

IACS Technical Resolutions adopted from January to June 2013

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

ClassNK has been regularly providing preliminary reports of outcomes of the International Maritime Organization (IMO)'s meetings and the latest development at IACS. For this issue, we would like to introduce the Unified Requirements (URs) and Unified Interpretations (UIs) adopted from January 2013 to June 2013 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URs and UIs are technical resolutions, which are set, revised and withdrawn by IACS.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 (URs) and Table 2 (UIs) with their summaries 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 have been published in [ClassNK's website](#).

Table 1 List of new/amendments to URs (Unified Requirements) adopted from January 2013 to June 2013

UR	Revision	Adoption	Title	Implementation
UR S27	Rev.6	Jun. 2013	Strength Requirements for Fore Deck Fittings and Equipment	1 Jul. 2014
UR Z18	Rev.3	Apr.2013	Periodical survey of Machinery	1 Jan. 2014
UR L2	Rev.2	Apr. 2013	Intact stability – matter of class	1 Jul. 2014
UR S6	Rev.7	Apr. 2013	Use of Steel Grades for Various Hull Members – Ships of 90 m in Length and Above	1 Jul. 2014
UR W30	New	Feb. 2013	Normal and higher strength corrosion resistant steels for cargo oil tanks	1 Jan. 2014
UR W31	New	Jan. 2013	Application of YP47 Steel Plates	1 Jan. 2014

UR S33	New	Jan. 2013	Requirements for Use of Extremely Thick Steel Plates	1 Jan. 2014
UR G3	Rev.5	Jan. 2013	Liquefied gas cargo and process piping	1 Jan. 2014
UR W24	Corr.1	Jan.2013	Cast Copper Alloy Propellers	-
UR P2.12	Corr.1	Jan. 2013	Flexible Hoses	-

Table 2 List of new/amendments to UIs (Unified Interpretations) adopted from January 2013 to June 2013

UI	Revision	Adoption	Title	Implementation
UI SC262	New	Jun. 2013	Fixed Foam Fire Extinguishing Systems, Foam-generating Capacity (FSS Code / CHAPTER 6 / 3.2.1.2 and 3.3.1.2 as amended by MSC.327(90))	1 Jan. 2014
UI SC235	Corr.2	Jun. 2013	Navigation bridge visibility to ship's side	-
UI SC261	New	May 2013	Interpretation of Performance Standards for voyage data recorders (VDRs) (resolution MSC.333(90))	1 Jul. 2014
UI SC257	Corr.1	Apr. 2013	Pilot Transfer Arrangements (SOLAS V/23 as amended by Resolution MSC.308(88))	-
UI HSC9	New	Mar. 2013	Keel Laying Date for Fibre-Reinforced Plastic (FRP) Craft	1 Jan. 2014
UI LL78	New	Mar. 2013	Keel Laying Date for Fibre-Reinforced Plastic (FRP) Craft	1 Jan. 2014
UI MPC104	New	Mar. 2013	Keel Laying Date for Fibre-Reinforced Plastic (FRP) Craft	1 Jan. 2014
UI SC260	New	Mar. 2013	Sample Extraction Smoke Detection System (FSS Code / Chapter 10 / 2.4.1.2 as amended by MSC.292 (87))	1 Jan. 2014
UI SC259	New	Feb. 2013	For Application of SOLAS Regulation II-1/3-11 Performance Standard for Protective Coatings for Cargo Oil Tanks of Crude Oil Tankers (PSPC-COT), adopted by Resolution MSC.288(87)	1 Jan. 2014
UI SC258	New	Jan. 2013	For Application of Regulation 3-11, Part A-1, Chapter II-1 of the SOLAS Convention (Corrosion Protection of Cargo Oil Tanks of Crude Oil Tankers), adopted by Resolution MSC.289 (87) The Performance Standard for Alternative Means of Corrosion Protection for Cargo Oil Tanks of Crude Oil Tankers	1 Jan. 2013
UI FTP6	New	Feb. 2013	Testing and approval of pipe penetrations and cable transits for use in "A" class divisions (IMO FTP Code 2010 Part 3)	1 Jan. 2014
UI COLREG1	Corr.1	Feb.2013	Interpretation to COLREG 1972 Annex 1, Section 9(b)	-
UI SC249	Rev.1	Feb. 2013	Implementation of SOLAS II-1, Regulation 3-5 and MSC.1/Circ.1379	1 Jul. 2013
UI MPC103	New	Jan. 2013	Identical Replacement Engines (MARPOL Annex VI Regulation 13)	1 Jan. 2014
UI SC191	Rev.5	May 2013	IACS Unified Interpretations (UI) SC 191 for the application of amended SOLAS regulation II-1/3-6 (resolution MSC.151(78)) and revised Technical provisions for means of access for inspections (resolution MSC.158(78))	24 Jun. 2013

*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 S27

UR S27 provides strength requirements to resist green sea forces for items such as air pipes, ventilator pipes and their closing devices, the securing of windlasses etc. located within the forward quarter length of the ship. According to Rev.5 of the UR the velocity V of water over the fore deck (used in the calculation of design pressure in section 4.1.1) is 13.5 m/s for exposed items located less than 22m or 0.1L (whichever is the lesser) above the summer load waterline. The objective of Rev.6 (June 2013) is to adjust the velocity V taking the actual height of the item into account, removing unreasonable requirements to the devices such as hold ventilator on the upper deck on large car carrier, almost 22 m above the summer load waterline.

(2) UR Z18

UR Z18 details the general requirements of special, annual and continuous surveys of the machinery, survey of steam boilers, propulsion steam turbines and machinery verification runs. In Rev.3 (Apr 2013), the reference to drydocking section 4.1 was removed because of the fact that the request of dock trial should be not directly related to the fact that the ship was docked. It should be more pertinent to relate dock trial as an operation to be carried out in order to complete a periodical (renewal) or an occasional machinery survey, as appropriate.

(3) UR L2

UR L2 stipulates that all new ships with a length of 24 m and above will be assigned class only after it has been demonstrated that their intact stability is adequate for the service intended. This UR was revised (Rev.2 Apr 2013) to further clarify that this is applicable only to ships of length 24 m and above and make the resolution in line with IMO resolution MSC.267(85). For vessels of smaller size flag state requirements or individual class requirements may apply.

(4) UR S6

UR S6 details the use of steel grades for various hull members of ships of 90 m in length and above, other than CSR Bulk Carriers and Tankers. This UR was revised (Rev.7 Apr 2013) to clarify the scope of application with regard to LNG carriers and to identify minimum steel grades for selected structures on membrane type liquefied gas carriers. The revision of the UR makes it in line with current industry practice.

(5) UR W30

The Performance Standard for Alternative Means of Corrosion Protection for Cargo Oil Tanks of Crude Oil Tankers (IMO Resolution MSC.289 (87)) allows for the use of "Corrosion Resistant Steel". This steel is modified ship steel with micro additions of certain chemical elements that have been found to have a beneficial effect by retarding the corrosion rate in the environments found in cargo tanks of crude oil carriers. In response to the request of steel Industry, IACS has developed UR W30 on these corrosion resistant steels. UR W30 stipulates IACS unified approach to the approval, manufacture, certification and shipyard application of these steels. Also in addition to the UR W30, a Unified Interpretation (UI SC 258) was also developed to clarify various provisions given in Resolution MSC.289 (87).

(6) UR W31

UR W31 gives the basic concepts for application of YP47 steel plates to longitudinal structural members in the upper deck region of Container Carriers (such as hatch side coaming, hatch coaming top and the attached longitudinals) incorporating extremely thick steel plates (over 50mm and not greater than 100mm). UR covers HT factor and material selection, material specification, manufacturing process approval, welding consumables, welding procedure qualification test etc.

(7) UR S33

UR S33 specifies the measures for identification and prevention of brittle fractures of Container Carriers to which extremely thick steel plates (over 50mm and not greater than 100mm) are applied for

longitudinal structural members. The UR covers the requirements of Non-Destructive Testing (NDT) during construction, periodic NDT after delivery and brittle crack arrest design.

(8) UR G3

UR G3 specifies the requirements applicable to liquefied gas cargo and process piping including cargo gas piping and exhaust lines of safety valves. In Rev.5 (Jan 2013), the requirements regarding prototype and production tests of safety valves were revised. The revision was based on the comments and proposals submitted by a safety valve manufacturing company.

(9) UI SC262

UI SC262 intent to clarify criteria to be adopted when determining the size of the "largest protected space" as referred to in the International Code for Fire Safety Systems (FSS Code) Ch. 6 (as amended by MSC Res. 327(90)). The UI applies to a machinery space of category A protected by a fixed high-expansion foam fire-extinguishing system complying with the provisions of the FSS Code.

(10) UI SC261

UI SC261 was developed to clarify the application of Resolution MSC.333(90), the phrase "installed on or after 1 July 2014". For ships for which the building contract is placed on or after 1 July 2014, or in the absence of the contract, constructed on or after 1 July 2014, "installed on or after 1 July 2014" means any installation on the ship; and for other ships "installed on or after 1 July 2014" means a contractual delivery date for the equipment or, in the absence of a contractual delivery date, the actual delivery of the equipment to the ship on or after 1 July 2014. The source of the interpretation of "install" is similar to that in MSC.1/ Circ.1375/ Rev.1.

(11) UI HSC9, LL78 & MPC104

With the introduction of the NOx Tier I/II/III requirements and other emerging statutory legislation, it has become necessary for IACS to agree to a consistent interpretation for the term "the keels of which are laid or which are at a similar stage of construction" for Fibre-Reinforced Plastic (FRP)

Craft. UI HSC9, LL78 and MPC104 stipulates that for the purposes of the application of the IMO Conventions and Codes (Performance Standards, Technical Standards, Resolutions and Circulars) for FRP Craft, the term "the keels of which are laid or which are at a similar stage of construction" should be interpreted as the date that the first structural reinforcement of the complete thickness of the approved laminate schedule is laid either in or on the mould.

(12) UI SC260

UI SC260 is intended to clarify the definition of Fire control station for the purpose of the application of FSS Code 10.2.4.1.2 amended by MSC.292(87). Since CO2 room with CO2 control equipment complying with the provision of the FSS Code Chapter 5 is considered to be a fire control station, control panel of Sample Extraction Smoke Detection System could be located in CO2 room when applying the requirement of the regulation of FSS Code 10.2.4.1.2.

(13) UI SC259

UI SC259 specifies interpretation for PSPC-COT of Resolution MSC.288(87) in the same manner of UI SC223 for PSPC-WBT of Resolution MSC.215(82). The UI covers definitions, general principles, coating standard, coating system approval, coating inspection and verification requirements, and alternative systems.

(14) UI SC258

The Performance Standard for Alternative Means of Corrosion Protection for Cargo Oil Tanks of Crude Oil Tankers (IMO Resolution MSC.289 (87)) allows for the use of "Corrosion Resistant Steel". In response to the request of Japanese steel industry, IACS has developed UI SC 258 to clarify various provisions given in Resolution MSC.289 (87). The UI details of general principles, technical file to be prepared by the shipbuilder for administration, scope of application, inspection, verification and approval requirements, and test procedures for qualification of corrosion resistant steel for cargo tanks in crude oil tankers.

(15) UI FTP6

UI FTP6 clarifies and harmonizes additional design and test requirements for pipe penetrations and cable transits that do not incorporate the traditional welded structural steel sleeve with non-removable filling. “A”-class pipe penetrations and cable transits that are constructed without structural sleeves of minimum 3 mm thickness and minimum 60 mm length welded or bolted to the division; and/or constructed with removable, soft or intumescent filling material are to be subject to additional testing and/or design criteria stipulated in the UI.

(16) UI SC249

UI SC249 provides a common basis for certifying that new installations on ships are asbestos-free based on declarations and supporting documentation. Rev.1 (Feb 2013) of the UI, which was prepared in light of approved text of MSC.1/Circ.1426, adds to the UI that the verification process to comply with SOLAS Chapter II-1, Regulation 3-5 shall be done taking into account appendix 8 of the 2011 Guidelines for the development of the inventory of hazardous materials (resolution MEPC.197(62)).

(17) UI MPC103

UI MPC103 provides a common basis by which to assess whether or not a replacement engine is identical to the engine being replaced. In this instance identical relates specifically to the NOx emission characteristic of the engine. The UI stipulates that an ‘identical engine’ is, as compared to the engine being replaced, an engine which is of the same design and model, rated power, rated speed, use, number of cylinders and fuel system type as well as additional criteria depending on the possession of EIAPP certificate.

(18) UI SC191

Based on the outcome of the IMO DE 57 and MSC92, UI SC191(Rev.5 May,2013) has been revised to make it in line with MSC circular on Unified Interpretations (MSC.1/Circ.1464 dated 24 June 2013). Text related to the extension of the relaxation of vertical and horizontal access holes was deleted from the interpretation of “Technical Provision, resolution MSC.158(78), paragraph 3.10 and 3.11”.

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.

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