PRE-BRIEF

for the **11th session of the**

SUB-COMMITTEE ON CARRIAGE OF CARGOES AND CONTAINERS (CCC 11)

Monday 8th to Friday 12th September 2025

and

for the **2nd session of the**

INTERSESSIONAL WORKING GROUP ON DEVELOPMENT OF TECHNICAL PROVISIONS FOR SAFETY OF SHIPS USING ALTERNATIVE FUELS (ISWG-AF2)

Monday 1st to Friday 8th September

INTRODUCTION

The sub-committee on *Carriage of Cargoes and Containers (CCC 11)* will take place from the 8th to the 12th September and will be preceded by the *Intersessional Working Group on Development of technical provisions for safety of ships using alternative fuels (ISWG-AF2).* The Intersessional Working Group will consider guidelines related to the use of alternative fuels and its report will be considered by CCC 11. At the time of writing this brief it is unclear which relevant paper submissions will be considered by CCC and which by ISWG-AF2.

SUB-COMMITTEE ON CARRIAGE OF CARGOES AND CONTAINERS (CCC 10)

Key Topics

The key topics[1] that will be discussed and may be of interest to Members include:

- **Cargoes**
  - *Agenda item 5 – Amendments to the IMSBC Code and Supplements*
  - *Agenda item 15 – Any other business*
    - Fumigation fatalities

- **GHG Reduction/New Fuels**
  - *Agenda item 3 - Amendments to the IGF Code and development of guidelines for alternative fuels and related technologies*
  - *Agenda item 9 - Unified interpretation of provisions of IMO safety, security, and environment-related conventions*
  - *Agenda item 11 - Revision of the Interim recommendations for carriage of liquefied hydrogen in bulk*
  - *Agenda item 15 – Any other business*
    - Arrangements of fuel tanks in methyl/ethyl alcohol fuelled vessels

- **Enclosed Space Entry**
  - *Agenda item 15 – Any other business*
    - Enclosed space entry fatalities & fumigation fatalities

[1] The provisional agenda for CCC 11 can be found in Appendix 1

Working Groups

The INTERCARGO Secretariat will endeavour to participate in the following Working Groups (WGs):

1. Development of guidelines for alternative fuels and related technologies

INTERSESSIONAL WORKING GROUP ON DEVELOPMENT OF TECHNICAL PROVISIONS FOR SAFETY OF SHIPS USING ALTERNATIVE FUELS

Provisional Agenda

1. Adoption of the agenda
2. Further development of the draft interim guidelines for ships using hydrogen as fuel, towards finalization
3. If time permits, further development of the draft interim guidelines for ships using low-flashpoint oil fuels
4. Any other business
5. Report to CCC 11

CARGOES

Report of E&T 41 including revision 08-25 of the IMSBC Code

CCC 11/5 **Report of the forty-first session of the Editorial and Technical Group (IMSBC Code matters) - Note by the Secretariat**

The Secretariat provides the report of the Editorial and Technical Group at its forty-first session – E&T41 - (IMSBC Code matters) that took place in September 2025.
Part of E&T 41's work was to finalise draft amendments to revision 08-25 of the IMSBC Code which were in turn sent MSC 110 for adoption with an entry into force of January 2027. See also INTERCARGO's MSC 110 briefs here.

New Schedules

CCC 11/5/1 **New individual schedule for BITUMINOUS GRANULATES COARSE Submitted by the Kingdom of the Netherlands**

CCC 11/INF.2 **Information to support a new individual schedule for BITUMINOUS GRANULATES COARSE - Submitted by the Kingdom of the Netherlands**

The Netherlands proposes a new schedule for BITUMINOUS GRANULATES COARSE, a Group C Cargo.

CCC 11/5/2 **New individual schedule for Bituminous Granulates Fines - Submitted by the Kingdom of the Netherlands**

CCC 11/INF.3 **Information to support a new individual schedule for BITUMINOUS GRANULATES FINES - Submitted by Netherlands (Kingdom of the)**

The Netherlands proposes a new schedule for BITUMINOUS GRANULATES COARSE, a Group A Cargo

CCC 11/5/3 **Draft new individual schedule for untreated incinerator bottom ash (U-IBA) - Submitted by Finland and Ireland**

Originally considered by CCC 9, the co-sponsors provide supplementary information and an updated proposal for a new individual schedule for UNTREATED INCINERATOR BOTTOM ASH (U-IBA), a Group A and B, MHB (WF & WT) Cargo.

CCC 11/5/4 **Draft new individual schedule for Contaminated Soil PFAS - Submitted by Finland and Ireland**

CCC 11/INF.4 **Information to support the proposed new individual schedule for Contaminated Soil-PFAS - Submitted by Finland and Ireland**

The co-sponsors propose a new schedule for CONTAMINATED SOIL PFAS, a Group A Cargo.

CCC 11/5/7 **Draft new individual schedule for calcium carbonate/lime mud - Submitted by Sweden**

CCC 11/INF.8 **Information to support a new individual schedule for Calcium carbonate/Lime mud - Submitted by Sweden**

Sweden proposes a new schedule for CALCIUM CARBONATE, LIME MUD, a Group A Cargo

CCC 11/5/8 **New individual schedule for mullite - Submitted by China**

CCC 11/INF.11 **Information to support the proposed new individual schedule for mullite - Submitted by China**

China proposes a new schedule for MULLITE, a Group C Cargo

CCC 11/5/9 **New individual schedule for kaolinite - Submitted by China**

CCC 11/INF.12 **Information to support the proposed new individual schedule for kaolinite -Submitted by China**

China proposes a new schedule for KAOLINITE, a Group C Cargo

Cargoes not listed in the IMSBC Code

CCC 11/5/5 ***Proposal for a way forward for publishing on GISIS every individual solid bulk cargo not listed in the IMSBC Code but shipped based on provisional assessments - Submitted by Finland, Liberia, Netherlands (Kingdom of the) and BIMCO***

The co-sponsors put forward a proposal for a way forward concerning information to be published on GISIS of solid bulk cargoes not listed in the IMSBC Code but shipped based on provisional assessments.

The paper builds on previous work to introduce a new module to GISIS for the competent authority of the port of loading to submit information to IMO on an application made under 1.3.2 of the IMSBC Code.

Fumigation

CCC 11/5/6 **Fumigation-related casualties - Submitted by Bahamas, Indonesia, Kingdom of Saudi Arabia, United Kingdom, IMarEST, InterManager, International Bulk Terminals Association, International Transport Workers' Federation and The Nautical Institute**

This document invites the Sub-Committee to note and consider the lessons learned from fumigation-related casualties and the recommendations for a further holistic review of the Recommendations on the safe use of pesticides in ships applicable to the fumigation of cargo holds (MSC.1/Circ.1264).

Liquefaction/Dynamic Separation

CCC 11/INF.13 **Study on the complementary test on the moisture content of group A cargoes using rapid testing technique - Submitted by China**

China provides information on the application of a thermogravimetric rapid analyser in the complementary test on the moisture content of group A cargoes, and analyses the effectiveness and potential application of the method.

CCC 11/INF.14 **Theoretical and experimental study on the of dynamic separation of solid bulk cargoes - Submitted by China**

China introduces a theoretical and experimental study on the dynamic separation of solid bulk cargoes and provides a possible mechanism for dynamic separation and a test method thereof.

GHG REDUCTION / NEW FUELS

General

CCC 11/3 **Report of the Correspondence Group - Submitted by Norway**

This document provides the report of the Correspondence Group on Development of Technical Provisions for the Safety of Ships using Alternative Fuels regarding Ammonia, Hydrogen and low-flashpoint oil fuels.

IGF Code

CCC 11/3/1 **Amendment to paragraph 5.7.1 of the IGF Code- Submitted by IACS and SGMF**

This document proposes an amendment of the IGF Code, pertaining to the inclusion of vent pipes in the existing regulation.

CCC 11/9 **IACS unified interpretation UI GF 22 of paragraph 9.6.1 of the IGF Code- Submitted by IACS**

This document provides IACS unified interpretation UI GF 22 on paragraph 9.6.1 of the IGF Code in respect of gas fuel vent pipes of single-walled construction in machinery spaces.

CCC 11/9/2 **Draft amendments of unified interpretation of paragraph 9.2.2 of the IGF Code (MSC.1/Circ.1670)- Submitted by IACS**

IACS proposes amendments to MSC.1/Circ.1670 to improve the unified interpretation of IGF Code paragraph 9.2.2 by clarifying the use of single common flanges at fuel consumer connections. The proposal introduces requirements for technical justification and safeguards to mitigate failure risks such as bolt loosening or sudden pipe movement.

IGC Code

CCC 11/9/3 **Proposed revised interpretation of the IGC Code, related to the secondary barrier testing and effectiveness assessment - Submitted by IACS**

IACS proposes a draft revised interpretation of the IGC Code, related to the secondary barrier testing and effectiveness assessment.

CCC 11/9/4 **Draft unified interpretation of paragraph 1.1.7.2 of the IGC Code (resolution MSC.370(93))- Submitted by China**

N/A to BC.

Methanol/Ethanol as fuel

CCC 11/3/2 **Proposed revisions of the MSC.1/Circ.1621 cofferdam requirements to promote the use of alternative fuels and related technologies- Submitted by Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands (Kingdom of the), Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and European Commission**

This document proposes amendments to the Interim Guidelines for the Safety of Ships Using Methyl/Ethyl Alcohol as Fuel (MSC.1/Circ.1621) to allow for the use of sandwich-structured cofferdams as a safe alternative to the conventional cofferdam design currently defined. The co-sponsors seek to introduce amendments that establish design goals and methodologies aimed at achieving equivalent levels of safety in a broader and more flexible manner. This approach takes into consideration advancements in technology and operational experience gained from the implementation and monitoring of alternative solutions. The proposed amendments aim to enhance the safety of ships, protection of human health, and the preservation of the marine environment.

CCC 11/3/3 Proposed amendment to MSC.1/Circ.1621- Submitted by China

China proposes a new section on personnel protection be incorporated into the Interim Guidelines for the Safety of Ships Using Methyl/Ethyl Alcohol as Fuel during the upcoming revision process and in view of the potential future development of these guidelines into mandatory regulations. This proposal takes into account the specific characteristics and hazards associated with methanol fuel. The draft amendment is provided in the annex.

CCC 11/3/5 Experiences gained using the Interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel (MSC.1/Circ.1621)- Submitted by the Kingdom of the Netherlands

The cosponsors propose that, when revising MSC.1/Circ.1621 or developing a mandatory instrument for methyl/ethyl alcohol fuel systems, certain paragraphs should be reviewed to ensure greater flexibility for alternative solutions, reduce the need for extensive analyses where sufficient knowledge exists, support applicability to converted existing ships, and enable the use of dual-fuel systems.

CCC 11/INF.17 Experiences gained using the Interim Guidelines for the safetyof ships using methyl/ethyl alcohol as fuel (MSC.1/Circ.1621)- Submitted by Estonia and Netherlands (Kingdom of the)

The document, submitted by Estonia and the Netherlands, shares experiences using the Interim Guidelines (MSC.1/Circ.1621) for the safety of ships using methyl/ethyl alcohol as fuel. It highlights challenges with crew training requirements under the STCW Convention, noting that current IGF Code training—designed for LNG—is insufficient for methanol. The paper calls for clearer guidance, especially for dual-fuel ships not actively using low-flashpoint fuels, and supports developing fuel-specific training frameworks under IMO's Human Element Sub-Committee (HTW).

CCC 11/3/6 Ethanol and methanol compared: safety characteristics and regulatory considerations- Submitted by Brazil

The authors provide the key differences between ethanol and methanol when used as marine fuels based on Brazil's consolidated experience in transporting ethanol as bulk liquid cargo.

CCC 11/15/1 IACS Unified Interpretation GF 21 of paragraph 11.7.1 of the Interim guidelines for the safety of ships using methyl/ethyl alcohol as fuel (MSC.1/Circ.1621)- Submitted by IACS

IACS proposes a unified interpretation (GF 21) of paragraph 11.7.1 of the Interim Guidelines for methyl/ethyl alcohol-fueled ships, recommending that CO_2 fire-extinguishing systems in machinery spaces use 50% of gross volume as design concentration for effectiveness against alcohol fires. Alternatives may be accepted based on risk assessment and Administration approval

Fuel cell technologies

CCC 11/3/4 Proposed considerations for developing regulations for onboard fuel cell power installation- Submitted by the Republic of Korea

The Republic of Korea informs that the global marine fuel cell market is projected to grow at an average annual rate of 7.8% between 2025 and 2029, reaching approximately USD 234.6 million by 2029. In order to enhance the practical application of safety design for shipboard fuel cell power installations, Korea proposes to clearly distinguish between the fuel cell enclosure and the fuel cell room, and to apply differentiated safety requirements that reflect the distinct characteristics and risk profiles of each space

CCC 11/INF.16 Information on accelerated durability testing of hydrogen fuel cells for maritime use- Submitted by the Republic of Korea

ROK presents results from accelerated durability testing of hydrogen fuel cells for maritime use. It introduces a new protocol (SRV protocol) based on the operational profile of a small research vessel, showing moderate performance degradation (38.74%) compared to existing IEC (69.3%) and DOE (15.8%) protocols. The study underscores the need for ship-specific durability testing frameworks to improve the reliability and standardization of hydrogen fuel cell applications in shipping.

Hydrogen

CCC 11/3/7 Comments on the report of the Correspondence Group (CCC 11/3) - Submitted by EUROMOT

EUROMOT provides comments on document CCC 11/3, especially regarding machinery space concepts and the use of hydrogen in high-speed engines.

CCC 11/3/8 Comments on document CCC 11/3 (part 1) - Submitted by Japan
CCC 11/3/9 Comments on document CCC 11/3 (part 2) - Submitted by Japan

Japan comments on document CCC 11/3 regarding the draft interim guidelines for ships using hydrogen as fuel. The papers: 1)highlight inconsistencies and impracticalities in requirements for environmental control measures and proposes solutions to address these issues, 2) proposes amendments to improve vacuum system reliability, including clarifying segregation for redundancy and rupture discs as safer alternatives, 3) emphasizes the need to allow probabilistic methods for fuel tank arrangements and proposes clarifying requirements on bilge alarms, relief systems and piping flexibility and 4) highlights safety concerns with valve and ventilation arrangements and suggests alternative wording to better reflect hydrogen-specific risks.

CCC 11/3/10 Comments on document CCC 11/3 (Norway), annex 1 (part 2) - Submitted by the Republic of Korea

ROK provides comments on annex 1 to document CCC 11/3 concerning the development of interim guidelines on ships using hydrogen as fuel. The paper comments on; 1) ventilation requirements, 2) explosion risk analysis, 3) Vacuum loss monitoring and scenario and 4) Emergency training requirements.

CCC 11/3/11 Comments on the draft interim guidelines for ships using hydrogen as fuel in the report of the Correspondence Group (CCC 11/3 (Norway)) - Submitted by China

China provides comments on the safety technical provisions in annex 1 (the draft interim guidelines for ships using hydrogen as fuel) of the report of the Correspondence Group> The paper comments on: 1) Arrangements of tank connection spaces, 2) Double-wall piping for compressed hydrogen fuel, and 3) Ventilation.

CCC 11/3/13 Comments on document CCC 11/3 (Norway) – part 1 - Submitted by IACS
CCC 11/3/14 Comments on document CCC 11/3 (Norway) – part 2 - Submitted by IACS
CCC 11/3/15 Comments on document CCC 11/3 (Norway) – part 3 - Submitted by IACS

IACS provides comments on annex 1 of document CCC 11/3 (Norway) as regards the development of the interim guidelines for the safety of ships using hydrogen fuels.

CCC 11/3/12 Comments on sections 4.3 and 12.3 of the draft interim guidelines for ships using hydrogen as fuel in the report of the Correspondence Group (CCC 11/3 (Norway)) - Submitted by China

China provides comments on the provisions for explosion consequence mitigation and explosion risk analysis in annex 1 (the draft interim guidelines for ships using hydrogen as fuel) of the report of the Correspondence Group (CCC 11/3 (Norway)).

CCC 11/3/16 Comments and proposed amendments on document CCC 11/3 (Norway) – report of the Correspondence Group - Submitted by Oman

Oman provides legal and regulatory comments on document CCC 11/3 (Norway). While the draft offers a valuable technical foundation, several legal and regulatory gaps have been identified that may hinder uniform implementation, legal enforceability, and alignment with binding IMO instruments.

CCC 11/11 Proposal for the revision of the Interim recommendations for carriage of liquefied hydrogen in bulk - Submitted by India and Republic of Korea

This proposal recommends revising the IMO's Interim Recommendations (MSC.565(108)) to include Part D, covering membrane-type cargo containment systems with vacuum insulation for the carriage of liquefied hydrogen (LH_2) in bulk. It introduces safety and design requirements addressing vacuum operation, leakage scenarios, and insulation integrity based on HAZID study results.

CCC 11/11/1 Comments on document CCC 11/11 - Submitted by Japan

Japan provides comments on document CCC 11/11 an in particular on: 1) Emergency control procedure, 2) Safety measures for permeation through a primary barrier and 3) Air intrusion detection and inerting measures.

CCC 11/11/2 Comments on the proposal for the revision of the Interim recommendations for carriage of liquefied hydrogen in bulk in document CCC 11/11 - Submitted by the Republic of Korea

This document clarifies that the proposed part D in document CCC 11/11 is intended to supplement the IGC Code by addressing the specific safety challenges associated with the transport of liquefied hydrogen using membrane-type cargo containment systems. Specifically, it proposes that maintaining the inter-barrier and hold spaces of membrane-type cargo containment systems under vacuum be considered as equivalent to the inerting requirement set out in 9.2.1 of the IGC Code,

CCC 11/INF 5 Demonstration test results of a liquefied hydrogen carrier- Submitted by Japan

Japan presents test results from the Suiso Frontier, the world's first liquefied hydrogen (LH_2) carrier, confirming the effectiveness of its multi-layer vacuum insulation system and overall design. The tests validated safety, stability, and Boil-Off Rate (BOR), supporting future discussions on raising the LH_2 filling limit once more operational data is collected.

CCC 11/INF 15 Technical information on the cryogenic test for high manganese casting valves - Submitted by Republic of Korea

The document, submitted by the Republic of Korea, presents successful cryogenic test results for high manganese steel casting valves, confirming their viability as alternatives to stainless steel for LNG and hydrogen service. The valves met ISO standards (ISO 28921-1, ISO 5208), showing no leakage or failures at -196°C. These materials, already approved for LNG tanks, are being developed

further for ammonia and hydrogen applications. The paper encourages timely regulatory updates to facilitate broader adoption of such materials to support shipping's GHG reduction goals.

ENCLOSED SPACE ENTRY

CCC 11/15 **Enclosed space fatalities aboard ships for the period 2000 to 2024 - Submitted by IBTA**

IBTA provides an updated summary of research carried out into all reported enclosed space related fatalities across all ship types for the 25-year period from 2000 to 2024. It aims to support the provisions of the Revised recommendations for entering enclosed spaces aboard ships (resolution A.1050(27)).

CCC 11/15/3 **Enclosed space fatalities by rank for the period 2000 to 2024 - Submitted by IBTA**

IBTA provides an analysis of crew member fatalities by rank in enclosed spaces on all ship types for the period 2000 to 2024.

Please also refer to *CCC 11/5/6 Fumigation-related casualties* in the cargoes section.

APPENDIX 1

PROVISIONAL AGENDA

1. Adoption of the agenda
2. Decisions of other IMO bodies
3. Amendments to the IGF Code and development of guidelines for alternative fuels and related technologies (
4. Development of guidelines for the use of ammonia cargo as fuel and provisions for the use of alternative fuels other than cargo on gas carriers
5. Amendments to the IMSBC Code and supplements
6. Amendments to the IMDG Code and supplements (
7. Revision of the Revised guidelines for the preparation of the Cargo Securing Manual (MSC.1/Circ.1353/Rev.2) to include a harmonized performance standard for lashing software to permit lashing software as a supplement to the Cargo Securing Manual
8. Consideration of reports of incidents involving dangerous goods or marine pollutants in packaged form on board ships or in port areas
9. Unified interpretation of provisions of IMO safety, security, environment, facilitation, liability and compensation-related conventions
10. Development of measures to prevent the loss of containers at sea
11. Revision of the Interim recommendations for carriage of liquefied hydrogen in bulk
12. Development of a safety regulatory framework to support the reduction of GHG emissions from ships using new technologies and alternative fuels
13. Biennial status report and provisional agenda for CCC 12
14. Election of the Chair and Vice-Chair for 2026
15. Any other business
16. Report to the Committees