

Agenda item yy

## SHIP DESIGN AND EQUIPMENT

### Comments on the report of the fiftieth session of the Sub-Committee

Submitted by the Royal Institution of Naval Architects

#### SUMMARY

*Executive Summary:* This paper provides comments on the draft MSC resolution on 'Performance standard for protective coatings for void spaces on bulk carriers and oil tankers' (DE 50/27 annex 3) and suggests amendments to the scope of the standard.

*Action to be taken:* Paragraph 7.

*Related Documents:* DE 50/27 and MSC 83/9

1. RINA is concerned that the "Performance Standard for Protective Coatings for Void Spaces on Bulk Carriers and Oil Tankers", as currently drafted in Annex 3 to DE50/27, conflicts with existing statutory requirements for the inspection and maintenance of spaces which are critical to the structural integrity of current and future Bulk Carriers and Oil Tankers.

2. Specifically, paragraphs 4.2.1.1.4 and 4.2.1.1.5 of the draft Performance Standard require protective coatings for lower and upper transverse bulkhead stools in Bulk Carriers, "*with the exception of totally enclosed spaces*" (defined in para. 2.13 as spaces which have no means of access and no ventilation"), although a similar exception is not made for Oil Tankers in paragraphs 4.2.1.2.5 and 4.2.1.2.6.

3. Similarly, paragraphs 4.2.3.2 and 4.2.3.3 of the draft Performance Standard also specifically exclude upper and lower bulkhead stools on both Bulk Carriers and Oil Tankers from the requirements for protective coatings when these stools are totally enclosed spaces.

4. Bulkhead stools are major structural elements on both Bulk Carriers and Oil Tankers. They not only provide part of the watertight or oiltight segregation between holds and tanks, but also contribute to the torsional strength of the hull, provide end fixity for the bulkheads and reduce stress levels for the tank top. Because of this, they are

subject to statutory inspection and must therefore be accessible. Therefore they cannot be designed as “totally enclosed spaces”, notwithstanding the implied provision in the performance Standard that they may be considered as such.

5. It is also noted that the draft Performance Standard will only apply to the spaces explicitly listed in the draft. Paragraph 4.2.3.5 specifically excludes any spaces not listed in paragraphs 4.2.1 and 4.2.2. from the requirement for a protective coating. RINA is concerned that this could allow other important structural spaces to be designed as “totally enclosed spaces” in future ships, in order to obviate the need for preservation.

6. It is therefore suggested that in order to remove any ambiguities and conflicts with other statutory requirements, the requirements of the Performance Standard should apply to all void spaces, except where access is neither required nor possible. Guidance on the types of such excluded spaces should be given.

#### **Action requested of the Committee**

7. The Committee is invited to agree the proposal in paragraph 6 above when considering the text of the draft Resolution for adoption.