



SYS-NEQ-OSV

March 2016

**Rule Note
NR 633 DT R00 E**

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MARINE & OFFSHORE DIVISION

GENERAL CONDITIONS

ARTICLE 1

1.1. - BUREAU VERITAS is a Society the purpose of whose Marine & Offshore Division (the "Society") is the classification ("Classification") of any ship or vessel or offshore unit or structure of any type or part of it or system therein collectively hereinafter referred to as a "Unit" 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.

The Society:

- "prepares and publishes Rules for classification, Guidance Notes and other documents ("Rules");
- "issues Certificates, Attestations and Reports following its interventions ("Certificates");
- "publishes Registers.

1.2. - The Society also participates in the application of National and International Regulations or Standards, in particular by delegation from different Governments. Those activities are hereafter collectively referred to as "Certification".

1.3. - The Society can also provide services related to Classification and Certification such as 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.

1.4. - The interventions mentioned in 1.1., 1.2. and 1.3. are referred to as "Services". The party and/or its representative requesting the services is hereinafter referred to as the "Client". The Services are prepared and carried out on the assumption that the Clients are aware of the International Maritime and/or Offshore Industry (the "Industry") practices.

1.5. - The Society is neither and may not be considered as an Underwriter, Broker in ship's sale or chartering, Expert in Unit's valuation, Consulting Engineer, Controller, Naval Architect, Manufacturer, Ship-builder, Repair yard, Charterer or Shipowner who are not relieved of any of their expressed or implied obligations by the interventions of the Society.

ARTICLE 2

2.1. - Classification is the appraisal given by the Society for its Client, at a certain date, following surveys by its Surveyors along the lines specified in Articles 3 and 4 hereafter on the level of compliance of a Unit to its Rules or part of them. This appraisal is represented by a class entered on the Certificates and periodically transcribed in the Society's Register.

2.2. - Certification is carried out by the Society along the same lines as set out in Articles 3 and 4 hereafter and with reference to the applicable National and International Regulations or Standards.

2.3. - It is incumbent upon the Client to maintain the condition of the Unit after surveys, to present the Unit for surveys and to inform the Society without delay of circumstances which may affect the given appraisal or cause to modify its scope.

2.4. - The Client is to give to the Society all access and information necessary for the safe and efficient performance of the requested Services. The Client is 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.

ARTICLE 3

3.1. - 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 knowledge of the Industry. They are a collection of minimum requirements but 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.

Committees consisting of personalities from the Industry contribute to the development of those documents.

3.2. - The Society only is qualified to apply its Rules and to interpret them. Any reference to them has no effect unless it involves the Society's intervention.

3.3. - The Services of the Society are carried out by professional Surveyors according to the applicable Rules and to the Code of Ethics of the Society. Surveyors have authority to decide locally on matters related to classification and certification of the Units, unless the Rules provide otherwise.

3.4. - 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.

ARTICLE 4

4.1. - The Society, acting by reference to its Rules:

- "reviews the construction arrangements of the Units as shown on the documents presented by the Client;
- "conducts surveys at the place of their construction;
- "classes Units and enters their class in its Register;
- "surveys periodically the Units in service to note that the requirements for the maintenance of class are met.

The Client is to inform the Society without delay of circumstances which may cause the date or the extent of the surveys to be changed.

ARTICLE 5

5.1. - The Society acts as a provider of services. This cannot be construed as an obligation bearing on the Society to obtain a result or as a warranty.

5.2. - The certificates issued by the Society pursuant to 5.1. here above are a statement on the level of compliance of the Unit to its Rules or to the documents of reference for the Services provided for. In particular, the Society does not engage in any work relating to the design, building, production or repair checks, neither in the operation of the Units or in their trade, neither in any advisory services, and cannot be held liable on those accounts. Its certificates 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.

5.3. - The Society does not declare the acceptance or commissioning of a Unit, nor of its construction in conformity with its design, that being the exclusive responsibility of its owner or builder.

5.4. - The Services of the Society cannot create any obligation bearing on the Society or constitute any warranty of proper operation, beyond any representation set forth in the Rules, of any Unit, equipment or machinery, computer software of any sort or other comparable concepts that has been subject to any survey by the Society.

ARTICLE 6

6.1. - The Society accepts no responsibility for the use of information related to its Services which was not provided for the purpose by the Society or with its assistance.

6.2. - If the Services of the Society or their omission cause to the Client a damage which is proved to be the direct and reasonably foreseeable consequence of an error or omission of the Society, its liability towards the Client is limited to ten times the amount of fee paid for the Service having caused the damage, provided however that this limit shall be subject to a minimum of eight thousand (8,000) Euro, and to a maximum which is the greater of eight hundred thousand (800,000) Euro and one and a half times the above mentioned fee. These limits apply regardless of fault including breach of contract, breach of warranty, tort, strict liability, breach of statute, etc.

The Society bears no liability for indirect or consequential loss whether arising naturally or not as a consequence of the Services or their omission such as loss of revenue, loss of profit, loss of production, loss relative to other contracts and indemnities for termination of other agreements.

6.3. - All claims are to be presented to the Society in writing within three months of the date when the Services were supplied or (if later) the date when the events which are relied on were first known to the Client, and any claim which is not so presented shall be deemed waived and absolutely barred. Time is to be interrupted thereafter with the same periodicity.

ARTICLE 7

7.1. - Requests for Services are to be in writing.

7.2. - Either the Client or the Society can terminate as of right the requested Services after giving the other party thirty days' written notice, for convenience, and without prejudice to the provisions in Article 8 hereunder.

7.3. - The class granted to the concerned Units and the previously issued certificates remain valid until the date of effect of the notice issued according to 7.2. here above subject to compliance with 2.3. here above and Article 8 hereunder.

7.4. - The contract for classification and/or certification of a Unit cannot be transferred neither assigned.

ARTICLE 8

8.1. - The Services of the Society, whether completed or not, involve, for the part carried out, the payment of fee upon receipt of the invoice and the reimbursement of the expenses incurred.

8.2. - Overdue amounts are increased as of right by interest in accordance with the applicable legislation.

8.3. - The class of a Unit may be suspended in the event of non-payment of fee after a first unfruitful notification to pay.

ARTICLE 9

9.1. - The documents and data provided to or prepared by the Society for its Services, and the information available to the Society, are treated as confidential. However:

- "Clients have access to the data they have provided to the Society and, during the period of classification of the Unit for them, to the classification file consisting of survey reports and certificates which have been prepared at any time by the Society for the classification of the Unit ;
- "copy of the documents made available for the classification of the Unit and of available survey reports can be handed over to another Classification Society, where appropriate, in case of the Unit's transfer of class;
- "the data relative to the evolution of the Register, to the class suspension and to the survey status of the Units, as well as general technical information related to hull and equipment damages, may be passed on to IACS (International Association of Classification Societies) according to the association working rules;
- "the certificates, documents and information relative to the Units classed with the Society may be reviewed during certifying bodies audits and are disclosed upon order of the concerned governmental or inter-governmental authorities or of a Court having jurisdiction.

The documents and data are subject to a file management plan.

ARTICLE 10

10.1. - Any delay or shortcoming in the performance of its Services by the Society arising from an event not reasonably foreseeable by or beyond the control of the Society shall be deemed not to be a breach of contract.

ARTICLE 11

11.1. - In case of diverging opinions during surveys between the Client and the Society's surveyor, the Society may designate another of its surveyors at the request of the Client.

11.2. - Disagreements of a technical nature between the Client and the Society can be submitted by the Society to the advice of its Marine Advisory Committee.

ARTICLE 12

12.1. - Disputes over the Services carried out by delegation of Governments are assessed within the framework of the applicable agreements with the States, international Conventions and national rules.

12.2. - Disputes arising out of the payment of the Society's invoices by the Client are submitted to the Court of Nanterre, France, or to another Court as deemed fit by the Society.

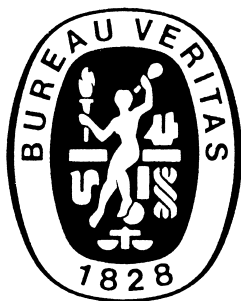
12.3. - Other disputes over the present General Conditions or over the Services of the Society are exclusively submitted to arbitration, by three arbitrators, in London according to the Arbitration Act 1996 or any statutory modification or re-enactment thereof. The contract between the Society and the Client shall be governed by English law.

ARTICLE 13

13.1. - These General Conditions constitute the sole contractual obligations binding together the Society and the Client, to the exclusion of all other representation, statements, terms, conditions whether express or implied. They may be varied in writing by mutual agreement. They are not varied by any purchase order or other document of the Client serving similar purpose.

13.2. - The invalidity of one or more stipulations of the present General Conditions does not affect the validity of the remaining provisions.

13.3. - The definitions herein take precedence over any definitions serving the same purpose which may appear in other documents issued by the Society.



RULE NOTE NR 633

NR 633
SYS-NEQ-OSV

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2.12	Conning display	
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2.14	Communication systems	
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SECTION 1

GENERAL

1 General

1.1 Application

1.1.1 The additional class notation **SYS-NEQ-OSV** may be assigned to ships:

- designed for the operations as listed in Sec 2, [1.1.2]
- satisfying the specific requirements given in this Rule Note, as relevant, regarding bridge design and instrumentation, and
- equipped with further means, as given in this Rule Note, for safe operation in all the waters, including areas with harsh operational and environmental conditions such as the North Sea.

1.2 Objectives

1.2.1 The additional class notation **SYS-NEQ-OSV** aims to reduce:

- the risk, during bridge operation, of bridge system failure causing collision, contact and grounding
- heavy weather damage.

1.2.2 The following main areas, related to the bridge systems, are concerned:

- mandatory and additional workstations
- field of vision from workstations
- location of instruments and equipment
- ergonomics and human machine interface
- range of instrumentation
- alarm management, including watch monitoring and alarm transfer system
- instrument and system tests.

1.2.3 To this end, this Rule Note gives requirements on the following items affecting the navigation safety:

- design of workplace, based on analyses of functions to be performed under various operating conditions and the technical support to be installed
- bridge working environment, based on factors affecting the performance of human operators
- range of instrumentation, based on information needs and efficient performance of the various tasks
- equipment reliability applicable to all the types of bridge equipment, based on common requirements to ensure their suitability under various environmental conditions
- performance of different types of bridge equipment, based on their specific functions
- human and machine interface, based on the analyses of human limitations and compliance with ergonomic principles

- tests and trials based on the need to make sure that technical systems operate in accordance with their approved specifications before being considered as reliable and used for real operations.

2 Definitions

2.1 Term and abbreviations

2.1.1 Terms used in the Rule Note are defined below:

- **Additional functions:**
Additional functions requiring work tasks not directly related to primary bridge functions or operations defined in Sec 2, [1.1.2].
- **Blind sector:**
An obstruction in a field of vision caused by window divisions, bridge structure or outside construction with a clear sector on both sides.
- **BAMS:**
Bridge Alert Management System
A system that harmonizes the priority, classification, handling, distribution and presentation of alerts, to enable the bridge team to devote full attention to the safe operation of the ship and to immediately identify any alert situation requiring action to maintain the safe operation of the ship.
- **BNWAS:**
Bridge navigational watch alarm system.
- **Bridge:**
The area from which the navigation and/or control of the ship are exercised, comprising the wheelhouse and the bridge wings.
- **Bridge system:**
The total system for the performance of bridge functions, comprising bridge personnel, technical systems, human and machine interface and procedures.
- **Bridge wing:**
The part of the bridge on each side of the wheelhouse, which extends to the ship's side.
- **Cargo Operations:**
Operations related to transferring or receiving general mixed cargo or liquid cargo between ship and offshore installation, included control and monitoring of own ship and cargo gear.
- **Category A alert:**
Alert for which graphical information at the task station directly assigned to the function generating the alert is necessary, as decision support for the evaluation of the alert-related condition.

- **Category B alert:**
Alert where no additional information for decision support is necessary besides the information which can be presented at the BAMS.
- **Category C alert:**
Alert that cannot be acknowledged on the bridge but for which information is required about the status and treatment of the alert.
- **Catwalk:**
Arrangement outside the wheelhouse allowing a person safe access to windows along the bulkhead(s).
- **CCTV:**
Closed circuit television.
- **Collision avoidance functions:**
Detection and plotting of other ships and moving objects; determination and execution of course and speed deviations to avoid collision.
- **Commanding view:**
View without obstructions, which could interfere with the navigator's ability to perform his main tasks, at least covering the field of vision required for safe performance of collision avoidance functions.
- **Conning information display:**
A screen-based information system that clearly presents information from sensor inputs relevant to navigation and manoeuvring, as well as all corresponding and upcoming orders given by an automatic navigation system to steering and propulsion systems if connected.
The conning position is the place in the wheelhouse with a commanding view providing the necessary information for conning, and which is used by navigators when monitoring and directing the ship's movements.
- **Control:**
Either effectuate actions or have orders effectuated.
- **Display:**
An observable illustration of an image, scene or data on a screen.
- **Distress situations:**
Loss of propulsion and/or steering, or when the ship is not seaworthy due to other reasons (situation prior to abandon ship situation).
- **Docking:**
Manoeuvring the ship alongside a berth and controlling the mooring operations.
- **Easily accessible:**
Within 5 m distance from working position.
- **Easily readable:**
Within the horizontal angle of 90 degrees to each side and vertical angle of 90 degrees below - to 60 degrees above the horizon from the normal line of sight for the operator.
- **ECDIS:**
Electronic chart display and information system
A navigation information system, which with adequate back-up arrangements can be accepted as complying with the up-to-date chart required by regulation V/20 of

SOLAS Chapter V, and be accepted as meeting the chart carriage requirements of SOLAS Chapter V, as amended by Res. MSC.99(73), by displaying selected information from a SENC.

- **Emergency situations:**
When incidents seriously affect internal operating conditions of the ship and the ability to maintain safe course and speed (fire, technical failure, structural damage).
- **ENC:**
Electronic nautical chart
The database, standardised as to content, structure and format, issued for use with ECDIS on the authority of government authorised hydrographic offices.
- **Ergonomics:**
Application of the human factors implication in the analysis and design of the workplace and equipment.
- **Field of vision:**
Angular size of a scene that can be observed from a position on the ship's bridge.
- **Manoeuvring:**
Operation of thrusters, steering systems and propulsion machinery as required to move the ship into predetermined directions, positions or tracks.
- **Monitoring:**
Act of constantly checking information from instrument displays and environment in order to detect any irregularities.
- **Navigation:**
Planning of the ship's route and determination of position and course of the ship, execution of course alterations and speed changes.
- **Navigational bridge:**
The area of the bridge where transit operation is performed.
- **Normal operating conditions:**
When all shipboard systems and equipment related to primary bridge functions operate within design limits, and weather conditions or traffic, do not cause excessive operator workloads.
- **Officer of the watch (OOW):**
Person responsible for the safety of navigation and bridge operations until relieved by another qualified officer.
- **Operational bridge functions:**
Functions related to ship handling in relation to the operation the ship is engaged in. Such functions are:
 - manoeuvring functions
 - deck equipment operation (for anchor handling, oil recovery and cargo transfer operations)
 - rescue operation
 - monitoring of internal safety systems
 - external and internal communication related to safety in bridge operation and distress situations
 - docking functions.

- **Primary bridge functions:**
Functions related to determination, execution and maintenance of safe course, speed and position of the ship in relation to the waters, traffic and weather conditions. Such functions are:
 - route planning functions
 - navigation functions
 - collision avoidance functions
 - manoeuvring functions
 - docking functions
 - monitoring of internal safety systems
 - external and internal communication related to safety in bridge operation and distress situations.
- **Readable:**
Within a horizontal sector of 225° and vertical sector from 90° below to 60° above the horizon from the operators normal eye position.
- **Rescue:**
An operation where a defined ship is, either bringing own personnel being in distress in the water to safety, or is assisting an offshore platform, barge or another ship in bringing their personnel being in distress in the water to safety.
- **Route monitoring:**
Continuous surveillance of the ship's sailing (position and course) in relation to a preplanned route and the waters.
- **Route planning:**
Pre-determination of course lines, radius turns and speeds in relation to the waters to be navigated.
- **Rudder angle:**
Rudder angle mean thruster angle when main propulsion is azimuth thrusters.
- **Safety operation:**
Handling of emergency and distress situations on board own ship or assisting other ships and offshore installations in such situations.
- **SENC:**
System electronic navigational chart
A database resulting from the transformation of the ENC by ECDIS for appropriate use, updates to the ENC by appropriate means and other data added by the mariner.
- **Screen:**
A device used for presenting visual information based on one or several displays.
- **Towing operation:**
An operation including one or more ships capable to assist offshore platforms, barges and ships in moving from one position to another, or in keeping their defined position.
- **Wheelhouse:**
Enclosed area of the bridge.

- **Within reach:**
The distance the operator can reach and use a control unit. For other workstations than workstations for off-shore operations the area may be increased to:
 - From a standing position this distance is regarded to be maximum 800 mm in forward direction and 1400 mm sideways.
 - From a seated position, at a distance of 350 mm from a console, this distance is regarded to be maximum 1000 mm, and maximum 800 mm for frequently used equipment.
- **Workstation:**
A work place at which one or several tasks constituting a particular activity are carried out and which provides the information and equipment required for safe performance of the tasks.
 - **Workstation for communication:**
A workplace for operation and control of equipment for distress and safety communication (GMDSS), and shipboard communication for ship operations.
 - **Workstation for primary bridge functions:**
A workplace with commanding view used by navigators when carrying out navigation, route monitoring, traffic surveillance and manoeuvring functions, and which enables monitoring of the safety state of the ship.
 - **Workstation for safety operations:**
A workplace dedicated organisation and control of internal emergency and distress operations, and which provides easy access to information related to the safety state of the ship.

3 Documentation

3.1 Documents to be submitted

3.1.1 Documents according Tab 1 are to be submitted.

3.2 Certification requirements

3.2.1 Certification documentation is to be submitted for the following devices:

- Automatic Identification System (AIS)
- BNWAS
- BAMS
- CCTV
- Depth measuring system
- ECDIS equipment
- External communication (including GMDSS)
- Gyro/heading system
- Heading control System (autopilot)
- Internal communication
- Position system
- Radar equipment
- Sound reception system

- Speed measuring system
- Steering/Manoeuvring control system
- Sunscreens
- Track Control system (TCS)

- Weather Information System
- Wiper system

Note 1: Depending on the flag, a BV type approval certificate or a MED certificate will be required.

Table 1 : Documentation to be submitted

Item No.	I/A (1)	Documentation
1	I	General arrangement plan
2	A	Navigation bridge design drawing
3	A	Drawing of vertical field of vision at navigation bridge
4	A	Drawing of horizontal field of vision at navigation bridge
5	A	Navigation bridge nautical workstation arrangement plan
6	A	Navigation bridge windows framing arrangement plan
7	A	Plan of system arrangement at navigation bridge
8	A	Navigation bridge coating specification
9	A	List of equipment of the navigation systems
10	A	Navigation system power supply arrangement
11	A	Navigation system arrangement plan
12	A	Test procedure for quay and sea trial of navigation systems
13	A	Bridge alarm management - Control system functional description
14	A	Functional description of steering mode selection system
15	A	Arrangement plan of the lighting system within the wheelhouse
16	A	Arrangement plan of the ventilation system in the wheelhouse
17	A	Arrangement plan of the external communication systems
18	A	Arrangement plan of Local Area Network (LAN) for navigation systems
19	A	Electrical schematic drawing of the automatic telephone system
20	A	Arrangement plan of the automatic telephone system
21	A	Equipment list of Ultra High Frequency (UHF) telephone system
(1) A : to be submitted for approval I : to be submitted for information.		