GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

GUIDANCE

Part U Intact Stability

2007 AMENDMENT NO.1

Notice No.51 27th September 2007

Resolved by Technical Committee on 2nd July 2007

Notice No.51 27th September 2007
AMENDMENT TO THE GUIDANCE FOR THE SURVEY AND CONSTRUCTION OF STEEL SHIPS

"Guidance for the survey and construction of steel ships" has been partly amended as follows:

Part U INTACT STABILITY

U2 STABILITY REQUIREMENTS

U2.1 General

Paragraph U2.1.2 has been amended as follows.

U2.1.2 Calculation on Stability

1 In calculation of stability curves, the following portions may be included in addition to hull below upper deck.

(1) Superstructures of first and second tiers above freeboard deck complying with the requirements in (10) (b) of Regulation 3, Annex I of Attachment 1 of International Convention on Load line, 1966 (hereinafter referred to as "*ILLC*" in this Part).

(2) Deckhouses of first tier above freeboard deck complying with the requirements in (10) (b) of Regulation 3, *ILLC*.

(3) Trunks

(4) Hatchways with effective closing means

(5) Portion of superstructures or deckhouses up to an angle above which seawater will flow-in through openings, even though the superstructure or deckhouse is not regarded as enclosed.
In a heeled condition exceeding the angle above, the flooded space is to be considered to have no buoyancy.

2 In calculation of stability curves, all openings within any deckhouses may be regarded as closed. However, such openings within the deckhouse, of which the doors do not comply with the requirements in Regulation 12, *ILLC* are to be fitted with closing devices complying with the requirements in Regulations 15, 17 and 18, *ILLC*.

3 The free surface effect is to be assessed as follows.

(1) For tanks with fixed filling levels (e.g. liquid cargo, water ballast), the free surface correction is to be determined using the actual filling level of each tank.

(2) For tanks with variable filling levels (e.g. consumable liquids such as fuel oil, diesel oil, and fresh water, and also liquid cargo and water ballast during liquid transfer operations), except as permitted in **(4)** and **(5)**, the free surface correction is to be determined using the maximum value attainable between the filling limits envisaged for each tank, consistent with any operating instructions.

(3) In calculating the free surface effects in tanks containing consumable liquids, it is to be assumed that for each type of liquid at least one transverse pair or a single centreline tank has a free surface and the tank or combination of tanks taken into account is to be those where the effect of free surfaces is the greatest.

(4) Where water ballast tanks, including anti-rolling tanks and anti-heeling tanks, are to be filled or discharged during the course of a voyage, the free surface effects are to be

calculated taking into account the most onerous transitory stage relating to such operations.

(5) For ships engaged in liquid transfer operations, the free surface corrections at any stage of the liquid transfer operations may be determined in accordance with the filling level in each tank at that stage of the transfer operation.

4 For ships without a deck camber, or that have installed gutter bars with a height in excess of the camber, and tankers that have cargo tanks exceeding 60% of the ship's maximum beam at midships regardless of gutter bar height, the free surface effect caused by liquids contained by the gutter bars is to be taken into account for compliance with the relevant intact stability requirements.

~~**3**~~**5** For the application of **2.1.1-3, Part U of the Rules**, reference is to be made to the provisions of Chapter 5 of *IMO Res. A*.749(18).

EFFECTIVE DATE AND APPLICATION

1. The effective date of the amendments is 1 October 2007.

2. Notwithstanding the amendments to the Guidance, the current requirements may apply to ships for which the date of contract for construction* is before the effective date.
*"contract for construction" is defined in IACS Procedural Requirement (PR) No.29 (Rev.4).

IACS PR No.29 (Rev.4)

1. The date of "contract for construction" of a vessel is the date on which the contract to build the vessel is signed between the prospective owner and the shipbuilder. This date and the construction numbers (i.e. hull numbers) of all the vessels included in the contract are to be declared to the classification society by the party applying for the assignment of class to a newbuilding.

2. The date of "contract for construction" of a series of vessels, including specified optional vessels for which the option is ultimately exercised, is the date on which the contract to build the series is signed between the prospective owner and the shipbuilder.
For the purpose of this Procedural Requirement, vessels built under a single contract for construction are considered a "series of vessels" if they are built to the same approved plans for classification purposes. However, vessels within a series may have design alterations from the original design provided:
(1) such alterations do not affect matters related to classification, or
(2) If the alterations are subject to classification requirements, these alterations are to comply with the classification requirements in effect on the date on which the alterations are contracted between the prospective owner and the shipbuilder or, in the absence of the alteration contract, comply with the classification requirements in effect on the date on which the alterations are submitted to the Society for approval.
The optional vessels will be considered part of the same series of vessels if the option is exercised not later than 1 year after the contract to build the series was signed.

3. If a contract for construction is later amended to include additional vessels or additional options, the date of "contract for construction" for such vessels is the date on which the amendment to the contract, is signed between the prospective owner and the shipbuilder. The amendment to the contract is to be considered as a "new contract" to which **1.** and **2.** above apply.

4. If a contract for construction is amended to change the ship type, the date of "contract for construction" of this modified vessel, or vessels, is the date on which revised contract or new contract is signed between the Owner, or Owners, and the shipbuilder.

Notes:
1. This Procedural Requirement applies to all IACS Members and Associates.
2. This Procedural Requirement is effective for ships "contracted for construction" on or after 1 January 2005.
3. Revision 2 of this Procedural Requirement is effective for ships "contracted for construction" on or after 1 April 2006.
4. Revision 3 of this Procedural Requirement was approved on 5 January 2007 with immediate effect.
5. Revision 4 of this Procedural Requirement was adopted on 21 June 2007 with immediate effect.