

## FORM 1

### Notice of Reservations Filed For IACS Unified Requirements as at June 2009

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Page 1

#### *UR A1 Equipment*

UR	Version	Clause	Society	Reservation
A1	1981	A1.2	ABS	For ships less than 40 m in length, ABS Rules allow with certain conditions wire ropes in lieu of chains.
A1	3/1994	A1.3.1	ABS	ABS' requirements for anchoring equipment for tugs of unrestricted service are less than prescribed in UR A1.3.1.

#### *UR A2 Shipboard fittings and supporting hull structures associated with towing and mooring on conventional vessels*

UR	Version	Clause	Society	Reservation
A2	Rev.3	A2.1.6 A2.2.6	GL	GL reserves the right to lower the SWL to be marked on shipboard mooring fittings by factor 1.5. ( $SWL_{GL}=SWL_{A2}/1.5$ ) The reason for GL's reservation is, GL do not support a safety concept utilizing a safety factor of 1.0 for the fittings against the breaking load of the ropes attached to the fittings. This has been raised during discussion in Hull Panel several times without feed back.

#### *UR D4 Self-elevating drilling units*

UR	Version	Clause	Society	Reservation
D4	Rev.2 1996	D4.4	LR	Damage stability requirements are not included in the Rules and the extent of defined damage is to be in accordance with Flag requirements.

#### *UR D5 Column stabilized drilling units*

UR	Version	Clause	Society	Reservation
D5	Rev.3 1996	D5.6	LR	Damage stability requirements are not included in the Rules and the extent of defined damage is to be in accordance with Flag requirements.

#### *UR D6 Surface type drilling units*

UR	Version	Clause	Society	Reservation
D6	1979	D6.4	LR	Damage stability requirements are not included in the Rules and the extent of defined damage is to be in accordance with Flag requirements.

#### *UR E7 Cables*

UR	Version	Clause	Society	Reservation
E7	Rev.3 May 2006	2	DNV	Partly implemented. The following IEC standards is not referred: 60092-373, 60092-374 (as these standards are beyond our scope)

E7	Rev.3 May 2006	3	RS	RS reserves its position on acceptance of cables other than those specified in item 2 of UR E7. These cables will be subject to special consideration by RS in each particular case. Rationale: RS Rules requires that cables should have RS type approval.
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***UR E10 Test Specification for Type Approval***

UR	Version	Clause	Society	Reservation
E10	4/May 2004	10.1	ABS	Not applied to all internal communication equipment as listed in 10.1.

***UR E11 Unified requirements for systems with voltages above 1kV up to 15kV***

UR	Version	Clause	Society	Reservation
E11	Rev.2 July 2003	11 1.3	LR	HV-LV segregation limited to electric cables
E11	Rev.2 July 2003	11 2.2.2	LR	Specific IP rating mentioned in the UR are not included in LR Rule.
E11	Rev.2 July 2003	11 2.2.3	LR	Specific IP rating mentioned in the UR are not included in LR Rule.
E11	Rev.2 July 2003	11 2.2.4	LR	Specific IP rating mentioned in the UR are not included in LR Rule
E11	Rev.2 July 2003	11 2.3.2	LR	IEC creepage distances and 25 mm/kV minimum mentioned in the UR are not included in the rules
E11	Rev.2 July 2003	11 2.4.1	LR	LR rule applies to all generators of rating 1500kVA and above irrespective of voltage rating
E11	Rev.2 July 2003	11 2.4.2	LR	LR rule applies to fault currents in excess of 5A in impedance earthed circuits only
E11	Rev.2 July 2003	11 2.4.5	LR	LR rule permits the use of suitable fuses for overload protection
E11	Rev.2 July 2003	11 3.2	LR	LR rule applies to all generators and motors utilised for electric propulsion applications only irrespective of voltage rating
E11	Rev.2 July 2003	11 4.1	LR	LR rules do not require low liquid level alarm and trip or load reduction facilities mentioned in the UR
E11	Rev.2 July 2003	11 6.2.2	LR	LR rules do not specifically require locking facilities on circuit breakers for high voltage applications mentioned in the UR
E11	Rev.2 July 2003	11 6.2.3	LR	LR rules do not specifically require the provision of shutters mentioned in the UR

***UR E13 Test requirements for Rotating Machines***

UR	Version	Clause	Society	Reservation
E13	Corr.1 May 04/ Rev.1 May 01	4.8 Table 1 item 8	DNV	Partly implemented Overspeed test, Applicable for type test only.
E13	Rev.1 May 2001	E13/3 Table 1	IRS	Overspeed tests for generators and motors are not considered necessary during routine testing, also these are difficult to put in practice due to reluctance from manufacturers. As far as type tests are concerned, overspeed test is included in IRS Rules.

***UR E20 Installation of electrical and electronic equipment in engine rooms protected by fixed water-based local application fire-fighting systems (FWBLAFFS)***

UR	Version	Clause	Society	Reservation
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E20	Rev.5 Nov 2005	All	DNV	Partly implemented In accordance with IMO FP48 WP4, DNV has made these requirements applicable for “Installation of electrical and electronic equipment in engine rooms protected by fixed water-based local application fire-fighting systems” operating with salt water systems only.
E20	May 04-		NK	NK admits to apply UR E20 for electrical and electronic equipment located within areas protected by FWBLAFFS and those within adjacent areas exposed to direct spray having a degree of protection of IP22 which got a satisfactory result of actual test using fresh water.

***UR F2 Aluminium Coatings on Board Oil Tankers and Chemical Tankers***

UR	Version	Clause	Society	Reservation
F2	1/1998	F2	ABS	ABS is not convinced that the restrictions on use of aluminium coatings/aluminized pipe are justified by the perceived hazards. ABS doing research on the matter.

***UR F5 Pump room alarms***

UR	Version	Clause	Society	Reservation
F5	Rev.1 1973	Entirely	LR	LR's policy is not to include statutory requirements in the Rules.

***UR F7 Portable instruments for measuring oxygen and flammable vapour concentrations***

UR	Version	Clause	Society	Reservation
F7	Rev.2 May 1999	Partly	LR	LR Rules do not require portable oxygen analysers for single hull tankers.

***UR F9 Lighting and sighting ports in pump room/engine room bulkheads***

UR	Version	Clause	Society	Reservation
F9	1971	Entirely	LR	As advised in Mr Wade's telefax to Council Members dated 12 May 1995, the requirements for fire protection, detection and extinction for ships covered by the SOLAS Convention were removed from LR Rules and Regulations for the Classification of Ships with effect from 26 July 1995. Compliance with SOLAS is a pre-requisite for classification. However, the Rules do contain requirements for fire protection, detection and extinction for cargo ships of less than 500 gross tons but UR F9 is no longer implemented in these Rules as the use of lighting and sighting ports is now obsolete in our experience.

***UR F34 Low Pressure Carbon Dioxide Smothering Systems***

UR	Version	Clause	Society	Reservation
F34	Rev.1 1989	All	DNV	N/A To be deleted (replaced by IACS UI SC170)
F34	Rev.1 1989	Entirely	LR	As advised in Mr Wade's telefax to Council Members dated 12 May 1995, the requirements for fire protection, detection and extinction for ships covered by the SOLAS Convention were removed from LR Rules and Regulations for the Classification of Ships with effect from 26 July 1995. However, compliance with SOLAS is a pre-requisite for classification. Accordingly, UR F34 is not implemented in LR Rules and Regulations for the Classification of Ships. The Rules do, however, contain requirements for fire protection, detection and extinction for cargo ships of less than 500 gross tons and for fishing vessels of between 12 and 45 metres in length.

***UR I2 Structural Requirements for Polar Class Ships***

UR	Version	Clause	Society	Reservation
I2	Rev.1	I2.13	GL	GL reserves its position to perform buckling strength calculations on the basis of DIN 18800

***UR K3 Keyless fitting of propellers without ice strengthening***

UR	Version	Clause	Society	Reservation
K3	Corr.2 June 1998	All	DNV	Full Reservation on existing K3. The proposed planned revision 5 of the IACS working group was implemented in the DNV Rules in January 2006.

***UR M2 Alarm Devices of Internal Combustion Engines***

UR	Version	Clause	Society	Reservation
M2	1971	M2	ABS	ABS Rules only require plan review and survey of engines of 100 kW and over. Therefore ABS does not implement this UR for engines in the range 37 to 100 kW.

***UR M3 Speed governor and overspeed protective device***

UR	Version	Clause	Society	Reservation
M3	Rev.5 Feb 06	2.3	DNV	Partly implemented 3 steps in lieu of 2

***UR M5 Mass production of internal combustion engines, procedure for inspection***

UR	Version	Clause	Society	Reservation
M5	1/1987	M5.1	ABS	ABS does not limit its application of UR M5 for mass production of internal combustion engines to those having cylinder bore not exceeding 300 mm.
M5	Rev. 1 1987	All	DNV	Full reservation. DNV plans to amend and align its reference documents (rules, etc.) in line with the outcome from the IACS Project Team established to review the relevant requirements.
M5	Rev.1/1987	M5.1	NK	NK admits to apply UR M5 for mass production of internal combustion engines having cylinder bore not exceeding 320mm.

***UR M6 Test pressures for parts of internal combustion engines***

UR	Version	Clause	Society	Reservation
M6	Rev.3 May 1998	All	DNV	Full reservation. DNV plans to amend and align its reference documents (rules, etc.) in line with the outcome from the IACS Project Team established to review the relevant requirements

***UR M14 Mass production of internal combustion engines: definition of mass production***

UR	Version	Clause	Society	Reservation
M14	1973	All	DNV	Full reservation. DNV plans to amend and align its reference documents (rules, etc.) in line with the outcome from the IACS Project Team established to review the relevant requirements.

***UR M18 Parts of internal combustion engines for which material tests are required***

UR	Version	Clause	Society	Reservation
M18	1972	M18.3	ABS	For repair of IC engines with bores 300mm or less, ABS does not insist on certification of connecting rods.
M18	Rev.4 Jun 2000	All	DNV	Full reservation. DNV plans to amend and align its reference documents (rules, etc.) in line with the outcome from the IACS Project Team established to review the relevant requirements
M18	Rev.4 Jun 2000	Partly	LR	This is a question of mass produced and non-mass produced engines. LR Rules do not refer to mass produced engines; the requirements are based on bore size alone, i.e. less than or greater than 400 mm.

***UR M19 Parts of internal combustion engines for which nondestructive tests are required***

UR	Version	Clause	Society	Reservation
M19	1974	All	DNV	Full reservation. DNV plans to amend and align its reference documents (rules, etc.) in line with the outcome from the IACS Project Team established to review the relevant requirements.

***UR M21 Mass production of internal combustion engines: type test conditions***

UR	Version	Clause	Society	Reservation
M21	1974, Corr. Sept 2003	All	DNV	Full reservation. DNV plans to amend and align its reference documents (rules, etc.) in line with the outcome from the IACS Project Team established to review the relevant requirements.

***UR M23 Mass production of engines: Mass Produced Exhaust Driven Turbochargers***

UR	Version	Clause	Society	Reservation
M23	Rev. 3 1991	All	DNV	Full reservation. DNV plans to amend and align its reference documents (rules, etc.) in line with the outcome from the IACS Project Team established to review the relevant requirements.
M23	Rev.3 1991	M23.1	RINA	This UR is applied by RINA to turbochargers fitted on diesel engines having a power of 1000 kW and above. For the others turbochargers (i.e. fitted on diesel engines having a power less than 1000 kW) RINA requires they are delivered with the works' certificate relevant to the bench running test and the hydrostatic test.

***UR M24 Rules concerning use of crude oil or slops as fuel for tanker boilers***

UR	Version	Clause	Society	Reservation
M24	Rev.1 1976	M24	BV	This UR refers to offshore Rules only.
M24	1/1976	M24	NK	NK does not apply crude oil or slops as fuel for tanker boilers. Therefore, this UR will not be implemented
M24	1/1976	M24	RINA	This UR was introduced in a RINA Rule for the assignment of a special class notation (in force since 1980) never applied. The above mentioned RINA Rule has consequently been deleted.

***UR M32 Definition of diesel engine type***

UR	Version	Clause	Society	Reservation
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M32	1979	Note 1	DNV	Partly implemented. DNV practices this requirement with the exception of Note 1, the conditions alter slightly as well as we use other parameters than power, namely cylinder pressure and speed.
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***UR M34 Scantlings of coupling flanges***

UR	Version	Clause	Society	Reservation
M34	1980	All	DNV	Full reservation. - M34.1: DNV uses combined stress criteria with credit for friction torque instead of the UR diameter formulae. - M34.3: DNV rules deviate when $r/d > 0.08$ - M34.4: DNV rules have no direct restriction to $r/d$ , but shaft calculations will tend to limit this ratio.

***UR M35 Alarms, remote indications and safeguards for main reciprocating I.C. engines installed in unattended machinery spaces***

UR	Version	Clause	Society	Reservation
M35	Rev.4 1999	Table 1 Item 6 Table 1 Item 8 Table 2 Item 2	DNV	Partly introduced. The DNV rules are basically in line with UR M35, however deviate in some respect: - Table 1 Item 6 "Oily contamination of engine cooling water system" - Table 1 Item 8 "Scavenge air system"; DNV rules does not require scavenge air receiver water level - Table 2 Item 2 "Oil mist concentration in crankcase"; DNV rules accept also alternatives to the oil mist detector

***UR M44 Documents for the approval of diesel engines***

UR	Version	Clause	Society	Reservation
M44	Rev.7 May 2004	Item 22 Item 27	DNV	Partly Implemented - Item 22: Material specifications of main parts with information on NDT and pressure tests. DNV rules request this, but in general for information only, not for approval. NDT is required for approval only for crankshafts and connecting rods. - Item 27: Cooling water system. DNV rules request this, but for information only, not for approval. Reduced extent for cylinder bores less than 150 mm.

***UR M51 Programme for trials of i.c. engines to assess operational capability***

UR	Version	Clause	Society	Reservation
M51	1987	M51.2.1.3b	ABS	Test at 110% power for 30 minutes is not in ABS Rules.
M51	1987	M51.2.2	ABS	This paragraph for special operating conditions is not in the ABS Rules.
M51	Rev.2 Jul 2003	1.1 2.1	DNV	Partly Implemented - 1.1: 25% test is taken out in the DNV rules. - 2.1: Reduced testing hours in DNV rules for small main engines. - 2.1: For aux. engines, DNV rules specify test time 1 hour, while IACS require 4 hours.

***UR M52 Length of aft stern bush bearing***

UR	Version	Clause	Society	Reservation
M52	1986	2	DNV	Partly implemented. DNV rules do not indicate any direct lower limit for bearing length. This length however, will be limited by load and damping characteristics with respect to whirling.

***UR M56 Marine Gears - Load Capacity of Involute Parallel Axis Spur and Helical Gears***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
M56	Rev.1 1994/ Corr 1996	All	DNV	Partly implemented. DNV use and accept alternative criteria for calculation of gears. Very much in line with recognised international standards. DNV has implemented updates from ISO 6336 which is the source for both M56 and DNV. M56 has not been updated accordingly.
M56	Rev.1 1994/ Corr. 1996	M56.1.2	RINA	RINA does not consider design approval of gears having rating less than 220 kW for main propulsion or 110 kW for essential service auxiliaries necessary, taking into account that they are mass produced according to standardized design criteria widely experienced in service and built by specialized manufacturers. RINA, in any case, requires factory acceptance tests and sea trials to be performed for gears intended for main propulsion and essential auxiliaries.

***UR M58 Charge air coolers***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
M58	1994	All	DNV	Full reservation. DNV rules do not request works material certificates, and accept hydraulic testing to be carried out at maximum working pressure only.

***UR M59 Control and safety systems for dual fuel diesel engines***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
M59	1996	3.1, 3.2 (1) and (2), 4.1, 8.1, 9.1.2.c	DNV	Partly implemented. UR M59 has been partly implemented in the DNV rules, do however not specifically list all requirements stated in the UR. (This applies to UR item nos. M59.3.1, 59.3.2 (1) and (2), 59.4.1, 59.8.1 and 59.9.1.2.c.) M59 will continue to be evaluated in machinery panel.

***UR M60 Control and Safety of Gas Turbines for Marine Propulsion Use***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
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M60	1997	1.1, 1.2, 2.2	DNV	<p>Partly implemented.</p> <p>The DNV rules deviate slightly from IACS UR M60 concerning monitoring requirements as follows:</p> <ul style="list-style-type: none"> <li>- Ref. UR M60.1.1.DNV rules do not require a specific maximum overspeed limit of 15%. DNV requirements are related to preventing the turbine speed from exceeding the maximum permissible speed as defined by the Manufacturer.</li> <li>- Ref. UR M60.1.2. DNV do not require separate speed governors for speed control and over speed protection. However, the control system must be capable of controlling the speed due to sudden turbine load drop without activating the over speed shut down function.</li> <li>- Ref. UR M60.2.2. DNV rules request “step to idle” (not “shut down”) for h) “excessive high vacuum pressure at compressor inlet”.</li> </ul> <p>DNV rules have no action requirements related to exhaust temperature. DNV does not require automatic shut down due to item e) “excessive axial displacement”. DNV only require that applications which may experience thrust load directional variations must be provided with an axial proximity probe in the high speed driven string. At the next rule revision DNV will implement a requirement for alarm in case of changed thrust load direction. DNV considers this to provide the highest vessel safety level, as shutdowns not strictly needed are detrimental to vessel safety.</p> <ul style="list-style-type: none"> <li>- Ref. UR M60.3, table 1. DNV rules do not request alarm for “oil fuel temperature” and “oil fuel supply pressure”. At the next rule revision DNV will implement a requirement for alarm related to low oil fuel temperature. This to be applicable for turbines running on oil fuels where oil fuel heaters are required to avoid viscosity problems.</li> </ul>
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### ***UR M62 Rooms for emergency fire pumps in cargo ships***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
M62	Feb 2002		ABS	The UR cannot be uniformly implemented until "adequately" is quantified and therefore is not being implemented by ABS at this time.

### ***UR N1 One man bridge operated ships***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
N1	1992	All	IRS	Requirements concerning navigation are not presently part of IRS Rules. Also, there are no ships of this type in IRS class.

### ***UR P2 Rules for Piping Design, Construction and Testing***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
P2	1/1987 & Corr.Nov 2001	P2.5.5.5 & Table 4	ABS	Post weld heat treatment for oxyacetylene welding is not in ABS Rules.

### ***UR P2 Rules for Piping Design, Construction and Testing - 2.3 Materials***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
P2	Rev.2 Nov 2001	2.3.1	LR	Pipe requirements given in Materials Pt 2 which is called up
P2	Rev.2 Nov 2001	2.3.3	LR	No restriction on systems in LR Rules
P2	Rev.2 Nov 2001	2.3.4	LR	Design temperature is common, no mention of vibration or shock
P2	Rev.2 Nov 2001	2.3.4	LR	The upper pressure limit in the UR is not given by LR nor is the prohibition from manifold use



***UR P2 Rules Piping Design, Construction and Testing - 2.5 Welding***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
P2	Corr. Nov 2001	2.5.3.2	LR	Use of tack welds not covered
P2	Corr. Nov 2001	2.5.4	LR	0.3 Mo alloy steel not in Rules
P2	Corr. Nov 2001	2.5.5.5	LR	Requirements for heat treatment of oxy acet welded pipes not given
P2	Corr. Nov 2001	Table 3	LR	0.3mo steel not included and slightly tighter temps
P2	Corr. Nov 2001	Table 3	LR	0.3mo steel not included note 3 acted on, notes 1 & 2 do not appear to be covered

***UR P2 Rules for Piping Design, Construction and Testing - 2.6 Non destructive testing of welds and acceptance criteria***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
P2	1987	2.6.1.1.1.2	LR	LR do not specify a min of 10% or the type of testing

***UR P2 Rules for Piping Design, Construction and Testing - 2.8 Hydrostatic tests of piping***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
P2	Rev.1, Corr Nov 2001	2.8.1	LR	Membrane stress limitation not quoted

***UR P2.7 Rules for Piping Design, Construction and Testing - Types of connections***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
P2.7	Rev.2 Nov 2001	P2.7.4	NK	NK admits the use of slip-type slip-on joints to steam piping of which design pressure is 1.0 MPa or less, for cargo heating on open decks in tankers.

***UR P6 Shell Type Exhaust Gas Heated Economizers that may be isolated from the steam plant system***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
P6	May 2005	P6.3.2 P6.3.3 P6.3.3.1 P6.3.4	ABS	The ABS technical committee considers that the requirements go beyond the recommendations of the MAIB and would impose unwarranted technical design changes on safety valve manufacturers.
P6	May 2005	P6.3.2 P6.3.3 P6.3.3.1 P6.3.4	RINA	No sufficient experience is available on construction and installation of special design safety valves and bursting discs.

***UR S4 Criteria for the use of high tensile steel with minimum yield Stress of 315 N/mm<sup>2</sup>, 355 N/mm<sup>2</sup> and 390 N/mm<sup>2</sup>***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
S4	Rev.2 Apr 2007	S4	ABS	ABS reserves against the k-factor for steel with a yield point of 390 N/mm <sup>2</sup> for the longitudinal strength calculation of Container Carriers with plate thickness greater than 51mm when additional special analyses are applied.
S4	Rev.2 Apr 2007	S4	DNV	Partly implemented DNV reserves against application of the k-factor for steel with minimum yield stress = 390 N/mm <sup>2</sup> for ships with DNV class notation Container Carrier provided that a fatigue assessment is performed.

S4	Rev.2	S4	GL	GL reservation against the k-factor for steel with a yield point of 390 N/mm (2008)
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### ***UR S6 Use of steel grades for various hull members - ships of 90m in length and above***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
S6	2/1996	S6.2 & 6.3	ABS	Until further experiences are gained, service temperatures cooler than -40C will be in the Rules as guidance. Design temperature for members in the current ABS Rules is being retained pending unification of polar ship requirements.
S6	2/1996 3/May 2002 4/July 2003 5/Sept 2007	6.2, 6.3	RS	RS has implemented UR S6 with regard to item 6.1 only. National requirements similar to S6.2 have been implemented in RS Rules.

### ***UR S7 Minimum Longitudinal Strength Standards***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
S7	3/1989	S7.1	RS	With respect to item 7.1, RS uses different criteria for ships in service for calculating minimum longitudinal strength standards. This reservation however does not apply to tankers with length over 130 m.

### ***UR S10 Rudders, sole pieces and rudder horns***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
S10	Rev.1 1990	S10.8.3	GL	For self-lubricating gearings, clearances less than 1.5 mm on diameter may be accepted on the basis of the manufacturer's specification.
S10	Rev.1 1990 Corr.July 2003		RS	Partially implemented, but rudder strength calculation method in RS Rules is more detailed and universal.

### ***UR S11 Longitudinal Strength Standard***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
S11	Rev.1 1993	S11.5	ABS	For certain type/size ships, ABS accepts alternate approach involving ultimate strength assessment.
S11	Rev.1 1993	S11.5	BV	Buckling strength has not been implemented. Equivalent criteria have been introduced to be coherent with other parts of BV Rules with regard to loads and corrosion margins.
S11	Rev.5 Jan 2006	S11.5	GL	GL reserves its position to perform buckling strength calculations on the basis of DIN 18800.
S11	Rev.5 Jan 2006	S11.5	NK	Structural members subject to hull girder bending and shear stress applying in S11.5.1 for buckling strength have partly been applied in NK rules but all longitudinal members have not been applied.
S11	Rev.1 1993	S11	RINA	This UR S11 is substantially applied. In the Rules for the classification of ships effective from 1st June 2000, the UR formulation has been modified to make it consistent with the general rule criteria, however without significant modifications to the final results.

### ***UR S14 Testing Procedures of Watertight Compartments***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
S14	Rev.2 May 2001	S14.3	NK	NK has partly implemented this UR because some requirements which are considered impracticable still remain in S14.3.

***UR S17 Longitudinal strength of hull girder in flooded condition for single side skin bulk carriers***

UR	Version	Clause	Society	Reservation
S17	1/1997	S17.5	ABS	This paragraph requires that permissible axial buckling stress meet S11. This is being adhered to for deck and bottom plating. When this is applied to a Panamax bulk carrier, 14.5 mm topside tank bottom plating had to be increased to 17 mm. We do not think this was / is the intent of S17 and are applying axial stress check only to the deck and bottom structures and request that UR be changed to clarify its applicability.
S17	Rev.7 Feb 2006	S17.5	GL	GL reserves its position to perform buckling strength calculations on the basis of DIN 18800.

***UR S21 Evaluation of Scantlings of Hatch Covers and Hatch Coamings of Cargo Holds of Bulk Carriers, Ore Carriers and Combination Carriers (Rev.4)***

UR	Version	Clause	Society	Reservation
S21	Rev.4 Jul 04/ Corr.1 Oct 04	S21.3.6	GL	GL reserves its position to perform buckling strength calculations on the basis of DIN 18800.

***UR S26 Strength and securing of small hatches on the exposed fore deck***

UR	Version	Clause	Society	Reservation
S26	Rev.3 Aug 06	1.4	DNV	Partly implemented. The requirement will not be retroactively implemented for all ships.
S26	Rev.3 Aug 06	S26.3.2	NK	For ships which will be less than 10 years of age on 1 January 2004, NK accepts postponement to the date of the first scheduled intermediate or special survey after that date in such a case where an intermediate or special survey of the ship is not scheduled between 1 January 2004 and the date on which the ship reaches 10 years of age. It is same as the due date for ships, which will be 10 years of age or more on 1 January 2004. Because it is impracticable for ships in question to implement this clause of the UR

***UR S27 Strength requirements for fore deck fittings and equipment***

UR	Version	Clause	Society	Reservation
S27	Rev.4 Nov 04	S27.3.2	NK	Same as the reservation of UR S26.3.2.

***UR S30 Cargo hatch cover securing arrangements for bulk carriers not built in accordance with UR S21***

UR	Version	Clause	Society	Reservation
S30	Rev.1 Aug 03	S30.1.2	NK	Same as the reservation of UR S26.3.2.

***UR S31 Renewal criteria for side shell frames in single side skin bulk carriers and OBO carriers not built in accordance with UR S12 Rev.1 or subsequent revisions***

UR	Version	Clause	Society	Reservation
S31	Rev.4 Apr 2007	S31.1	NK	Same as the reservation of UR S26.3.2

***UR W26 Requirements for welding consumables for aluminium alloys***

UR	Version	Clause	Society	Expected Implementation Date
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W26	Rev.1 Jun 2005	All	DNV	Partly implemented. DNV use international designations in lieu of IACS designations for filler materials.
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### ***UR W28 Welding procedure qualification tests of steels for hull construction and marine structures***

UR	Version	Clause	Society	Reservation
W28	June 2005	FR	ABS	In message 6095_ Abc, ABS detailed several technical reservations against clauses 3.1.2, 4.2.2.5(b), 5.3.1, 5.7.1 and Annex A. ABS will not be able to implement UR W28 until these reservations are resolved.

### ***UR Z1 Annual and intermediate classification survey coverage of IMO Resolution A.948(23)***

UR	Version	Clause	Society	Reservation
Z1	2/ June 1999	Z1.3.3	ABS	(12.3.2.5/Annex 4-1.3.2.5) Spares are not a class item.
Z1	2/ June 1999	Z1.3.4	ABS	(13.3.2.4/Annex 4-2.3.2.4) Spares are not a class item.

### ***UR Z3 Periodical Survey of the Outside of the Ship's Bottom and Related Items***

UR	Version	Clause	Society	Reservation
Z3	Rev.4 Oct 2006	Z3.2.7	NK	NK Rules are not intended to apply ships which are utilized in support of military operations or service

### ***UR Z6 Continuous System for Hull Special Survey***

UR	Version	Clause	Society	Reservation
Z6	Rev.0~5	Z6	KR	It has been decided that UR Z6 is not applicable to KR.

### ***UR Z10.1 Hull surveys of oil tankers***

UR	Version	Clause	Society	Reservation
Z10.1	Rev.12 July 2005	Z10.1.2.5 Extent of tank testing	DNV	DNV accepts that pressure testing of cargo tanks is confirmed by Master, similarly as for Z10.3 item 2.5.1.
Z10.1	Rev.14 Feb 07	Z10.1 2.2.3.1 & 4.2.2.2	NK	Coating condition in 2.2.3.1 and 4.2.2.2 were not changed from the previous revision because these changes were not approved by the technical committee.

### ***UR Z10.3 Hull Surveys of Chemical Tankers***

UR	Version	Clause	Society	Reservation
Z10.3	Rev.8, Corr.1 Sep 2006	Z10.3 2.2.3.1 & 4.2.2.2	NK	Coating condition in 2.2.3.1 and 4.2.2.2 were not changed from the previous revision because these changes were not approved by the technical committee.

### ***UR Z10.4 Hull Surveys of Double Hull Oil Tankers***

UR	Version	Clause	Society	Reservation
Z10.4	Rev.5 Feb 07	Z10.4 2.2.3.1 & 4.2.2.2	NK	Coating condition in 2.2.3.1 and 4.2.2.2 were not changed from the previous revision because these changes were not approved by the technical committee.

***UR Z15 Hull Structure, Equipment and Machinery Surveys of Mobile Offshore Drilling Units***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
Z15	Aug 2002	Z15.2.1.2	ABS	ABS does not apply maximum 3 months extension provision to MODUs as a class requirement.

***UR Z17 Procedural Requirements for Service Suppliers***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
Z17	Rev.5 Feb 2004	Z17.1.1	ABS	Approval of thickness measurement firms is not required by ABS for: - ships less than 90m L which are not subject to URs Z7.1, Z7.2 and Z10.1 through Z10.5; - ships for Great Lakes Service.
Z17	Rev.5 Feb 2004	Z71 3.1.1 & 3.1.2	NK	Partly incorporated in the rules in 2004. Some services of the firms specified in 3.1.1 and 3.1.2 are not subjected to the Society's approval.

***UR Z18 Periodical Survey of Machinery***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
Z18	Rev.2 Oct 2006	Z18.2.1	NK	NK requires one of Boiler Surveys in every 5 year period to be carried out at the time of Special Survey, which allows 3 months prolongation.
Z18	Rev.2/ Oct 06	Z18.4 Note	NK	NK Rules are not intended to apply ships which are utilized in support of military operations or service

***UR Z21 Survey of Propeller Shafts and Tube Shafts***

<b>UR</b>	<b>Version</b>	<b>Clause</b>	<b>Society</b>	<b>Reservation</b>
Z21	Nov 2001	1(a)ii))	ABS	For shafts on water lubricated bearing without continuous liner, ABS Rules permit 4 years [5 years effective 2003] interval for multiple shaft installations.
Z21	Nov 2001	2(b)	ABS	Where oil lubricated, a modified survey is acceptable to ABS on every survey
Z21	Nov 2001	3(b)	ABS	Removal of propeller and NDT are not required by ABS for extension
Z21	Nov 2001	3(c)	ABS	ABS Rules provide optional 5 year extension subject to certain provisos
Z21	Nov 2001	Z21	BV	BV interval of survey is 5 years (+/- 6 months) instead of 5 years (maximum) in UR Z21.1 and Z21.2. BV does not require drawing of the shaft to expose the aft bearing contact area for modified survey in UR Z21.2.
Z21	Rev.2 Oct 2006	Z21.2	NK	NK does not require the drawing of the shaft to expose the aft bearing contact area at the modified survey even in case of no LO analysis.
Z21	Rev.2/ Oct 06	Z21.3 Note	NK	NK Rules are not intended to apply ships which are utilized in support of military operations or service
Z21	Nov 2001	Z21.3	RINA	In RINA Rules for the classification of ships effective from 1st June 2000, the Partial Survey is no longer included.