### Subject:

Eight measures taken by IACS for improving Bulk carrier safety



No. TEC-0451

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To whom it may concern

On 15 March 2002, IACS (International Association of Classification Society) launched the following measures in order to improve safety bulk carriers.

This society, as a member of IACS, will take actions to implement measure, however, with regard to the measure 3 given below, this society placed reservations as it is technically premature to implement the measure at moment.

The IACS URs (Unified Requirements) mentioned in measure 1, 2 and 3 below can be found on IACS Web-Site (http://www.iacs.org.uk/) as "Bulk carrier measures, March 2002" under the section titled "Technical" for your reference.

### (Measures for immediate effects)

1. Earlier implementation of SOLAS Chapter XII requirements. (For existing bulk carriers of 150m in length and over)

The objective is to bring forward the reinforcement of the corrugated transverse bulkhead between No.1 and No.2 holds and the double bottom of No. 1 hold. The concrete accelerated time frame is:

- for vessels under 10 as of 1 July 2003, to be complied with at 10 years
- for vessels of 10-15 years of age as of 1 July 2003, at the due date of the next Intermediate or Special Survey (whichever comes first) after 1 July 2003.

The changes are introduced through the adoption of a new revision of IACS UR S23, which covers the early implementation of the already existing IACS UR S19 (on strength standard for bulkhead between No.1 and No. 2 hold) and UR S22 (on strength standard for double bottom in way of No. 1 hold) for existing single side skin bulk carriers.

2. Revision of UR Z10.2 (Hull Surveys of Bulk Carriers) (For existing bulk carriers regardless of length)

This amended Unified Requirement now extends ESP requirements for close-up surveys at Special Survey No.2 and also requires Intermediate Surveys of bulk carriers of 10-15 years of age to have essentially the same scope as Special Survey No.2.

(To be continued)

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3. Extended application of IACS' UR S24 (For new & existing bulk carriers regardless of length)
The measure requires the installation of water ingress detection and alarms in all cargo holds of existing bulk carriers as well as new building.

## (Measures for further consideration on the technical details) (application, including length limitation is still under consideration)

- 4. Installation of bulwark, breakwater, forecastle (for new/existing bulk carriers) (To be concluded by the end of September 2002)
  - Requirements for the installation of an improved bulwark or breakwater on existing bulk carriers when not fitted with a forecastle, and a forecastle on new vessels, to provide more protection for forward hatches and fore-deck fittings.
- 5. Fore deck fitting (for new/existing bulk carriers) (To be concluded by the end of June 2002) Requirements to increase the integrity of fore-deck fittings on existing and new bulk carriers, to resist green water loading are under consideration.
- 6. Strengthening of hatch covers (for existing bulk carriers) (To be concluded by the end of September 2002)
  - Implementation of hatch cover requirements within the forward 0.25 L of existing vessels that are generally equivalent to UR S21 requirements for new vessels.
- 7. Strengthening hold frames (for existing bulk carriers) (To be concluded by the end of July 2002) Implementation of requirements for the strength of side shell frames of existing vessels taking into consideration IACS UR S12, which today is applicable only for side frames of new bulk carriers.
- 8. Fitting of water ingress detection and alarms for spaces forward of the cargo area. (for new/existing bulk carriers) (To be concluded by the end of March 2002)

  Consider installation of such devices.

For your reference, IACS press release is attached hereto.

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(To be continued)

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Attachment: IACS Press Release

Attachment to ClassNK Technical Information No. TEC-0

# **IACS**

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### PRESS RELEASE

### **FOR IMMEDIATE RELEASE**

MARCH 15, 2002

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## IACS TAKES ACTIONS TO IMPROVE THE SAFETY REGIME FOR BULK CARRIERS

New requirements to enhance the safety of bulk carriers were announced today (March 15) by the International Association of Classification Societies (IACS). Igor Ponomarev, IACS Chairman, told a briefing in London: "This important initiative involves all IACS members and is directed primarily at existing bulk carriers. Taken together with our extensive work programme concerning new vessels, these IACS measures address continued public and industry concerns over bulk carrier safety following recent losses. The new initiatives for existing vessels will, inter alia, accelerate the schedule for strengthening of the foremost cargo hold's transverse corrugated bulkhead and double bottom, address the strength of the side structure in cargo holds, increase requirements for forward hatch covers, require the installation of improved bulwarks or breakwaters when the ships are not fitted with a forecastle, and will further increase the requirements of the IACS Enhanced Survey Programme (ESP) earlier in the service life of these ships.

"Bulk carrier safety is our central priority for 2002. Our objectives include progressing the measures we announce today for existing ships and completing our reassessment of strength requirements for hatch cover scantlings – a key recommendation of Mr Justice Colman's Re-opened Formal Investigation (RFI) report into the loss of the Derbyshire. The Association is also pursuing a rapid and

successful conclusion of its recently commenced work to improve the side structure integrity of existing bulk carriers."

For future new buildings, the Association intends to complete major elements in the work programme of the IACS Bulk Carrier Safety Steering Committee. This committee has over the last months had various consultations with the industry, which have given IACS valuable input to our work.

The IACS Chairman added: "Our new, eight-point package of requirements for existing bulk carriers contributes to the International Maritime Organization's fast-track regulatory programme in this area. A number of the new measures follow through on the risk control options set out in the IACS Formal Safety Assessment study of fore-end watertight integrity, submitted to the IMO in January of last year. The new measures apply to existing vessels with a length of 150 m or greater, although some will also apply to smaller vessels and, in certain cases, to new vessels."

The new requirements for existing ships consist of two sets of actions. The first set, consisting of three measures, has been adopted and will take effect on January 1, 2003:

- 1. Earlier implementation of SOLAS Chapter XII requirements. The objective is to bring forward the reinforcement of the corrugated transverse bulkhead between No.1 and No.2 holds and the double bottom of No. 1 hold. This is now to be complied with at 10 years for vessels under 10 as of July 1, 2003 and at the due date of the next Intermediate or Special Survey (whichever comes first) after 1 July 2003 for vessels of 10-15 years of age as of July 1, 2003. Previously, these requirements were applied at 15 years. The changes are introduced through the adoption of a new revision of IACS UR S23, which covers the early implementation of the already existing IACS UR S19 and UR S22 for existing single side skin bulk carriers.
- 2. Adoption of a new revision of UR Z10.2 (Hull Surveys of Bulk Carriers). This amended Unified Requirement now extends ESP requirements for close-up surveys at Special Survey No.2 and also requires Intermediate Surveys of bulk carriers of 10-15 years of age to have essentially the same scope as Special Survey No.2.
- 3. Extended application of IACS' UR S24, requiring the installation of water ingress detection and alarms in all cargo holds of existing bulk carriers, as well as newbuildings.

The remaining five measures, to be introduced in the second phase of actions towards existing bulk carriers, are under development. The target is to complete the requirements in time to give owners sufficient notice to plan for and implement the modifications by the due date of the next Intermediate or Special Survey commenced on or after January 1, 2003. Those measures are:

- 4. Requirements for the installation of an improved bulwark or breakwater on existing bulk carriers when not fitted with a forecastle, and a forecastle on new vessels, to provide more protection for forward hatches and fore-deck fittings.
- 5. Requirements to increase the integrity of fore-deck fittings on existing and new bulk carriers, to resist green water loading.
- 6. Implementation of hatch cover requirements within the forward 0.25 L of existing vessels that are generally equivalent to UR S21 requirements for new vessels. UR S21 is currently under review for revision in light of the findings of further model tests carried out by the UK with input from

IACS in conjunction with the findings of the RFI on the loss of the Derbyshire.

- 7. Implementation of requirements for the strength of side shell frames of existing vessels taking into consideration IACS UR S12, which today is applicable only for side frames of new bulk carriers.
- 8. Fitting of water ingress detection and alarms for spaces forward of the cargo area.

IACS has established a Fast Project Team to address measures 4, 6 and 7. It is intended to complete measure 7 by end-July 2002 and measures 4 and 6 by end-September 2002. Detailing of measures 8 and 5 are scheduled to be completed by end-March and end-June 2002 respectively.

The full text of the measures already detailed and approved by IACS can be found on IACS web-site (www.iacs.org.uk). The requirements not yet detailed will be released as soon as they are approved, for the industry to have as much lead time as possible in preparation for necessary modifications and strengthenings of bulk carriers affected.

Meanwhile, IACS work continues, as stated above, on developing revised requirements for hatch covers and fore-deck fittings in response to the RFI report's recommendations. The report called for more model tests. IACS reacted swiftly, producing the specification for the tests - performed at MARIN, in The Netherlands. The test data were received by IACS in November 2001. This allowed IACS to commence a full re-assessment of hatch cover strength requirements (UR S21) under extreme sea conditions. Initial work suggests further development of S21 may be required, to address some damage flooding scenarios.

Requirements for new bulk carriers are also being considered. Current work has produced a set of proposals, from the IACS Bulk Carrier Safety Steering Committee, for harmonised notations and standard loading conditions for bulk carriers. These proposals, which are developed in co-operation with the industry, are expected to be adopted over the next few months.