



**BUREAU
VERITAS**

Requirements for Survey of Materials and Equipment for the Classification of Ships and Offshore Units

NR 266

AMENDMENTS

January 2018

These sheets contain amendments within the following Sections of January 2017 issue of NR266.

These amendments are effective from January 1st, 2018.

Sections	Tables	Items
<i>Section 2</i>	Table 2 Table 4 Table 5 Table 7 Table 11 Table 13 Table 14 Table 15 Table 16 Table 17 Table 18 Table 20	B20 ; B24 D10 E13 G9 ; G28 ; G34 ; G35 G37 ; G40 K ; K26 M ; M5 N O ; O1 ; O2 P1 Q1 R1 ; R2 T1 ; T2 ; T3
<i>Section 3</i>	Table 1	



**BUREAU
VERITAS**

MARINE & OFFSHORE - GENERAL CONDITIONS

1. INDEPENDENCY OF THE SOCIETY AND APPLICABLE TERMS

- 1.1. The Society shall remain at all times an independent contractor and neither the Society nor any of its officers, employees, servants, agents or subcontractors shall be or act as an employee, servant or agent of any other party hereto in the performance of the Services.
- 1.2. The operations of the Society in providing its Services are exclusively conducted by way of random inspections and do not, in any circumstances, involve monitoring or exhaustive verification.
- 1.3. The Society acts as a services provider. This cannot be construed as an obligation bearing on the Society to obtain a result or as a warranty. The Society is not and may not be considered as an underwriter, broker in Unit's sale or chartering, expert in Unit's valuation, consulting engineer, controller, naval architect, manufacturer, shipbuilder, repair or conversion yard, charterer or shipowner; none of them above listed being relieved of any of their expressed or implied obligations as a result of the interventions of the Society.
- 1.4. The Services are carried out by the Society according to the applicable Rules and to the Bureau Veritas' Code of Ethics. The Society only is qualified to apply and interpret its Rules.
- 1.5. The Client acknowledges the latest versions of the Conditions and of the applicable Rules applying to the Services' performance.
- 1.6. Unless an express written agreement is made between the Parties on the applicable Rules, the applicable Rules shall be the rules applicable at the time of the Services' performance and contract's execution.
- 1.7. The Services' performance is solely based on the Conditions. No other terms shall apply whether express or implied.

2. DEFINITIONS

- 2.1. "**Certificate(s)**" means class certificates, attestations and reports following the Society's intervention. The Certificates are an appraisal given by the Society to the Client, at a certain date, following surveys by its surveyors on the level of compliance of the Unit to the Society's Rules or to the documents of reference for the Services provided. They cannot be construed as an implied or express warranty of safety, fitness for the purpose, seaworthiness of the Unit or of its value for sale, insurance or chartering.
- 2.2. "**Certification**" means the activity of certification in application of national and international regulations or standards, in particular by delegation from different governments that can result in the issuance of a certificate.
- 2.3. "**Classification**" means the classification of a Unit that can result or not in the issuance of a class certificate with reference to the Rules.
- 2.4. "**Client**" means the Party and/or its representative requesting the Services.
- 2.5. "**Conditions**" means the terms and conditions set out in the present document.
- 2.6. "**Industry Practice**" means International Maritime and/or Offshore industry practices.
- 2.7. "**Intellectual Property**" means all patents, rights to inventions, utility models, copyright and related rights, trade marks, logos, service marks, trade dress, business and domain names, rights in trade dress or get-up, rights in goodwill or to sue for passing off, unfair competition rights, rights in designs, rights in computer software, database rights, topography rights, moral rights, rights in confidential information (including know-how and trade secrets), methods and protocols for Services, and any other intellectual property rights, in each case whether capable of registration, registered or unregistered and including all applications for and renewals, reversions or extensions of such rights, and all similar or equivalent rights or forms of protection in any part of the world.
- 2.8. "**Parties**" means the Society and Client together.
- 2.9. "**Party**" means the Society or the Client.
- 2.10. "**Register**" means the register published annually by the Society.
- 2.11. "**Rules**" means the Society's classification rules, guidance notes and other documents. The Rules, procedures and instructions of the Society take into account at the date of their preparation the state of currently available and proven technical minimum requirements but are not a standard or a code of construction neither a guide for maintenance, a safety handbook or a guide of professional practices, all of which are assumed to be known in detail and carefully followed at all times by the Client.
- 2.12. "**Services**" means the services set out in clauses 2.2 and 2.3 but also other services related to Classification and Certification such as, but not limited to: ship and company safety management certification, ship and port security certification, training activities, all activities and duties incidental thereto such as documentation on any supporting means, software, instrumentation, measurements, tests and trials on board.
- 2.13. "**Society**" means the classification society "**Bureau Veritas Marine & Offshore SAS**", a company organized and existing under the laws of France, registered in Nanterre under the number 821 131 844, or any other legal entity of Bureau Veritas Group as may be specified in the relevant contract, and whose main activities are Classification and Certification of ships or offshore units.
- 2.14. "**Unit**" means any ship or vessel or offshore unit or structure of any type or part of it or system whether linked to shore, river bed or sea bed or not, whether operated or located at sea or in inland waters or partly on land, including submarines, hovercrafts, drilling rigs, offshore installations of any type and of any purpose, their related and ancillary equipment, subsea or not, such as well head and pipelines, mooring legs and mooring points or otherwise as decided by the Society.

3. SCOPE AND PERFORMANCE

- 3.1. The Society shall perform the Services according to the applicable national and international standards and Industry Practice and always on the assumption that the Client is aware of such standards and Industry Practice.

- 3.2. Subject to the Services performance and always by reference to the Rules, the Society shall:

- review the construction arrangements of the Unit as shown on the documents provided by the Client;
- conduct the Unit surveys at the place of the Unit construction;
- class the Unit and enters the Unit's class in the Society's Register;
- survey the Unit periodically in service to note that the requirements for the maintenance of class are met. The Client shall inform the Society without delay of any circumstances which may cause any changes on the conducted surveys or Services.

The Society will not:

- declare the acceptance or commissioning of a Unit, nor its construction in conformity with its design, such activities remaining under the exclusive responsibility of the Unit's owner or builder;
- engage in any work relating to the design, construction, production or repair checks, neither in the operation of the Unit or the Unit's trade, neither in any advisory services, and cannot be held liable on those accounts.

4. RESERVATION CLAUSE

- 4.1. The Client shall always: (i) maintain the Unit in good condition after surveys; (ii) present the Unit after surveys; (iii) present the Unit for surveys; and (iv) inform the Society in due course of any circumstances that may affect the given appraisal of the Unit or cause to modify the scope of the Services.

- 4.2. Certificates referring to the Society's Rules are only valid if issued by the Society.

- 4.3. The Society has entire control over the Certificates issued and may at any time withdraw a Certificate at its entire discretion including, but not limited to, in the following situations: where the Client fails to comply in due time with instructions of the Society or where the Client fails to pay in accordance with clause 6.2 hereunder.

5. ACCESS AND SAFETY

- 5.1. The Client shall give to the Society all access and information necessary for the efficient performance of the requested Services. The Client shall be the sole responsible for the conditions of presentation of the Unit for tests, trials and surveys and the conditions under which tests and trials are carried out. Any information, drawings, etc. required for the performance of the Services must be made available in due time.

- 5.2. The Client shall notify the Society of any relevant safety issue and shall take all necessary safety-related measures to ensure a safe work environment for the Society or any of its officers, employees, servants, agents or subcontractors and shall comply with all applicable safety regulations.

6. PAYMENT OF INVOICES

- 6.1. The provision of the Services by the Society, whether complete or not, involve, for the part carried out, the payment of fees thirty (30) days upon issuance of the invoice.

- 6.2. Without prejudice to any other rights hereunder, in case of Client's payment default, the Society shall be entitled to charge, in addition to the amount not properly paid, interests equal to twelve (12) months LIBOR plus two (2) per cent as of due date calculated on the number of days such payment is delinquent. The Society shall also have the right to withhold certificates and other documents and/or to suspend or revoke the validity of certificates.

- 6.3. In case of dispute on the invoice amount, the undisputed portion of the invoice shall be paid and an explanation on the dispute shall accompany payment so that action can be taken to solve the dispute.

7. LIABILITY

- 7.1. The Society bears no liability for consequential loss. For the purpose of this clause consequential loss shall include, without limitation:

- Indirect or consequential loss;
- Any loss and/or deferral of production, loss of product, loss of use, loss of bargain, loss of revenue, loss of profit or anticipated profit, loss of business and business interruption, in each case whether direct or indirect.

The Client shall save, indemnify, defend and hold harmless the Society from the Client's own consequential loss regardless of cause.

- 7.2. In any case, the Society's maximum liability towards the Client is limited to one hundred and fifty per-cents (150%) of the price paid by the Client to the Society for the performance of the Services. This limit applies regardless of fault by the Society, including breach of contract, breach of warranty, tort, strict liability, breach of statute.

- 7.3. All claims shall be presented to the Society in writing within three (3) months of the Services' performance or (if later) the date when the events which are relied on were first discovered by the Client. Any claim not so presented as defined above shall be deemed waived and absolutely time barred.

8. INDEMNITY CLAUSE

- 8.1. The Client agrees to release, indemnify and hold harmless the Society from and against any and all claims, demands, lawsuits or actions for damages, including legal fees, for harm or loss to persons and/or property tangible, intangible or otherwise which may be brought against the Society, incidental to, arising out of or in connection with the performance of the Services except for those claims caused solely and completely by the negligence of the Society, its officers, employees, servants, agents or subcontractors.

9. TERMINATION

- 9.1. The Parties shall have the right to terminate the Services (and the relevant contract) for convenience after giving the other Party thirty (30) days' written notice, and without prejudice to clause 6 above.

- 9.2. In such a case, the class granted to the concerned Unit and the previously issued certificates shall remain valid until the date of effect of the termination notice issued, subject to compliance with clause 4.1 and 6 above.

10. FORCE MAJEURE

- 10.1. Neither Party shall be responsible for any failure to fulfil any term or provision of the Conditions if and to the extent that fulfilment has been delayed or temporarily prevented by a force majeure occurrence without the fault or negligence of the Party affected and which, by the exercise of reasonable diligence, the said Party is unable to provide against.

- 10.2. For the purpose of this clause, force majeure shall mean any circumstance not being within a Party's reasonable control including, but not limited to: acts of God, natural disasters, epidemics or pandemics, wars, terrorist attacks, riots, sabotages, impositions of sanctions, embargoes, nuclear, chemical or biological contaminations, laws or action taken by a government or public authority, quotas or prohibition, expropriations, destructions of the worksite, explosions, fires, accidents, any labour or trade disputes, strikes or lockouts

11. CONFIDENTIALITY

- 11.1. The documents and data provided to or prepared by the Society in performing the Services, and the information made available to the Society, are treated as confidential except where the information:

- is already known by the receiving Party from another source and is properly and lawfully in the possession of the receiving Party prior to the date that it is disclosed;
- is already in possession of the public or has entered the public domain, otherwise than through a breach of this obligation;
- is acquired independently from a third party that has the right to disseminate such information;
- is required to be disclosed under applicable law or by a governmental order, decree, regulation or rule or by a stock exchange authority (provided that the receiving Party shall make all reasonable efforts to give prompt written notice to the disclosing Party prior to such disclosure).

- 11.2. The Society and the Client shall use the confidential information exclusively within the framework of their activity underlying these Conditions.

- 11.3. Confidential information shall only be provided to third parties with the prior written consent of the other Party. However, such prior consent shall not be required when the Society provides the confidential information to a subsidiary.

- 11.4. The Society shall have the right to disclose the confidential information if required to do so under regulations of the International Association of Classifications Societies (IACS) or any statutory obligations.

12. INTELLECTUAL PROPERTY

- 12.1. Each Party exclusively owns all rights to its Intellectual Property created before or after the commencement date of the Conditions and whether or not associated with any contract between the Parties.

- 12.2. The Intellectual Property developed for the performance of the Services including, but not limited to drawings, calculations, and reports shall remain exclusive property of the Society.

13. ASSIGNMENT

- 13.1. The contract resulting from these Conditions cannot be assigned or transferred by any means by a Party to a third party without the prior written consent of the other Party.

- 13.2. The Society shall however have the right to assign or transfer by any means the said contract to a subsidiary of the Bureau Veritas Group.

14. SEVERABILITY

- 14.1. Invalidity of one or more provisions does not affect the remaining provisions.

- 14.2. Definitions herein take precedence over other definitions which may appear in other documents issued by the Society.

- 14.3. In case of doubt as to the interpretation of the Conditions, the English text shall prevail.

15. GOVERNING LAW AND DISPUTE RESOLUTION

- 15.1. The Conditions shall be construed and governed by the laws of England and Wales.

- 15.2. The Society and the Client shall make every effort to settle any dispute amicably and in good faith by way of negotiation within thirty (30) days from the date of receipt by either one of the Parties of a written notice of such a dispute.

- 15.3. Failing that, the dispute shall finally be settled by arbitration under the LCIA rules, which rules are deemed to be incorporated by reference into this clause. The number of arbitrators shall be three (3). The place of arbitration shall be London (UK).

16. PROFESSIONAL ETHICS

- 16.1. Each Party shall conduct all activities in compliance with all laws, statutes, rules, and regulations applicable to such Party including but not limited to: child labour, forced labour, collective bargaining, discrimination, abuse, working hours and minimum wages, anti-bribery, anti-corruption. Each of the Parties warrants that neither it, nor its affiliates, has made or will make, with respect to the matters provided for hereunder, any offer, payment, gift or authorization of the payment of any money directly or indirectly, to or for the use or benefit of any official or employee of the government, political party, official, or candidate.

- 16.2. In addition, the Client shall act consistently with the Society's Code of Ethics of Bureau Veritas. <http://www.bureauveritas.com/home/about-us/ethics+and+compliance/>

Amendments to NR266

Sec 2, Table 2 - Item B20

Replace Remarks (2) and (3) by:

- (2) Ship specific onboard equipment. Requirements as per NR467, Pt B, Ch 10, Sec 2, [4] and NR467, Pt C, Ch 3, Sec 6. Also see relevant provisions of NR266 item **K26 / N** (Automation systems)
- (3) Loading instrument approval consists of: approval of hardware (unless two computers are available on board for loading calculations only), approval of basic software, approval of application software, and installation testing - as per NR467, Pt C, Ch 3 (Automation systems)

Replace Reference to “NR467” by a reference to “NR467, Pt C, Ch 3, Sec 6”

Replace the product certification columns as follow:

TA or DA (2) (3)		X (2) (3)	C / W (3)
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Sec 2, Table 2 - Item B24

Replace reference to “NR467, Part D, Chapter 14” by a reference to “NR467, Part E, Chapter 1” in Remarks (1a) and (1b)

Replace references to “NR467, Pt D, Ch 14, Sec 2 and NI 617, Safety Guidelines for Design, construction and Operation of Tugs” by a reference to “NR467, Part E, Chapter 1” in Remark (5)

Replace reference to “NR467, Pt D, Ch 14, Sec 2” by “NR467, Part E, Chapter 2” in Remark (6)

Replace references to “NR467, Pt D, Ch 14, Sec 2 and NI 617” by references to “NR467, Part E, Chapter 1 and NR467, Part E, Chapter 2” in the Note after Remark (6)

Sec 2, Table 4 - Item D10

Replace reference to “item H5 or I10” by a reference to “item H17 or I14” in Remark (1)

Replace the product certification columns as follow:

TA or DA	C / W (1)	X h ndt	C
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Sec 2, Table 5 - Item E13

Replace Remark (2) by:

- (2) Refer to specific requirements of NR529 Gas Fuelled Ships, and relevant provisions of NR467, Pt D, Ch 9, Sec 16

Sec 2, Table 7 - Item G9

Replace the title of item G9 by “Propellers (1) (10)”

Replace reference to “NR467, Pt E, Ch 8, Sec 3” by a reference to “NR467, Pt F, Ch 8, Sec 3” in Remark (1)

Insert the following Remark (10):

(10) Navigation in polar waters: refer to the requirements for the assignment of additional class notation **POLAR CLASS**, as per NR527 - Rules for the Classification of Ships Operating in Polar Waters and Icebreakers

Sec 2, Table 7 - Item G28

Replace Remark (3) as follow:

(3) Prototype testing: see NR467, Pt C, Ch 1, Sec 10, [2.6] (type approval) and [20.2] (type tests)

Sec 2, Table 7 - Item G34

Replace the title of item G34 by “Thrusters (1) (9) and their prime movers (6)”

Replace Remarks (1) and (5) as follow:

(1) Thrusters: as per NR467 Pt C, Ch 1, Sec 12. For azimuth thrusters intended for dynamic positioning, the additional requirements in NR467, Part F, Chapter 4 are to be complied with. Thrusters intended for propulsion and steering of ships with an **ICE CLASS** notation are to comply with the additional requirements of NR467, Part F, Chapter 8. Transverse thrusters intended for manoeuvring of ships with an **ICE CLASS** notation are required to comply with the additional requirements in NR467, Pt F, Ch 8, Sec 3, [2.4.1] - (for design requirements)

(5) Survey of thrusters as per the applicable requirements of NR467, Pt C, Ch 1, Sec 8, [4.2]. The survey requirements of NR467, Pt C, Ch 1, Sec 8 also apply to Thrusters of ships with an **ICE CLASS** notation -as per NR467, Part F, Chapter 8.

Replace reference to “NR467, Ch 1, Sec 8, [2.1.1]” by a reference to “NR467, Pt C, Ch 1, Sec 8, [2.1.1]” in Remark (8)

Insert the following Remark (9):

(9) Navigation in polar waters: refer to the requirements for the assignment of additional class notation **POLAR CLASS**, as per NR527 - Rules for the Classification of Ships Operating in Polar Waters and Icebreakers

Sec 2, Table 7 - Item G35

Replace reference to “NR467, Part E, Chapter 7” by a reference to “NR467, Part F, Chapter 7” in Remark (1)

Sec 2, Table 7 - Item G37

Replace Remarks (2) and (3) as follow:

- (2) Prototype testing: see NR467, Pt C, Ch 1, Sec 10, [2.6] (type approval) and [20.2] (type tests)
- (3) All flexible hose assemblies or expansion joints are to be satisfactorily prototype burst tested to an international standard to demonstrate they are able to withstand a pressure not less than 4 times its design pressure without

indication of failure or leakage. Exemptions from this requirement may be granted for expansion joints of large diameter used on sea water lines and to large diameter expansion joints used on exhaust gas lines, except for those which are fitted directly on engines (TA required)

Sec 2, Table 7 - Item G40

Replace reference to “NR467, Pt E, Ch 5, Sec 2” by a reference to “NR467, Pt F, Ch 5, Sec 2” in Remark (2)

Replace reference to “Pt E, Ch 9, Sec 2, [2]” by a reference to “NR467, Pt F, Ch 9, Sec 2, [2]” in Remark (3)

Sec 2, Table 11 - Item K

Replace the Title of Table 11 by “ELECTRICAL EQUIPMENT AND AUTOMATION SYSTEMS”

Insert the following item K26:

Table 11: Electrical Equipment and Automation Systems - item K

ELECTRICAL EQUIPMENT AND AUTOMATION SYSTEMS - ITEM K						
No.	Item	Product certification				Remarks
		Design assessment / Approval	Raw material certificate	Examination and testing	Product certificate	
K26	Automation systems (1) (2)	DA / TA (3) (9)		X (3) (9) (12)		(1) As per NR467, Pt C, Ch 3, Sec 1. The requirements apply to automation systems, installed on all ships, intended for essential services as defined in NR467, Pt C, Ch 2, Sec 1. They also apply to systems required in NR467, Part C, Chapter 1 and NR467, Part C, Chapter 2, installed on all ships. Navigation systems required by SOLAS Chapter V, Radio-communication systems required by SOLAS Chapter IV are not in the scope of these requirements
	1- Automation system components: electrical cables; transformers; rotating machines; electrical converters for primary essential services; switching devices (circuit-breakers, contactors, disconnectors, etc.) and overcurrent protective devices; sensors, alarm panels, electronic protective devices, automatic and remote control equipment, actuators, safety devices for installations intended for essential services (steering, controllable pitch propellers, propulsion machinery, etc.), electronic speed regulators for main or auxiliary engines; computers used for tasks essential to safety; cable trays or protective casings made of plastics materials (thermoplastic or thermosetting plastic materials)	TA (4) (5)	C / W (6) (7)	X (6)	C / W (7)	(2) Requirements for unattended machinery spaces and for additional notations are specified in NR467, Part F. Also see provisions of item N - Automation Systems, additional class notation (AUT) (3) Automation systems intended for essential services are to be tested for type approval, at works and on board, when required. The details of these tests are defined, in each case, after having studied the concept of the automated installations and their construction. A complete test program is to be submitted for approval
	2- Software of computer based systems (computerized systems) - Category III	TA (8) (9)		X (9)	C	(4) Type approved components as per NR467, Part C, Ch 2, Sec 15 (5) TA or case-by-case DA based on submission of adequate documentation and execution of tests may also be granted at the discretion of the Society
	3- Software of computer based systems (computerized systems) - Category II	TA (8) (9)		X (9)	C	(6) Fabrication/testing as per relevant provisions of NR467 (7) As per conditions set in the TA
	4- Software of computer based systems (computerized systems) - Category I	TA (HBV) (8) (9) (10)		X (9)	W	(8) System categories I, II and III: NR467, Pt C, Ch 3, Sec 3, [2.3] and Tab 1 shows how to assign system categories based on their effects on system functionality (the exact category being dependent on the risk assessment for all operational scenarios):
	5- Hardware elements included in computer based systems (computerized systems)	TA (9) (11)		X (9)	C	<ul style="list-style-type: none"> Category III: Those systems, failure of which could immediately lead to dangerous situations for human safety, safety of the vessel and/or threat to the environment Category II: Those systems, failure of which could eventually lead to dangerous situations for human safety, safety of the vessel and/or threat to the environment Category I: Those systems, failure of which will not lead to dangerous situations for human safety, safety of the vessel and/or threat to the environment
	6- Loading instruments/stability computer	TA or DA (13) (14)		X (9) (14)	C / W (7) (14)	

ELECTRICAL EQUIPMENT AND AUTOMATION SYSTEMS - ITEM K

No.	Item	Product certification				Remarks
		Design assessment / Approval	Raw material certificate	Examination and testing	Product certificate	
K26						<p>(9) Design assessment, acceptance tests and surveys requirements as per provisions of NR467, Pt C, Ch 3, Sec 3 and NR467, Pt C, Ch 3, Sec 6</p> <p>(10) Type tests/approval TA (HBV): if the concerned system is in the scope of Class requirement (BV)</p> <p>(11) Evidence of environmental type testing according to NR467, Pt C, Ch 3, Sec 6, [2.2] regarding hardware elements included in the system and sub-systems shall be submitted to the Society for Category I, II and III computer based systems. This requirement is not mandatory for Category I computer based systems not considered by Class (BV)</p> <p>(12) The construction of systems is to comply with the requirements of NR467, Pt C, Ch 3, Sec 4</p> <p>(13) For loading instrument/stability computer, see NR467, Pt B, Ch 10, Sec 2, [4]. See item B20</p> <p>(14) Loading instrument approval consists of:</p> <ul style="list-style-type: none"> • approval of hardware according to NR467, Pt C, Ch 3, Sec 6, [2.2], unless two computers are available on board for loading calculations only • approval of basic software according to NR467, Pt C, Ch 3, Sec 6, [2.3] • approval of application software, consisting in data verification which results in the Endorsed Test Condition according to NR467, Part B • installation testing according to NR467, Pt C, Ch 3, Sec 6, [4] <p>Note: On board testing according to NR467, Pt C, Ch 3, Sec 6</p>

Sec 2, Table 13 - Item M

Replace references to “NR467, Part E, Chapter 7” by references to “NR467, Part F, Chapter 7” in the 1st and 3rd items of the list

Sec 2, Table 13 - Item M5

Replace reference to “NR467, Pt E, Ch 7, Sec 1, [7.5]” by a reference to “NR467, Pt F, Ch 7, Sec 1, [7.5]” in Remark (6)

Sec 2, Table 14 - Item N

Replace Table 14 as follows:

Table 14 : Automation Systems covered by Additional Class Notation AUT (AUT-UMS, AUT-CCS, AUT-PORT, AUT-IMS) - item N

AUTOMATION SYSTEMS COVERED BY ADDITIONAL CLASS NOTATION AUT (AUT-UMS, AUT-CCS, AUT-PORT, AUT-IMS) - ITEM N						
No.	Item	Product certification				Remarks
		Design assessment / Approval	Raw material certificate	Examination and testing	Product certificate	
N0	Testing of Automation systems as per NR467, Pt F, Ch 3 - Tests of automated installations are to be carried out according to NR467, Pt C, Ch 3, Sec 6 to determine their operating conditions. The details of these tests are defined, in each case, after having studied the concept of the automated installations and their construction. A complete test program is to be submitted for approval. Automation systems are to be tested for type approval, at works and on board, when required. Tests are to be carried out under the supervision of a Surveyor of the Society. Also see provisions of item K26					
N1	Machinery monitoring and alarm systems	TA (1)		X (2)	C / W (3)	(1) As per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3 (2) According to a program to be agreed with the Society (3) As per conditions set in the TA
N2	Propulsion plant remote control systems: diesel engines, turbines, clutches, controllable pitch propellers, thrusters, automatic shaft brakes, ...	TA (1)		X (2)	C / W (3)	(1) As per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3 (2) According to a program to be agreed with the Society (3) As per conditions set in the TA
N3	Control and monitoring systems for auxiliaries equipment: generating sets, boilers, air compressors, fresh water generators, ...	TA (1)		X (2)	C / W (3)	(1) As per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3 (2) According to a program to be agreed with the Society (3) As per conditions set in the TA
N4	Fire or gas detection systems: detectors, control cabinet, ...	TA (1)		X	C / W (2)	(1) In the case of a discrepancy between the provisions of the applicable International and National statutory regulations and those of the Society's Rules, normally the former take precedence. A valid certification to MED 2014/90/EU (or MED96/98/EC as amended for its Annex A1 items) is to be recognised for classification purpose (2) As per conditions set in the TA
N5	Sensors and control equipment and/or monitoring devices such as: pressure or temperature sensors, shut-down electric valves, level sensors, automatic pressure, temperature or level controllers, ...	TA (1)		X (1)	C / W (2)	(1) As per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3 (2) As per conditions set in the TA

AUTOMATION SYSTEMS COVERED BY ADDITIONAL CLASS NOTATION AUT (AUT-UMS, AUT-CCS, AUT-PORT, AUT-IMS) - ITEM N						
No.	Item	Product certification				Remarks
		Design assessment / Approval	Raw material certificate	Examination and testing	Product certificate	
N6	Integrated computer-based system (1)	TA (2)		X (3)	C / W (4)	<p>(1) Integrated system is a system consisting of two or more subsystems having independent functions connected by a data transmission network and operated from one or more workstations (data communication link includes point to point links, instrument net and local area networks, normally used for inter-computer communication on board units. The software and hardware which support the data communication are also included)</p> <p>(2) As per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3</p> <p>(3) According to a program to be agreed with the Society</p> <p>(4) As per conditions set in the TA</p>
N7	Sensors, alarm panels, electronic protective devices, automatic and remote control equipment, actuators, safety devices for installations intended for essential services, electronic speed regulators for auxiliary engines	TA (1)		X (1)	C / W (2)	<p>(1) As per per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3</p> <p>(2) As per conditions set in the TA</p>
N8	Programmable logic controllers (PLC's) and computers used for tasks essential to safety, all components related to safety functions	TA (1)		X (1) (2)	C / W (3)	<p>(1) Hardware and software type approval and testing as per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3</p> <p>(2) According to a program to be agreed with the Society</p> <p>(3) As per conditions set in the TA</p>
N9	Expert system (1)	DA (2) (3)		X (4)	W	<p>(1) Expert system is an intelligent knowledge-based system that is designed to solve a problem with information that has been compiled using some form of human expertise</p> <p>(2) As per per NR467, Pt F, Ch 3 and relevant requirements of NR467, Pt C, Ch 3</p> <p>(3) The expert system software is not to be implemented on a computer linked with essential functions. Expert system software is not to be used for direct control or operation, and needs human validation by personnel on watch</p> <p>(4) According to a program to be agreed with the Society</p>
N10	Automation systems (1)	(1)	(1)	(1)	(1)	(1) General requirements: see item K26

Sec 2, Table 15 - Item O

Replace “ALP, ALM or ALS” by “ALP or ALM”

Sec 2, Table 15 - Item O1

Replace reference to “NR184” by a reference to “NR526”

Sec 2, Table 15 - Item O2

Replace “notations ALM and ALS” by “notation ALM”

Sec 2, Table 16 - Item P1

Replace reference to “NR467, Pt E, Ch 10, Sec 5” by a reference to “NR467, Pt F, Ch 11, Sec 5” in Remark (1)

Sec 2, Table 17 - Item Q1

Replace reference to “NR467, Pt E, Ch 10, Sec 4” by a reference to “NR467, Pt F, Ch 11, Sec 4” in Remark (1)

Sec 2, Table 18 - Item R1

Replace reference to “NR467, Pt E, Ch 10, Sec 6” by a reference to “NR467, Pt F, Ch 11, Sec 6” in Remark (1)

Sec 2, Table 18 - Item R2

Replace reference to “NR467, Pt E, Ch 10, Sec 6” by a reference to “NR467, Pt F, Ch 11, Sec 6” in Remark (1)

Sec 2, Table 20 - Item T1

Replace reference to “NR467, Part E, Chapter 2” by a reference to “NR467, Part F, Chapter 2”

Sec 2, Table 20 - Item T2

Replace reference to “NR467, Part E, Chapter 2” by a reference to “NR467, Part F, Chapter 2”

Sec 2, Table 20 - Item T3

Replace reference to “NR467, Part E, Chapter 2” by a reference to “NR467, Part F, Chapter 2”

Sec 3, Table 1

Insert the following Rows in Table 1

Table 1 : General index

Key-words and labels (from A to Z)	Item ref. No.
Additional class notation (AUT), Automated systems	K26, N
Additional class notation ICE CLASS - (Thrusters)	G34
Additional class notation POLAR CLASS , Polar Waters, Icebreakers - (Propellers)	G9
Automation system components	K26
Automation systems - System categories I, II and III	K26
Calculator / Loading instrument	K26, B20
Communication link, Data	N6
Computer based systems (computerized systems - System categories I, II and III	K26
Computerized systems (computer based systems) - System categories I, II and III	K26
Data communication link	N6
Expert system	N9
Geared propulsor (with or without nozzle), Additional class notation ICE CLASS - (Thrusters)	G34
Hardware elements included in computer based systems (computerized systems) - System categories I, II and III	K26
ICE CLASS , Additional class notation, Propulsors in Ice - (Thrusters)	G34
Ice-infested waters, Additional class notation ICE CLASS - (Thrusters)	G34
Icebreakers, Polar Waters, Additional class notation POLAR CLASS - (Propellers)	G9
Intelligent knowledge-based system	N9
Loading instruments / stability computer	K26, B20
Podded propulsor (with or without nozzle), Additional class notation ICE CLASS - (Thrusters)	G34
POLAR CLASS , Additional class notation, Polar Waters, Icebreakers (Propellers)	G9
Polar Waters, Icebreakers, Additional class notation POLAR CLASS - (Propellers)	G9
Programmable logic controllers (PLC's) and computers used for tasks essential to safety	N8
Propulsors in Ice, Additional class notation ICE CLASS - (Thrusters)	G34
Software of computer based systems (computerized systems) - System categories I, II and III	K26
Stability computer / Loading instruments	K26, B20
System categories I, II and III - Automation systems	K26



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