

**Amendments to the IMSBC Code, including evaluation of  
properties of solid bulk cargoes**

**Measures to improve safe transportation of solid bulk cargoes by ships**

**Submitted by Intercargo, BIMCO, ICS, International Group of P & I Clubs, and IUMI**

**SUMMARY**

<i>Executive summary:</i>	This document comments on document DSC 16/4/10 (France) concerning "Transport in bulk of solid cargoes which may liquefy".
<i>Strategic direction:</i>	5.2
<i>High-level action:</i>	5.2.3
<i>Planned output:</i>	5.2.3.3
<i>Action to be taken:</i>	Paragraph 9
<i>Related documents:</i>	MSC 89/7/4, MSC 89/7/7, DSC 16/4/10 and DSC 16/4/? [Intercargo et al submitted 15/7/11]

**Introduction**

1. This document comments on document DSC 16/4/10 (France) concerning "Transport in bulk of solid cargoes which may liquefy" and is submitted in accordance with paragraph 4.10.5 of the Guidelines on the organization and method of work of the Committees (MSC-MEPC.1/Circ.2).

2. Paragraphs 24 to 30 of DSC 16/4/10 discuss "Improvements to be brought to the IMSBC Code" proposing an amendment to require shippers to introduce procedures to control the sampling, testing and certification of cargoes that may liquefy and for these procedures to be approved and periodically checked by the competent authority; proposed text for an IMSBC Code amendment is included in Annex 1 of DSC 16/4/10. The co-sponsors support this proposal in principal and make the following observations, comments and proposals to strengthen the concept (shown as additions and ~~deletions~~).

**Amendments to the proposed text**

3. The proposed text for a new paragraph 4.3.3 refers to "competent authority of the country of loading or by an organization recognized by it". In the definition of competent authority under section 1.7.7 it is recognised that such authority for the purposes of the Code may be delegated to a recognised body hence there is no need to repeat this in 4.3.3, where it could imply that the already delegated authority can be further delegated. It is proposed to delete "or by an organization recognized by it" from 4.3.3. In addition an editorial amendment is proposed to improve clarity by adding "at a safe level until the cargo is on board the ship". It is anticipated that guidelines will be required to facilitate consistent

application and enforcement, text has been added to reflect this. The proposed amended text is:

4.3.3 When a concentrate or other cargo which may liquefy is carried, procedures for sampling, testing and controlling moisture content at a safe level until the cargo is on board the ship ~~up to the time of the ship's loading~~ shall be established by the shipper, taking account of the provisions of this Code. Such procedures shall be approved and their implementation checked periodically by the competent authority of the country of loading ~~or by an organization recognized by it, taking into account guidelines developed by the organisation.~~ The certificate issued by the competent authority ~~or organization recognized by it~~ stating that the procedures have been approved shall be provided to the master or his representative.

### **Proposals to strengthen the concept**

4. The risk of increased moisture content during the cargo handling process significantly increases when barges are used to load the ship. In order to explicitly include controlling moisture content when using barges in the procedures required under 4.3.3, it is proposed to add a further paragraph 4.3.4:

4.3.4 If the cargo is loaded on to the ship from barges, in developing the procedures under 4.3.3 the shipper shall include procedures to protect the cargo on the barges from precipitation and water ingress from the sea.

5. There are instances where the competent authority in the port of loading is the shipper. The co-sponsors consider this to be a conflict of interest under the extant Code that would also fundamentally undermine the current proposal in 4.3.3. To strengthen the effectiveness of the Code, and the proposed section 4.3.3, the following amendment to paragraph 1.7.7 is proposed:

1.7.7 Competent authority means any national regulatory body or authority designated or otherwise recognised as such for any purpose in connection with this code. The competent authority shall be independent from the shipper.

6. Accurate declaration of cargo properties is the responsibility of the shipper. However, responsibility for the safety of the ship lies with the master and it is reasonable for the master or their nominated representative to satisfy themselves, as far as is practicable, that the shipper's declaration is accurate and procedures under 4.3.3 have been followed. To explicitly permit this the following text is proposed:

4.2.4 The shipper shall provide access to stockpiles and loading installations for inspection by the ship's personnel, the carrier's nominated technical persons or other representatives prior to loading. Should it be deemed necessary to independently sample and test the cargo, access shall be provided in order to carry out sampling in accordance with this Code.

4.2.5 Should independent testing reveal any material discrepancy in the shipper's declaration of moisture content and TML, including when the actual moisture content exceeds the TML, the competent authority certifying the procedures under section 4.3.3 shall be notified. Upon such notification the competent authority shall review the approval of the shipper's procedures.

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7. There is evidence that the indicative “can test” under Section 8 of the Code is being used inappropriately to “pass” cargo for carriage. The can test is only able to provide an indication of when a cargo is in excess of its flow moisture point (FMP); it cannot demonstrate that a cargo is safe for carriage. As stated in the Code, cargoes which may liquefy shall only be accepted for loading when the actual moisture content is less than the transportable moisture limit (TML). Determining the accurate TML can only be achieved by testing cargo samples in a laboratory. In order to provide clarity to the extant Code and support the proposed paragraphs 4.2.4 and 4.2.5 the following additional paragraph under Section 8 is proposed:

8.5 If a sample exhibits free moisture or fluid conditions during a can test, this indicates that the moisture content of the material exceeds the Flow Moisture Point (FMP) and that the cargo may liquefy. However, it cannot be assumed that there is no risk of liquefaction if samples remain dry following a can test as the moisture content of the material may still exceed the Transportable Moisture Limit (TML). As stated elsewhere in this Code, cargoes which may liquefy shall only be accepted for loading when the actual moisture content of the cargo is less than the TML, not the FMP. Determining the TML is only possible by testing cargo samples in a laboratory.

8. In addition the co-sponsors propose guidelines are developed to assist in the development and application of the procedures under 4.3.3.

#### **Action requested of the Sub-committee**

9. The Sub-committee is invited to consider the above comments and proposals and decide as appropriate.

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