

IACS Technical Resolutions adopted from July 2012 to December 2012

ClassNK is delighted to inform you of the recent information related to the International Association of Classification Societies (IACS).

ClassNK has been providing the latest developments at the International Maritime Organization (IMO) as preliminary reports after its meetings, in which you might be interested. In addition to this, we hereafter would like to release up-to-date information of IACS as well.

For this issue, we would like to introduce the Unified Requirements (URs) and Unified Interpretations (UIs) adopted from July 2012 to December 2012 with their summaries.

URs and UIs are technical resolutions, which are set, revised and withdrawn by IACS. URs are classification rules established for the uniform implementation among IACS member societies. URs shall be incorporated in the rules of each member society within one year of adoption unless otherwise specified.

UIs are developed for uniform interpretations of the requirements of Convention which are left to the satisfaction of the Administration or vaguely worded while Administrations have not set clear instructions.

Hereunder, URs and UIs are shown in Table 1 (UR) and Table 2 (UI) respectively. Texts of these resolutions and their Technical Backgrounds have been published in [IACS website](#). These resolutions are/will be incorporated into ClassNK's Rules and Guidance for the survey and construction of steel ships after review by ClassNK's relevant Technical Committee.

In addition, the underlined versions (revised parts are clearly shown) of URs and UIs not published in IACS website have been published in [ClassNK's website](#).

Table 1 List of new/amendments to URs (Unified Requirements) adopted from July 2012 to December 2012

UR	Revision	Adoption	Title	Implementation
UR M68	Corr.2	Nov. 2012	Dimensions of propulsion shafts and their permissible torsional vibration stresses	---
UR F2	Rev.2	Nov. 2012	Aluminium coatings on board oil tankers and chemical tankers	1 Jan. 2014
UR P3	Rev.3	Nov. 2012	Air Pipe Closing Devices	1 Jan. 2014
UR E9	Rev.1	Oct. 2012	Earthing and bonding of cargo tanks/process plant/piping systems for the control of static electricity	1 Jan. 2014
UR P2	Rev.3 (P2.11)	Aug. 2012	Rules for piping design, construction and testing	1 Jan. 2014

UR Z23	Corr.1	Aug. 2012	Hull Survey for New Construction	---
UR Z17	Corr.1	Aug. 2012	Procedural Requirements for Service Suppliers	---
UR Z10.3	Rev.14	Aug. 2012	Hull Surveys of Chemical Tankers	1 Jul. 2013
UR S14	Rev.4	Aug. 2012	Testing Procedures of Watertight Compartments	1 Jul. 2013

Table 2 List of new/amendments to UIs (Unified Interpretations) adopted from July 2012 to December 2012

UI	Revision	Adoption	Title	Implementation
UI SC226	Rev.1	Dec. 2012	IACS Unified Interpretations (UI) on the application of SOLAS regulations to conversions of Single-Hull Oil Tankers to Double-Hull Oil Tankers or Bulk Carriers	1 Jan. 2014
UI SC257	New	Nov. 2012	Pilot Transfer Arrangements (SOLAS V/23 as amended by Resolution MSC.308(88))	1 Jul. 2013
UI SC244	Rev.1	Nov. 2012	Load testing of hooks for primary release of lifeboats and rescue boats	1 Jan. 2014
UI MPC11	Rev.1	Nov. 2012	Interpretation to MARPOL I/27	1 Jul. 2013
UI SC233	Rev.1	Nov. 2012	LSA Code – lifeboat exterior colour	1 Jul. 2013
UI COLREG 1	Rev.1	Oct. 2012	Interpretation to COLREG 1972 Annex 1, Section 9(b)	1 Jul. 2013
UI SC144	Rev.2	Sep. 2012	Periodic Servicing of Launching Appliances and on-load Releasing Gear	1 Jan. 2013
UI SC255	New	Jul. 2012	Fuel pump arrangement required for ships to maintain normal operation of propulsion machinery when operating in emission control areas and non-restricted areas	1 Jul. 2013
UI MPC102	New	Jul. 2012	Surveys and certification relating to the Ship Energy Efficiency Management Plan (SEEMP) (MARPOL Annex VI Regulation 5.4.4)	1 Jan. 2013
UI MPC101	New	Jul. 2012	Supplement to the International Air Pollution Prevention (IAPP) Certificate – Section 2.3	1 Jan. 2013
UI HSC8	New	Jul. 2012	Protection of load bearing structures	1 Jan. 2014

*Corr.(Corrigenda) means the correction that basically does not include the contents of resolution but literal error.

Outlines of IACS Technical Resolutions listed in the above Tables are mentioned below.

(1) UR F2

UR F2 prohibits the use of aluminium coatings in cargo tanks, cargo tank deck area, pump rooms, cofferdams or any other area where cargo vapour may accumulate. In Rev.2 (November 2012), in reference to the requirements specified in the

Common Structural Rules (CSR), the aluminium coatings containing not greater than 10 percent aluminium by weight in the dry film may be permitted.

(2) UR P3

UR P3 details the requirements of automatic closing devices of air pipes required by Load Line Convention 1966. The UR was revised in November

2012 (Rev.3) to specify that the tightness test of the closing devices during immersion/emerging in water, detailed in the UR, is to be carried out at the 'strictest condition' for the device. 'Strictest condition' was further clarified with the help of figures. The requirements of discharge / reverse flow test are also added to prove the ability of the device to handle vacuum.

(3) UR E9

UR E9 details the earthing and bonding requirements in order to avoid the hazard of an incentive discharge due to the build-up of static electricity resulting from the flow of liquids/gases/vapours. OCIMF highlighted cases of valve installations on board product carriers that were improperly bonded to the hull, and as a consequence, the resistance between the valve and the hull of the ship was higher than required by the UR. It was found that connecting bolts of wafer-style valves, unlike for other type of valves, did not provide a proper means of bonding the valve to the hull. The UR was revised in October 2012 (Rev.1) to clarify that bonding straps are required for wafer-style valves with non-conductive (e.g PTFE) gaskets or seals.

(4) UR P2

UR P2 Section 11 describes the testing requirements for type approval of mechanical joints intended for use in marine piping systems. Pull-out test is carried out in order to determine ability of a mechanical joint assembly to withstand axial load likely to be encountered in service. In Rev.3 (August 2012), the pull-out test (in section 11.5.5.5) requirement is altered such that the design pressure and external axial force are to be applied simultaneously in order to achieve a more realistic situation.

(5) UR Z10.3

UR Z10.3 specifies the requirements for hull surveys of chemical tankers in operation. In Rev.14 (August 2012), the figures showing areas for close up surveys are modified to show typical transverse sections of chemical tanker.

(6) UR S14

UR S14 specifies the procedures for testing tanks and tight boundaries. In Rev.4 (August 2012), the procedures are harmonised with the guidelines for testing tanks and tight boundaries of newbuilding ships, which IACS etc. submitted to IMO MSC86.

(7) UI SC226

UI SC226 stipulated the applicable SOLAS regulations at conversions of single hull oil tankers to double hull oil tankers or bulk carriers. Thereafter, during IMO deliberations on this UI, amendments to some parts of it together with interpretations related to the application of MARPOL and Load Lines requirements were discussed and IMO approved as MSC-MEPC.2/Circ.10. Accordingly, rev.1 (Dec 2012) of UI SC226 was issued to make it consistent with MSC-MEPC.2/Circ.10.

(8) UI SC257

SOLAS regulation V/23.3.3.1 requires that where a single length of pilot ladder is used, "an adverse list of 15°" should be considered. On the other hand, where an accommodation ladder is used in conjunction with the pilot ladder in accordance with SOLAS regulation V/23.3.3.2, no reference is made to allowance for "an adverse list of 15°". In this regard, IACS newly adopted UI SC257 (New Nov 2012) which clarifies that "adverse list of 15°" applies only to an emergency condition and permits a pilot climb more than 9 m by an additional length of pilot ladder during that condition, also, 15° list requirement does not apply when accommodation ladder used in conjunction with the pilot ladder.

(9) UI SC244

UI SC244 stipulates the applicable type of lifeboat for load testing requirements in accordance with Res.MSC (70). So far, it is stipulated that load testing requirements is applied to lifeboats launched by falls only. Noting the conclusion made at DE56 (DE56/13/1), IACS revised UI SC244 (Rev.1) in order to extend the load testing of hooks for primary release also to rescue boats. Also in the revised UI, it is clearly stated that test does not apply to the secondary means of launching for free-fall lifeboats.

(10) UI MPC11

UI MPC11 clarifying the intact stability criteria was editorially revised in November 2012 (Rev.1) to reflect the following amendments:

- Reference to "MARPOL Reg. I/ 25A" was revised to "MARPOL Reg. I/ 27" throughout.

(11) UI SC233

UI SC233 stipulates the requirement of lifeboat exterior colour and its applicable areas of lifeboats. At IMO MSC 90, UI SC233 is adopted with the modification to the applicable areas and circulated as MSC.1/Circ.1423. In response to this, IACS revised UI SC233 in line with MSC.1/Circ.1423. According to the revised UI (Rev.1 November 2012), the stipulated colour is applicable to the exterior of the rigid watertight enclosure of totally enclosed lifeboats and the exterior of the canopy of partially enclosed lifeboats.

(12) UI COLREG 1

The original version of UI COLREG 1 specifies that when two all-round lights are used, one may be screened up only to 180 degrees. This revision to the UI (Rev.1 Oct 2012) was developed to accept alternative arrangements of all-round lights with screened angles greater than 180 degrees, taking into account current industry practice. The technical background document of the revision illustrates an example of such alternative arrangement.

(13) UI SC144

UI SC144 was editorially revised (Rev.2 September 2012) to take account of amendments to SOLAS Reg.III-20.11, approval of MSC.1/Circ.1206 (and its Revision 1) and MSC.1/Circ.1277. The revised UI only stipulates that thorough examinations/overhauls and tests of Launching Appliances and on-load Releasing Gear, in five year intervals, shall be done in the presence of a surveyor.

(14) UI SC255

SOLAS II-I 26-3.4 states that means shall be provided whereby normal operation of propulsion machinery can be sustained or restored even though one of the essential auxiliaries becomes

inoperative and special consideration shall be given to the malfunctioning of the fuel oil supply systems for boilers or engines. The new UI SC255 (July 2012) stipulates the arrangements to be considered for ships, intending to use Heavy Fuel Oil (HFO) or Marine Diesel Oil (MDO) in non-restricted areas and marine fuels with a sulphur content not exceeding 0.1 % m/m and minimum viscosity of 2 cSt in emission control areas. The arrangements detailed in the UI ensure the requirements of pump redundancy in order to comply with SOLAS II-I/26.3.4.

(15) UI MPC102

Resolution MEPC.203(62), entering into force on 1 January 2013, revises MARPOL Annex VI, introducing the requirement for the issue of an International Energy Efficiency Certificate (IEEC) following verification of the ship's attained Energy Efficiency Design Index (EEDI) and confirmation that a Ship Energy Efficiency Management Plan (SEEMP) is onboard. The new UI MPC102 (July 2012) clarifies the applicability of the IEEC to existing ships, the timing of the verification survey for the SEEMP, and the effect on the International Air Pollution Prevention Certificate (IAPPC) should the SEEMP not be found onboard.

(16) UI MPC101

UI MPC 101 (New July 2012) stipulates that Section 2.3 of the Supplement ("sulphur content as documented by bunker delivery notes") allows for an "x" to be entered in advance of the dates indicated in all of the relevant check boxes recognizing that the bunker delivery notes, required to be retained on board for a minimum period of three years, provide the subsequent means to check that a ship is actually operating in a manner consistent with the intent as given in section 2.3. This provide a reasonable means to complete Section 2.3 of the Supplement to the IAPP Certificate without doing so repetitively as each time the entry into force date for the new fuel oil sulphur limit requirement occurs.

(17) UI HSC8

Chapter 7.4.2.3 of the International Code of

Safety for High-Speed Craft, 2000 (HSC Code) stipulates that main load-carrying structures within areas of major fire hazard and areas of moderate fire hazard and structures supporting control stations shall be arranged to distribute load such that there will be no collapse of the construction of the hull and superstructure when it is exposed to fire for the

appropriate fire protection time. However, in the application of the chapter 7.4.2.3, the interpretations about “fire protection time of load-carrying structures”, “considerable extent of structural fire protection”, “fire testing” and “load case” were somewhat unclear; IACS, therefore, developed a unified interpretation.

A proceeding to revise NK’s Rules will be commenced to incorporate the above URs and UIs appropriately.

ClassNK External Affairs Division is pleased to provide international trends promptly.

For any questions about the above, please contact:

NIPPON KAIJI KYOKAI (ClassNK)

External Affairs Division, Administration Center, Head Office

Address: 4-7 Kioi-cho, Chiyoda-ku, Tokyo 102-8567, Japan

Tel.: +81-3-5226-2038

Fax: +81-3-5226-2024

E-mail: xad@classnk.or.jp

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