considerations. If answer is "no" make proper justification</i> | <i>Identify how human element considerations should be addressed in the output</i> |
| 4 | Does the "output" affect the operation and maintenance of the ship, its structure or systems and equipment? | | | | |
| 4.1 | By introducing equipment that the user may find difficult to operate or maintain or may be unreliable | No | | <p>This proposal is for a new output for a revision of MSC-MEPC.3/Circ.4/Rev.1 to address high-level omissions of data, improve granularity in key areas, update language to reflect current best practices and guidance for marine safety investigation reports and promote a more comprehensive approach to identifying contributory factors, aligning with current no-blame investigation practices.</p> <p>The proposal does not call for change to any IMO instrument that will have a direct effect on the workload of seafarers, managers or other parts of the industry.</p> | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-----|---|-----------------|---------------------|---|-------------------|
| | | | | As noted in paragraph 11 of the proposal, the proposed revision of MSC-MEPC.3/Circ.4/Rev.1 would deliver enhanced data quality, strengthen safety analysis and enhance GISIS MCI module utility; this aligns with ongoing work to improve GISIS and efforts could correlate with the output to review the Casualty Investigation Code, if approved. | |
| 4.2 | By introducing new and/or novel technology, or technology that changes the role of the person | No | | As above. | Not applicable. |
| 4.3 | By introducing requirements for new competencies and roles | No | | As above. | Not applicable. |
| 4.4 | By overloading existing infrastructure such as power generation and ventilation systems | No | | As above. | Not applicable. |
| 4.5 | By poor integration with existing systems and controls | No | | As above. | Not applicable. |
| 4.6 | By introducing new and unfamiliar operations/procedures | No | | As above. | Not applicable. |
| 4.7 | By introducing new and unfamiliar operating interfaces? | No | | As above. | Not applicable. |
| 4.8 | By introducing risks to the ship during any modifications required prior to the implementation date of the output | No | | As above. | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-----|--|-----------------|---|---|---|
| | Measures to address the human element | | Other relevant references may be added Strike out references that are not relevant | If answer to question is "yes" identify considerations. If answer is "no" make proper justification | Identify how human element considerations should be addressed in the output |
| 5 | Does the "output" require changes to: | | | | |
| 5.1 | Training | No | | This proposal is for a new output for a revision of MSC-MEPC.3/Circ.4/Rev.1 to address high-level omissions of data, improve granularity in key areas, update language to reflect current best practices and guidance for marine safety investigation reports and promote a more comprehensive approach to identifying contributory factors, aligning with current no-blame investigation practices. The proposal does not call for change to any IMO instrument that will have a direct effect on the workload of seafarers, managers or other parts of the industry. | Not applicable. |

| | 1 Question | 2 Yes/ No | 3 IMO references | 4 Considerations | 5 Instructions |
|-----|---|-----------------|---------------------|---|-------------------|
| | | | | As noted in paragraph 11 of the proposal, the proposed revision of MSC-MEPC.3/Circ.4/Rev.1 would deliver enhanced data quality, strengthen safety analysis and enhance GISIS MCI module utility; this aligns with ongoing work to improve GISIS and efforts could correlate with the output to review the Casualty Investigation Code, if approved. | |
| 5.2 | Practical skill development and competences | No | | As above. | Not applicable. |
| 5.3 | Operating, management and/or maintenance procedures | No | | As above. | Not applicable. |
| 5.4 | Information/manuals for operation and maintenance | No | | As above. | Not applicable. |
| 5.5 | Spares outfit | No | | As above. | Not applicable. |
| 5.6 | Occupational safety requirements including guarding and PPE | No | | As above. | Not applicable. |
| 5.7 | Shore support | No | | As above. | Not applicable. |