



**BUREAU
VERITAS**

Risk Based Verification of Floating Offshore Units

September 2020

**Guidance Note
NI 567 DT R01 E**

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GENERAL CONDITIONS

1. INDEPENDENCE 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, designer, 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 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 entering into the relevant contract for the performance of the Services.
- 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 classification or statutory certificates, attestations and reports following the Society's intervention.
- 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 classification Certificate with reference to the Rules. Classification is 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.
- 2.4 "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 public electronic register of ships updated regularly by the Society.
- 2.11 "Rules" means the Society's classification rules and other documents. The Society's Rules 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, maritime labour certification, training activities, all activities and duties incidental thereto such as documentation on any supporting means, software, instrumentation, measurements, tests and trials on board. The Services are carried out by the Society according to the applicable referential and to the Bureau Veritas' Code of Ethics. 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.
- 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 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 Subject to the Services requested 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 enter the Unit's class in the Society's Register;
 - survey the Unit periodically in service to note whether 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.
- 3.2 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 for surveys; and (iii) inform the Society in due time of any circumstances that may affect the given appraisal of the Unit or cause to modify the scope of the Services.
- 4.2 Certificates 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.
- 4.4 The Society may at times and at its sole discretion give an opinion on a design or any technical element that would 'in principle' be acceptable to the Society. This opinion shall not presume on the final issuance of any Certificate or on its content in the event of the actual issuance of a Certificate. This opinion shall only be an appraisal made by the Society which shall not be held liable for it.

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, drawing, 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 defend, release, save, indemnify, defend and hold harmless the Society from the Client's own consequential loss regardless of cause.
- 7.2 Except in case of wilful misconduct of the Society, death or bodily injury caused by the Society's negligence and any other liability that could not be, by law, limited, 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 Services having caused the damage. This limit applies to any liability of whatsoever nature and howsoever arising, including fault by the Society, 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 completion of 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 shall defend, release, save, 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 (including for damages arising out of or in connection with opinions delivered according to clause 4.4 above) except for those claims caused solely and completely by the gross 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 Classification 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.
- 9.3 In the event where, in the reasonable opinion of the Society, the Client is in breach, or is suspected to be in breach of clause 16 of the Conditions, the Society shall have the right to terminate the Services (and the relevant contracts associated) with immediate effect.

10. FORCE MAJEURE

- 10.1 Neither Party shall be responsible or liable 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 properly and lawfully in the possession of the Society;
 - is already in possession of the public or has entered the public domain, otherwise than through a breach of this obligation;
 - is acquired or received 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 Parties 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 Without prejudice to sub-clause 11.1, 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 by the Society for the performance of the Services including, but not limited to drawings, calculations, and reports shall remain the 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 any 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

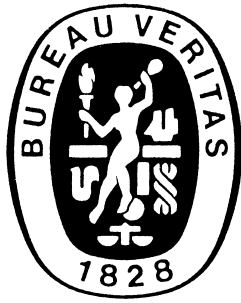
- 14.1 Invalidity of one or more provisions does not affect the remaining provisions.
- 14.2 Definitions herein take precedence over other definitions which may appear in other documents issued by the Society.
- 14.3 In case of doubt as to the interpretation of the Conditions, the English text shall prevail.

15. GOVERNING LAW AND DISPUTE RESOLUTION

- 15.1 These Conditions shall be construed and governed by the laws of England and Wales.
- 15.2 The Parties 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 under the Rules of Arbitration of the Maritime Arbitration Chamber of Paris ("CAMP"), 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 Paris (France). The Parties agree to keep the arbitration proceedings confidential.

16. PROFESSIONAL ETHICS

- 16.1 Each Party shall conduct all activities in compliance with all laws, statutes, rules, economic and trade sanctions (including but not limited to US sanctions and EU sanctions) 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, copyright and trademark protection, personal data protection (<https://personaldataprotection.bureauveritas.com/privacypolicy>).
- 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 Bureau Veritas' Code of Ethics. <https://group.bureauveritas.com/group/corporate-social-responsibility>



GUIDANCE NOTE NI 567

NI 567 Risk Based Verification of Floating Offshore Units

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SECTION 1 GENERAL

1 General

1.1 Objective

1.1.1 The main objectives of the present Note are to provide:

- a general statement of Bureau Veritas Risk Based Verification (RBV) services for offshore units
- a statement of independent verification services provided by the Society when acting as an Independent verification body
- an interface between Risk Based Verification and independent verification and the classification process
- a statement of the services that the Society can provide toward the compliance with UK Continental Shelf Regulations.
- a statement of the services that the Society can provide toward the compliance with Brazilian Regulations.

1.2 Application

1.2.1 The provisions of the present Note are applicable for all structural types of floating offshore units defined in Pt A, Ch 1 of the Offshore Rules.

1.2.2 The provisions of the present Note are applicable for all types of services covered by the class notations defined in Pt A, Ch 1, Sec 2 of the Offshore Rules, including drilling, drilling assistance, oil and gas production, oil and gas storage and offloading, etc.

1.2.3 Risk Based Verification and independent verification services can be performed separately from, or combined with Classification. Depending on the type of investigated unit, the Classification can provide useful features which can be directly credited into independent verification.

1.2.4 Risk Based Verification and independent verification services can be performed for both newbuild units and existing units and cover all the stages of offshore units life-cycle.

2 Verification services

2.1 General

2.1.1 Verification service is a confirmation by examination and provisions of objective evidence that specified requirements have been fulfilled (ISO 9000/2015).

2.1.2 Verification services are parallel to design, construction and operation activities. These activities are to be carried out under the responsibility of the appointed duty holder.

2.2 Risk Based Verification

2.2.1 The principle of Risk Based Verification is to assess the risks related to relevant failure modes of safety and environmental critical equipments and systems in order to keep the risk below an acceptable limit.

For this purpose, safety and environmental critical equipments and systems are to comply with relevant performance standards and this compliance is verified.

2.2.2 The Society can provide Risk Based Verification services using performance standards based on the requirements of the Offshore Rules, international and national regulations and standards or Owner/Operator specifications.

2.2.3 Principles of Risk Based Verification services are included in Sec 2.

2.2.4 Many National Authorities have specific Regulations related to verification activities, which are to be taken into account for Risk Based Verification. These Regulations may be goal setting, prescriptive or combined. The Authorities may also have requirements about the roles and responsibilities, independence of the verifier, content and form of verification activities.

2.3 Independent Verification Body

2.3.1 Independent verification service is a particular case of Risk Based Verification carried out by the Society when acting as Independent Verification Body (IVB).

2.3.2 Some National Regulations such as UK Continental Shelf Regulations require independent verification. The IVB is appointed by the duty holder to provide a independent verification service.

2.3.3 Additional information relating to independent verification services for compliance with UK Continental Shelf Regulations is given in Sec 3.

2.3.4 Additional information relating to independent verification services for compliance with Brazilian Regulations is given in Sec 4.

3 Classification and verification

3.1 General

3.1.1 Classification and Risk Based Verification can be performed through a combined approach, with important benefits for both services.

3.1.2 A list of these benefits with application to the compliance with UK Continental Shelf Regulations is given in Sec 3, [4].

3.1.3 A list of these benefits with application to the compliance with Brazilian Regulations is given in Sec 4, [4.1].

3.2 Classification principles

3.2.1 The principles, meaning, scope and limits of the Classification are defined in Pt A, Ch 1 of the Offshore Rules and Bureau Veritas Marine & Offshore General Conditions.

The classification process mainly consists of:

- the development of Offshore Rules, guidance notes and other documents relevant to the structure, material, equipment, machinery and other items covered by such documents
- the review of plans and calculations and the surveys, checks and attendance to tests intended to demonstrate that the unit meets the Offshore Rules
- the assignment of class and issue of a Certificate of Classification, where compliance with the above Offshore Rules is found
- the periodical, occasional and class renewal surveys performed to record that the unit in service meets the conditions for maintenance of class (see Part A, Chapter 2 of the Offshore Rules).

3.2.2 Classification is a representation of compliance to the prescriptive requirements of the Offshore Rules. These Rules are based on experience and current good practice and can credit for the compliance with a large number of standards and regulations. Classification provides also a useful input for the Risk Based Verification, in particular when the performance standards adopted for verification are based on the requirements of the Offshore Rules.

3.2.3 Classification based on a risk analysis approach, which may be accepted by the Society provided that the conditions of Pt A, Ch 1, Sec 1, [2.6] of the Offshore Rules are complied with, can credit for Risk Based Verification because both approaches have a common background.

3.3 Class notations relating to verification

3.3.1 Offshore units classed by the Society and complying with a regulation or standard through a Risk Based Verifica-

tion carried out by the Society may be granted the additional class notation **RBVS-xxx**, where “xxx” is the reference of the concerned regulation, standard or Owner specification.

3.3.2 Offshore units classed by the Society and for which an independent verification is carried out by the Society, acting as IVB, may be granted the additional notation **IVBS**. The notation is completed with the reference of the concerned regulation, standard or Owner specification. The current notation are:

- **IVBS-UK** for UK regulations, see Sec 3
- **IVBS-BRA** for Brazilian regulations, see Sec 4.

4 Definitions

4.1 General definitions

4.1.1 The definitions of this section are general definitions and applies to the whole document, unless otherwise stated.

4.1.2 Society

Society means the Classification Society with which the unit is classed

4.1.3 Offshore Rules

Offshore Rules means Bureau Veritas Rules for the Classification of Offshore Units (NR445). When reference is made to the Offshore Rules, the latest version of these ones is applicable.

4.1.4 HAZID

Hazard Identification (HAZID) is a structured method for the identification of hazards, threats and consequences.

4.1.5 Availability

Availability of a system or equipment is the probability that it is not in a failed state at a point in time.

4.1.6 Reliability

Reliability is a probability of desired performance over time in a specified condition

4.1.7 Duty Holder

The duty holder is responsible for discharging the duties in the context of Risk Based Verification. Depending on the regulation, it may be the Owner or the Operator.

SECTION 2 PRINCIPLES OF RISK BASED VERIFICATION

1 General

1.1 Introduction

1.1.1 Through Risk Based Verification, the Society aims to confirm that the offshore unit being designed, constructed and operated such as to be fit for its intended purpose, it meets the following principles:

- the level of integrity is as high as reasonably practicable
- the associated risk relating to persons, environment and property is as low as reasonably practicable (ALARP).

1.1.2 For duty holders or other parties requiring Risk Based Verification services, the following benefits are considered:

- improve availability of the unit/installation in operation
- improve reliability
- improve the timing of verification activities, through the selection of areas and activities high contributors to risk
- possibility of a combined approach to Classification and Risk Based Verification, combining the features of both services
- involvement in the early stages of the project and active support from the Society.

1.2 Documents

1.2.1 Risk Based Verification documents will be issued by the Society for each phase of the project, as defined in Tab 1.

1.2.2 The Society will issue a Compliance Statement for each phase of the project, showing satisfactory completion of related verification activities. It should include the verification scheme.

1.2.3 A verification report will be associated to the Compliance Statement. This document will include a detailed description of various related verification activities, comments and survey reports.

1.2.4 For classed units granted the additional class notation **RVBS-xxx**, the Compliance Statement and the verification report will be included in a memorandum.

2 Procedure of Risk Based Verification

2.1 Verification phases

2.1.1 The main phases of Risk Based Verification provided by the Society are summarized in Tab 2.

2.1.2 The Society may assist the duty holder during all relevant phases in Tab 2.

Table 1 : Stages and phases of the project

Stage	Phase of the project
Design	Conceptual design
	Detail Design
Construction	Manufacturing of components
	Manufacturing of equipment
	Installation
	Project completion
Operation	Operation, maintenance and repair
End of Life	Decommissioning, dismantling, abandonment

Table 2 : Verification phases

	Verification phase	Remark
1	Record and/or update of safety and environmental critical elements and documentation of selection process	Performed by the duty holder
2	Definition, record and/or update of performance standards for each safety and environmental critical element	Performed by the duty holder
3	Verification of safety and environmental critical element list and performance standards	Verification carried out by the Society
4	Definition or update of a verification scheme including verification tasks and schedules	Performed by the Society and the duty holder
5	Execution of verification tasks (verification scheme), conclusions and record of comments	Verification carried out by the Society
6	Issue of Compliance Statement	Issued by the Society

2.2 Safety and environmental critical elements

2.2.1 The record of safety and environmental critical elements requires several steps, as follows:

- definition of asset prioritization
- identification of major accident events
- identification of safety and environmental critical elements.

2.2.2 Asset prioritization

Asset prioritization is to be based on criteria related to function, capacity, operational requirements. The description of components is to be done through several grouping levels.

2.2.3 Major accidents

Typical definition of major accident includes:

- fire and explosions
- structural failure
- helicopter crash
- loss of stability
- well blow-out during simultaneous operations
- collisions with support vessels
- toxic release
- serious mechanical failures
- station keeping failure, when relevant
- towing incidents.

The Sec 3, [1.2] provides a definition of major accidents based on UK Regulations and directly applicable for Safety Case approach given in Sec 3. However, this definition can be completed or modified for each Risk Based Verification, taking into account the specificities of the investigated asset and local regulations.

The identification of major accident events requires a HAZID analysis, as defined in Sec 1. It is also important to establish a link between hazard, risk and risk reducing measures such as prevention and/or mitigation.

2.2.4 Risk ranking

In order to focus on the most significant hazards, a risk ranking of hazards identified as per [2.2.3] is to be performed.

2.2.5 Identification of safety critical elements

The identification of safety critical elements is to be based on the definition given in Sec 3, [1.2.12] and on the list of major accident events (see [2.2.3]).

2.2.6 Identification of environmental critical elements

The identification of environmental critical elements is to be based on the definition given in Sec 3, [1.2.12] and on the list of major accident events (see [2.2.3]).

2.3 Performance standards

2.3.1 Performance standards, as defined in Sec 1, are to be defined for each safety critical element and each environmental critical element identified as per [2.2.5] [2.2.6].

2.3.2 For classed units, classification requirements can provide a valuable input for the definition of both qualitative and quantitative performance standards.

2.4 Review of safety and environmental critical elements and performance statements

2.4.1 This review is carried out by the Society and all comments are recorded. The Society will provide to the duty holder necessary information for clear understanding of these comments through the verification report.

2.4.2 Before establishing the verification scheme, all disagreements relating to the comments record are to be resolved with the participation of the duty holder.

2.5 Verification scheme

2.5.1 The definition of the verification scheme is a crucial step of the Risk Based Verification. Verification tasks will be identified in order to check that the performance standards are achieved for each safety critical element.

2.5.2 The Society involvement in the verification process will depend on the assigned risk class of the safety environmental and critical element. An example is shown in Tab 3.

Table 3 : Involvement in verification process

Risk Class	Involvement in the verification process
Class 1	Detailed review of the design documents and procedures Attendance of the surveyor requested for inspection and factory acceptance test; More comprehensive involvement than Class 2.
Class 2	Detailed review of the design documents and procedures Attendance of the surveyor requested for inspection and factory acceptance test.
Class 3	Review of principal design documents and procedures Attendance of the surveyor only during system testing

2.5.3 The categorization of safety and environmental critical elements into risk classes is performed on the base of the following criteria:

- failure modes relating to the element
- risk ranking of hazards required in [2.2.4]
- role of the element in risk reducing measures, particularly mitigation.

2.5.4 The verification scheme is to integrate all verification tasks related to all project phases, including examination of documents and required inspections, defining clearly the objective and scope of each verification task.

2.6 Verification scheme process

2.6.1 The general process that drives the activities of the verification scheme is based on an initial audit as a condition to enter the Risk Based Verification, followed by regular audits in order to ensure the goals and performance standards of the verification scheme are achieved and fulfilled through the life cycle of the considered facility.

2.6.2 As part of the process, the verification scheme is to include Management of Change process, see [2.8] as well as an auto-update process, by which the verification scheme is updated based on new information, see [2.9].

2.6.3 When class notation **IVBS-xxx** is assigned, the verification scheme is to include requirements to maintain it. Example of such requirements and update process can be found in Guidance Note NI 657.

In case of additional class notation **IVBS-UK**, Sec 3 indicates that periodic reviews are required.

2.7 Execution of the verification tasks

2.7.1 The Society will perform the verification tasks defined through the verification scheme, including the examination of documents and inspections. A Compliance Statement will be issued for each phase of the project, as stated in [1.2], when the relevant verification activities are satisfactorily fulfilled. It should include the verification scheme.

2.7.2 Without any declared changes and provided verification scheme is followed, the Compliance Statement remains valid.

2.8 Management of changes

2.8.1 Management of changes is part of the Verification Scheme and is to be described as a structured process.

2.8.2 When required by the Management of Change process, the Society will be notified and the procedure of Risk Based Verification will be reiterated from the relevant verification phase.

Typical changes include modification relating to design, construction or operation.

2.8.3 When the Risk Based Verification procedure is reiterated due to modifications, the verification activities performed by the Society are to be reiterated too.

2.9 Updates of verification schemes

2.9.1 The Society may require updates and improvements of verification schemes. Such updates involve the execution of additional verification tasks or changes of verification procedures.

Such changes and improvement might be linked to the local regulations requirements.

2.9.2 For classed units, changes to the verification schemes are to be recorded and integrated through amendment to the class memorandum.

SECTION 3

VERIFICATION FOR COMPLIANCE WITH UK CONTINENTAL SHELF REGULATIONS

1 General

1.1 Objective

1.1.1 The present Section gives a general statement of the services that the Society can provide toward the compliance with UK Continental Shelf Regulations including:

- independent verification services, when the Society acts as Independent Verification Body (IVB)
- combined approach to classification and independent verification.

1.1.2 Independent verification services presented in the present Section are based on the methodology and principles given in Sec 2. The purpose of the present Section is to highlight the specificities of independent verification for compliance with UK Continental Shelf Regulations.

1.2 Definitions based on UK Continental Shelf Regulations

1.2.1 The present list of definitions and terms is provided in accordance with UK Continental Shelf Regulations. The references to relevant statutory instruments are given in [2].

1.2.2 Competence

Relates to relevant theoretical and practical knowledge and experience to enable a professional judgment to be made regarding the importance and suitability of plant to be assessed.

1.2.3 Escape

The process of leaving the installation in an emergency, when the evacuation system has failed. It may involve entering directly into the sea. It is a 'last resort' method of getting personnel off the installation.

1.2.4 Evacuation

Action to safeguard the health and safety of persons on or near an installation in an emergency.

It refers to the planned and controlled method of leaving an installation and its vicinity without directly entering the sea. Means of evacuation offer protection from the hazard, and have their own motive power to enable persons to move quickly away from the installation.

1.2.5 Independent

A person is regarded as independent only where this person has had no involvement or responsibility related to the aspect or thing to be verified, nor any financial interest,

which might compromise his objectivity; and he is sufficiently independent of any management system which bears responsibility for the aspect or thing to be examined, that he will be objective in discharging his function.

1.2.6 Major Accident

A major accident means (SI 2015/398 (SCR)):

- a) an event involving a fire, explosion, loss of well control or the release of a dangerous substance causing, or with a significant potential to cause, death or serious personal injury to persons on the installation or engaged in an activity on or in connection with it
- b) an event involving major damage to the structure of the installation or plant affixed to it or any loss in the stability of the installation causing, or with a significant potential to cause, death or serious personal injury to persons on the installation or engaged in an activity on or in connection with it
- c) the failure of life support systems for diving operations in connection with the installation, the detachment of a diving bell used for such operations or the trapping of a diver in a diving bell or other subsea chamber used for such operations
- d) any other event arising from a work activity involving death or serious personal injury to five or more persons on the installation or engaged in an activity on or in connection with it, or
- e) any major environmental incident resulting from any event referred to in paragraph (a), (b) or (d),

and for the purposes of determining whether an event constitutes a major accident under paragraph (a), (b) or (e), an installation that is normally unattended is to be treated as if it were attended.

Reporting of an accident is to follow EU regulation No 1112/2014 of 13 October 2014.

1.2.7 Major environmental incident

A major environmental accident means (SI 2015/398 (SCR)):

An incident which results, or is likely to result, in significant adverse effects on the environment in accordance with Directive 2004/35/EC of the European Parliament and of the Council on environmental liability with regard to the prevention and remedying of environmental damage.

Reporting of an incident is to follow EU regulation No 1112/2014 of 13 October 2014.

1.2.8 Means of Escape

Means of escape includes items which assist with descent to the sea, such as davit-launched life rafts, chute systems, ladders, and individually controlled descent devices; and items in which personnel can float on reaching the sea, such as throw-over life-rafts.

1.2.9 Offshore installation

Offshore installation is as defined in Regulation 3 of SI 1995/738 (MAR). This also deems an offshore installation to include any part of a pipeline or any apparatus or works that are connected to the installation and within the 500 m zone.

1.2.10 Performance Standard

A set of statements which can be expressed in qualitative or quantitative terms, of the performance required of a system, item of equipment, person or procedures in order to manage a hazard, throughout the life-cycle of the installation.

The performance standard should contain sufficient information against which to assess the suitability and condition of the item to which it applies. This is expected to include the purpose of the measure(s), and the associated requirements:

- functionality
- reliability
- availability, and
- survivability.

Performance Standards should be written for each safety and environmental critical element at a system level, focusing on what the system is required to achieve. The requirements of the safety and environmental critical element may be described in terms of:

- Goal: what's the purpose of safety and environmental critical element from a safety and environmental critical perspective? This should be linked to the relevant Major Accident Hazards
- Boundary: which items of equipment does the Performance Standard apply to?
- Functionality: what the safety and environmental critical element must do from a safety and environmental critical perspective?
- Availability: will it be ready and able to perform when required?
- Reliability: will it function dependably?
- Survivability: what kind of events does it need to survive and for how long?
- Interactions: what systems the safety and environmental critical element interact with?

The Performance Standard acceptance criteria must be clear, measurable and auditable *i.e.* it must be possible to demonstrate the safety and environmental critical element meets the criteria. It is beneficial to include a reference as to how the criteria was derived within the Performance Standard. Performance Standards should be periodically reviewed to incorporate modifications, changes in operating conditions or to incorporate new learnings.

1.2.11 Safety Case

The formal document prepared pursuant to Regulation 2(2) of SI 2015/398 (SCR).

1.2.12 Safety and environmental-Critical Elements

Means such parts of an installation and such of its plant (including computer programmes), or any part of those:

- a) The failure of which could cause or contribute substantially to a major accident; or
- b) A purpose of which is to prevent or limit the effect of, a major accident.

This definition also applies to temporary equipment brought onto the offshore installation.

1.2.13 UK written schemes or combined scheme

Relevant documentation to the written schemes is to be combined in relationship between SCR, Safety Cases, Verification Scheme, PFEER and DCR.

1.2.14 Verification scheme

Refers to a suitable written scheme provided to ensure that selected items are appropriate for the intended use, dependable and effective when required, and able to perform as intended. SCR Verification Scheme refers to the scheme provided under SCR regulations 9, 10 and 13.

The Verification Scheme must define the Verification activities in terms of nature and frequency for temporary equipment that may introduce additional hazard or interact with safety and environmental critical elements:

- Nature: describes what the Verifier will do
- Frequency: describes how much the Verifier will do

1.2.15 Verifier

Verifier means an independent and competent person who performs functions in relation to a verification scheme.

Within the context of the additional class notation **IVBS-UK**, the Society acts as a verifier.

1.3 Application

1.3.1 The provisions of the present Section are directly applicable for all types of units defined in Pt A, Ch 1 of the Offshore Rules operating or intended to operate in UK waters.

1.3.2 Independent verification services can be performed separately or through a combined approach with classification. The combined approach with classification is particularly recommended for compliance with UK Continental Shelf Regulations, for the benefits stated in this Section.

1.3.3 The provisions of the present Section may be applied for units operating outside UK waters, even when not requested by the concerned regulation.

1.4 Class notation

1.4.1 As mentioned in Sec 1, [3.3], Offshore units classed by the Society and for which the Society provides independent verification services for compliance with UK regula-

tions are granted the additional class notation **IVBS-UK**. A detailed description of the verification services performed by the Society is stated in a memorandum.

2 UK Continental Shelf Regulations

2.1 Legislative framework

2.1.1 UK Continental Shelf Regulations are part of the general duties required under Health and Safety at Work, etc. Act 1974.

2.1.2 The provisions of the present Section are based on or reference to the following regulations:

- SI 2015/398 “Offshore Installations (Offshore Safety Directive) (Safety Case etc.) Regulations” (SCR), applicable in external waters

Note 1: “External Waters” means the territorial sea adjacent to Great Britain and any area designated by order under section 1(7) of the Continental Shelf Act 1964.

- SI 1995/743 “Offshore Installations (Prevention of Fire and Explosion, and Emergency Response on Offshore Installations) Regulations” (PFEER)
- SI 1996/913 “Offshore Installations and Wells (Design and Construction, etc.) Regulations” (DCR)
- SI 1995/738 “Offshore Installations and Pipeline Works (Management and Administration) Regulations” (MAR).
- SI 1996/825 “The Pipelines Safety Regulations” (PSR).

2.1.3 UK Continental Shelf Regulations are established on a fully goal-setting approach, setting goals for outcomes instead of prescriptive requirements. The main targets of these regulations relate to the identification of major accident hazards concerning an offshore unit or installation and their management throughout the unit lifecycle.

2.2 Responsibilities under UK Continental Shelf Regulations

2.2.1 The duty holder is responsible for compliance with UK Continental Shelf Regulations. The duty holder is defined depending on the type of offshore unit, as follows:

- for units performing oil and gas production, the duty holder is the Operator
- for all other units, the duty holder is the Owner.

Note 1: Additional information clarifying the definition of Owner and Operator are given in SI 1995/738.

Note 2: Special consideration is to be given to the individual roles for cases when the work is contracted between separate parties.

2.2.2 With regards to compliance with the regulations for Verification, duty holders are accountable for:

- Appointing the Verifier
- Ensuring all Verifier(s) are independent and competent
- Producing the list of safety and environmental critical elements
- Ensuring a Verification scheme is developed by, or in consultation with the Verifier
- Ensuring the Verifier reviews and comments on the list of safety and environmental critical elements and the Verification scheme
- Ensuring that the scheme is implemented and maintained
- Ensuring the activities defined by that scheme are completed by the Verifier
- Acting upon any findings and remedial actions recommended raised by the Verifier within a specified time frame
- Providing the Verifier with information necessary for proper implementation or revision of the scheme
- Providing the Verifier with the appropriate level of authority to carry out their role

2.2.3 The duty holder must:

- define criteria for the appointment of the Verifier
- periodically review the competence and independence of persons executing Verification activities
- provide adequate resources to facilitate the management of Verification including the necessary financial provisions. This can be achieved by having clear nature and frequency defined within the Verification scheme to predict resource requirements
- provide adequate asset specific documentation to facilitate the delivery of Verification including the necessary safety studies, Safety Case, bowties, drawings etc.
- periodically audit the Verification scheme as part of the overall safety and environmental management system (SEMS)
- ensure that a periodic review of the Verification scheme is completed by, or in consultation with, a Verifier and, where necessary, revise or replace it. This should consider the evolving phases of the lifecycle, material changes and thorough reviews of the Safety Case, and the impact of ageing where a more thorough review may take place
- ensure that a note is made of any reservations made by the Verifier on the record of safety and environmental critical elements or on the scheme. It is a requirement that the Verifier will review and agree the list of safety and environmental critical elements and specified plant. The list should be formally issued by the duty holder and all responses should be logged. Additionally, there should be a record of the Verifier review of the Verification scheme

- ensure that the Verification scheme is put into effect
- notify the Verifier of any material change to the Safety Case
- notify the Verifier of any information in relation to a fundamental change to a safety and environmental critical element, e.g. modifications and major repairs
- ensure suitable arrangements for communication with the Verifier to get an understanding of the status of activities completed so far, and the status of safety and environmental critical elements compliance with Performance Standards
- ensure a correspondence file is kept by both the duty holder and Verifier
- manage interfaces between two or more Verifiers. Where more than one Verifier is appointed by the duty holder, arrangements should be in place to manage interfaces in terms of responsibilities, communications and Verification scope, to ensure that the process is effective with no gaps.

2.2.4 Duty holder is responsible for the following actions:

- identify major accident hazards relating to the offshore unit
- identify means of avoiding or mitigating these hazards
- perform engineering studies in order to check that the risk is reduced to ALARP
- detail arrangements for protection of personnel (temporary refuge, escape and evacuation, monitoring and control)
- establish Performance Standards for the safety and environmental Critical Systems.

2.2.5 For compliance with UK Continental Shelf Regulations, the duty holder is to achieve the following items:

- provide Quantitative Risk Assessment
- provide PFEER assessment
- demonstrate that the selected PFEER measures and performance standards are suitable against all relevant major accident hazards
- submit the formal safety case document and comply with specific Safety Management System and audit requirements
- identify the safety and environmental critical elements and realize a formal record of elements and standards
- establish a SCR written scheme
- establish a written scheme for measures provided against fire and explosion and for emergency response (PFEER (SI 1995/743), reg 19)
- establish a written scheme for examination and testing of personal protective equipment to be used in an emergency
- assess the emergency response and provide additional means or protection, wherever required
- provide rescue and recovery plan
- comply with the requirements of PFEER (SI 1995/743), reg 11 relating to communications.
- select an IVB to carry out the verification work.

2.3 Independent Verification Body (IVB)

2.3.1 UK Continental Shelf Regulations require an independent verification of PFEER written scheme of examination, the SCR record of safety and environmental critical elements and the SCR verification scheme. This independent verification is to be carried out by an independent and competent person (ICP).

2.3.2 The IVB (or directly ICP) is to be appointed by the duty holder.

2.3.3 The Society can act as IVB, assist the duty holder in the activity for compliance with UK Continental Shelf Regulations or evaluate the state of compliance, when requested.

The Society cannot assume the responsibility of the duty holder for the safety and integrity of the offshore units.

The Society cannot issue or guarantee the compliance on behalf of UK authorities.

3 Verification services

3.1 General

3.1.1 When appointed as IVB, the Society can provide the following services:

- understand the Major Accident Hazards and risks associated with the given asset at any point during its lifecycle
- comments on the record of safety and environmental critical elements
- preparation and consultation for SCR and PFEER written schemes, or combined schemes when requested
- perform Verification activities as defined in the Verification Scheme
- report to the duty holder on initial and continuing suitability of safety and environmental critical elements detailing examinations / reviews performed, findings and remedial actions recommended
- draw up or consultation for the periodic reviews and up-dates of the verification scheme at various stages of the lifecycle and taking into account all modifications of the design or operations affecting the safety and environmental impact of the unit.
- communicate any reservations on the list of safety and environmental critical elements or the content of the Verification scheme to the duty holder
- provide comment on material change to the installation Safety Case.

3.2 Verification of safety and environmental-critical elements

3.2.1 The verification scheme relating to safety critical elements and environmental critical elements shall be established by, or in consultation with the Society acting as IVB. Independent verifications under this scheme shall be performed by the Society.

3.2.2 The Society will provide a written comment on the record of safety and environmental critical elements, as required in SCR (SI 2015/398), reg 9.

3.2.3 The verification scheme is to be subject of review and up-date as necessary to ensure the suitability of safety and environmental critical elements and with respect to the schedules of UK Continental Shelf Regulations.

3.3 PFEER

3.3.1 The examination of PFEER plant for detection, control and mitigation of fire and explosions will be performed by the Society, acting as IVB, and is to be based on an established written scheme for examination. The examination will include a check against the performance standards determined through PFEER assessment.

3.3.2 As PFEER plant is also selected as a safety critical elements, a scheme combining PFEER and SCR may be used, in order to avoid overlapping work. Details are given in [3.5].

3.4 Personnel protective equipment for use in an emergency

3.4.1 Personnel protective equipment includes equipment which protects persons against fire, smoke, toxic gases and immersion in the sea. A related written scheme for examination will be performed by the Society, acting as IVB. This list may be combined with other verification schemes, as stated in [3.5].

3.5 Combined verification schemes

3.5.1 In order to avoid the overlapping of work using PFEER and SCR verification schemes and improve timing, the Society can propose combined verification schemes, with the agreement of the duty holder.

3.5.2 Following the typical sequence of the work for compliance with UK Continental Shelf Regulations, the combined schemes will include:

- all verification activities relating to safety and environmental critical elements
- PFEER related verification activities which are not included above.

3.5.3 The combined schemes will include all requirements of separate schemes and all the activities and information requested by the independent verification for all stages of the lifecycle. Interfaces between different parts of verification schemes can be provided, upon duty holder request.

4 Combined approach to classification and independent verification

4.1 Benefits

4.1.1 Independent verification and Classification can be combined as stated in [1.3.2]. The following benefits are to be considered:

- classification can contribute to the compliance with UK Continental Shelf Regulations, as stated in [4.2] and Sec 4, [4.2]
- classification is based on prescriptive Rules considering implicitly risk aspects and incorporating risk mitigation principles, providing an important input for demonstrating the adequacy of marine systems
- classification requirements can be used directly or contribute for the definition of performance standards
- classification requirements apply to key structure and systems which are important for safety and integrity of the offshore unit
- documents issued and managed through the Classification process can constitute a valuable input for the activities required by the compliance with UK Continental Shelf Regulations
- the period of safety case up-date required by SCR is 5 years, the same as the period of class renewal
- the combined approach to Classification and verification improve the efficiency of both activities through avoidance of duplication.

4.2 Classification

4.2.1 Classification, as defined in Sec 1, is based on the prescriptive requirements of the Offshore Rules. These Rules are based on experience and current good practice.

4.2.2 Observations, condition of class and memoranda are important inputs for the verification schemes of units coming in UK waters from other areas.

4.2.3 UK Continental Shelf Regulations requirements can be accepted for the class through the principle of equivalence formulated in Pt A, Ch 1, Sec 1 of the Offshore Rules.

4.2.4 For compliance with UK Continental Shelf Regulations, the following additional work is to be performed:

- risk assessment
- safety cases
- written schemes.

4.3 Classification based on risk analysis approach

4.3.1 Classification based on risk analysis approach is accepted by the Society provided that the conditions of Pt A, Ch 1, Sec 1, [2.6] of the Offshore Rules are complied with.

4.3.2 In such a case, the Classification scheme is based on risk analysis and the development and maintenance of the inspection and maintenance scheme for hull structure shall comply with the requirements of NI 657.

4.3.3 The approach of the Classification based on risk analysis is similar with the one for UK compliance.

4.3.4 Offshore units classed through a risk analysis approach fulfill also a significant part of the procedure for UK compliance. As additional work, the following items are to be considered:

- a formal safety case is required
- evacuation, escape rescue and recovery are to be specially considered.

SECTION 4 VERIFICATION FOR COMPLIANCE WITH BRAZILIAN REGULATIONS

1 General

1.1 Objective

1.1.1 The present Section gives a general statement of the independent verification services that the Society can provide toward the compliance with Brazilian Regulations, including design review, inspections, witness of tests and the assessment of the required Operational Safety Management System.

1.1.2 The aim of the present Section is to describe the regulatory framework for which the Interested Party shall comply with.

Note 1: The Brazilian Authorities indicated in item [2.1.2] hereafter do not give recognition or accreditation to any third party certification authority, therefore the voluntary aspect of the independent verification and additional class notation shall be taken into account.

Note 2: The independent verification services as described in the present Guidance Note does not cancel/replace/substitute the Interested Party's responsibilities in respect to the Brazilian regulatory framework, as indicated in item [2.1.2] hereafter.

1.1.3 The purpose of the present Section is to highlight the specificities of independent verification for compliance with Brazilian Regulations. Independent verification services presented in the present Section are based on the methodology and principles given in Sec 2.

Methods and principles given in the present Section prevail over Sec 2. The general principles of Sec 2 remain applicable as a guidance, in particular in relation with the assessment of the Operational Safety Management System.

1.2 Specific definitions

1.2.1 The following specific definitions apply for Sec 4 and for App 1.

1.2.2 Yard

The party responsible for the design, procurement, construction or conversion, integration, commissioning and installation phases of the offshore unit. More than one yard can be involved during one or more of the previously mentioned phases

1.2.3 Owner

The party that owns and manages the offshore unit during its operational life.

1.2.4 Operator

The party for which the concession of the offshore field is granted by the Brazilian National Petroleum, Natural Gas and Biofuels Agency (ANP).

Note 1: The owner and operator can be the same entity, if an offshore unit is owned by the operator

1.2.5 Interested party

The party applying for the classification of the offshore unit and for the additional Class notation object of the present section and can be the yard, the owner or the operator, depending on which phase, as mentioned in the previous items.

1.2.6 Authorized professional

Legally licensed professional, duly qualified and registered in the respective Brazilian council.

1.3 Application

1.3.1 The provisions of the present Section are directly applicable for all types of units defined in Pt A, Ch 1 of the Offshore Rules (NR 445) for units operating or intended to operate in Brazilian Jurisdictional Waters (AJB).

1.3.2 The independent verification services can be performed separately or through a combined approach with the Classification.

1.3.3 It is the Interested Party's responsibility, on a voluntary basis, to define the best application.

1.3.4 The full application of the Brazilian regulatory framework means that the yard shall design, build and commission the offshore unit, taking into consideration requirements from each of the Brazilian agencies mentioned in item [2.1.2].

In addition, the owner of the offshore unit shall implement and maintain an Operational Safety Management System during the operational life.

1.3.5 Regarding the application to statutory requirements, attention is drawn upon the necessary agreement of the flag and/or coastal Authorities.

1.4 Class notations

1.4.1 As mentioned in Sec 1, [3.3], the **IVBS-BRA** additional Class notation will be granted to Offshore units under classification by the Society and for which the independent verification and assessment services for compliance with Brazilian regulations are requested to the Society by the Interested Party during the construction phase and will be normally issued at the unit's delivery or installation.

1.4.2 For existing units, the **IVBS-BRA** additional Class Notation can be granted, as mentioned in [4.3].

1.4.3 The **IVB-BRA** additional Class Notation will be kept for the Offshore Unit during the operational phase, based on an initial audit and periodical audits performed by the Society to verify the implementation and maintenance, respectively, of the Operational Safety Management System by the owner according to Regulations mentioned in [2.1.3].

1.4.4 A detailed description of the verification services performed by the Society is stated in a memorandum.

2 Verification for compliance with Brazilian regulations

2.1 Regulatory framework

2.1.1 Brazilian Regulations are established considering two different approaches that are complementary:

- a prescriptive approach set by national technical requirements defined in item [2.1.2].
- the implementation and maintenance of an Operational Safety Management System, with the safety of the unit being continuously assessed through a risk management and a goal setting approach, with establishment and monitoring of safety critical elements throughout the unit's life-cycle.

Note 1: In case of any contradiction between prescriptive requirements, the priority will be given to Brazilian national technical requirements and IMO requirements.

2.1.2 The provisions of the present Section, related to the additional class notation **IVBS-BRA**, are based on or reference to the regulations/requirements issued by the following Brazilian Authorities:

- Ministry of Defence / Brazilian Navy - Ports and Coasts Directorate (DPC);
- Ministry of Defence / Hydrography and Navigation Directorate (DHN);
- Ministry of Mines and Energy / National Petroleum, Natural Gas and Biofuels Agency (ANP);
- Ministry of Economy / Labor Inspection Secretary
- Ministry of Science, Technology, Innovation and Communications / National Telecom Agency (ANATEL);
- Ministry of the Environment / National Environment Council (CONAMA);
- Ministry of the Environment / Brazilian Institute of Environment and Renewable Natural Resources (IBAMA);
- Ministry of Health/ National Health Surveillance Agency (ANVISA);
- Other technical standards as referred by the agencies (INMETRO, ABNT, etc...).

A detailed list of all applicable Regulations can be found in App 1.

2.1.3 During the operational phase, in addition to [2.1.2] above, additional class notation **IVBS-BRA** will continue to be assigned to the unit based on audits and verification of the specific Resolutions issued by the National Petroleum, Natural Gas and Biofuels Agency (ANP) regarding the implementation of an Operational Safety Management System, as indicated hereafter:

- SGSO (Resolution ANP n° 43/2007) for Technical Regulation of the Operational Safety Management System for Oil and Natural Gas Drilling and Production Facilities

2.1.4 Although excluded from the notation **IVBS-BRA**, it shall be noted by the operator that, as part of its obligation towards ANP, other resolutions require the implementation of safety management systems covering also other aspects linked to offshore oil & gas exploration and production, such as subsea systems and well integrity, as indicated hereafter:

- SGSS (Resolution ANP n°41/2015) for Operational Safety Management of Subsea Systems (Offshore Production Risers and umbilical for import and export subsea systems, including long-term test systems and subsea processing units)
- SGIP (Resolution ANP n°46/2016) for Well Integrity Management System (Wells for Exploration and Production activities).

2.1.5 The unit is to comply with requirements of the present Guidance Note, and, in addition, with the latest edition code or standard, as listed in App 1, according to its nature, any mix-up of different codes or standards being avoided.

2.1.6 Upon preliminary agreement of the Society, other codes and standards than those listed here under may be included for the assignment of the notation.

2.2 Responsibilities

2.2.1 The Interested Party is responsible for compliance with Brazilian Regulations and for the following actions:

- to implement the technical requirements from the Brazilian authorities mentioned in [2.1.2]
- to ensure the flow of documents requested for verification and to act as a proxy for information held by various Contractors
- to prepare the technical dossiers, as requested by the applicable regulations/requirements, before start of operation
- to request inspection from Brazilian Authorities, in due time, to grant the issued permits and authorizations for operation
- to implement the Operational Safety Management System and perform internal audits for verification
- to prepare the technical dossiers, as requested by the applicable regulations/requirements, during operation and for decommissioning
- monitor/evaluate any modifications of the design or operation affecting the Brazilian Regulations, in particular impacting the unit's operational safety.

2.2.2 The Interested Party during the construction phase is the Yard, until the delivery or arrival of the unit.

2.2.3 The Interested Party during the Operational phase is the Owner or the Operator after the delivery or arrival of the unit.

2.3 Verification services

2.3.1 The Society will provide the following verification activities for the additional Class Notation **IVBS-BRA**:

- to identify/select and perform design review of documents from the Interested Party's Master list
- to validate the inspection and test plan
- to perform surveys during construction, final tests and commissioning, as defined in the agreed Inspection and Test Plan
- to perform the material and equipment certificates review in respect to national regulations
- to review the technical dossiers prepared by the Interested Party for each of the relevant regulations
- assessment of the Operational Safety Management System, during development and implementation phases, through audits and document verification
- to perform periodical audits for verification of the continuous adherence of the Operational Safety Management System to the applicable Regulation.

2.3.2 Assignment of IVBS-BRA Class Notation at construction phase

A set of five steps is to be followed for the initial assignment of the **IVBS-BRA** Class Notation. These steps are:

- a) Kick-off workshop
 - clarification of applicable Regulations
 - define documents to be submitted to the Society
 - define follow-up meetings
- b) Design requirements
 - to consider Brazilian Regulations during Class design review
- c) Material and equipment requirements
 - review of specific material and equipment certificates
- d) Inspection / audit / testing
 - follow-up as required by Brazilian Regulations, during Class Surveys in respect to Brazilian Regulations.
- e) Technical File
 - review of technical dossiers in respect to document revisions, consistency, etc.

2.3.3 Maintenance of IVBS-BRA Class Notation in operational phase

A set of five steps is to be followed for the maintenance of the **IVBS-BRA** Class Notation. These steps are:

- a) Kick-off workshop
 - definition of a working plan and common agreement on the activities and responsibilities

b) Technical File

- review of technical dossiers in respect to document revisions, consistency, etc.

Note 1: Not applicable to units with **IVBS-BRA** notation assigned during construction

c) Operational Safety Management System Assessment

- verification of procedures, documents and records

d) Initial Audit

- system Independent Audit (on board)

e) Periodical Audits

- system Independent Audit concurrently with class annual and renewal surveys.

2.3.4 Prior to the start of activities, be for its assignment or for maintenance of the notation, a kick-off workshop is to be held between the Society and the Interested Parties' representatives (yard, owner and operator) to define a working plan and common agreement on the activities and responsibilities.

This is specially relevant when more than one yard is involved in the design and construction of different parts of the unit (e.g. hull, topsides) or for different construction phases (e.g. modules fabrication and topsides integration and commissioning).

2.3.5 During the execution phase, be for its assignment or for maintenance of the notation, periodical meetings are to be held between the Society and the Interested Parties' representatives for a continuous review of the agreed working plan and, when applicable, perform updates, for instance, due to any modification/new releases of Brazilian Regulations.

3 Operational safety management system

3.1 General

3.1.1 The operational safety management system is required by the National Petroleum, Natural Gas and Biofuels Agency (ANP) as stated in [2.1.3] and [2.1.4], under Resolution 43/2007, for new or existing units, operating or intended to operate in Brazilian Jurisdictional Waters (AJB), and has to include the following:

- documents establishing the safety conditions for intended operation
- implementation and maintenance of an adequate operational safety management system.

3.1.2 Prior to the start of implementation activities related to the operational safety management system, a kick-off workshop is to be held between the Society and the Interested Parties' representatives (yard, owner and operator) to define a working plan and common agreement on the activities and responsibilities.

3.2 SGSO operational safety management system

3.2.1

The Operational Safety Management System as required by SGSO, as stated in [2.1.3], and consolidated by the so called Operational Safety Documentation (DSO), is to be submitted by the Interested Party to the Society, including:

- Correlation Matrix (MC)
- Description of the Maritime Unit (DUM), and
- Concessionaire Information Report (RIC).

3.2.2 The Society will review the Correlation Matrix (MC) considering document verification and system independent audits, during the system implementation and maintenance phases or due to any update/modification, as requested by the Interested Party.

3.2.3 The MC to be submitted to the Society is to represent the correlation among the Operational Safety Management System and each of one of the 17 Management Practices from SGSO, indicated hereafter:

- Leadership, Personnel and Management
 - MP 1: Safety Culture and Management Responsibility
 - MP 2: Personnel Engagement
 - MP 3: Personnel Qualification, Training and Performance
 - MP 4: Work Environment and Human Factors

- MP 5: Selection, Control and Management of Contractors
- MP 6: Monitoring and Continuous Improvement
- MP 7: Internal Audits
- MP 8: Information and Documentation Management
- MP 9: Accidents Investigation
- Installations and Technology
 - MP 10: Design, Construction, Installation and Decommissioning
 - MP 11: Safety Critical Elements
 - MP 12: Hazard Identification & Risk Analysis
 - MP 13: Mechanical Integrity
 - MP 14: Management of Major Emergencies
- Operational Practices
 - MP 15: Operational Procedures
 - MP 16: Management of Change
 - MP 17: Practices for Safe Labor and Control of Special Activities

3.2.4 As stated in [3.2.2], the Society will perform a verification of procedures, documents and records as relevant for each MP and perform system independent audits covering, at least, the scope presented in Tab 1 “minimal scope of independent audits”. Prior to each audit, a detailed audit plan will be defined, based on Tab 1.

Table 1 : Minimal scope of independent audits

Management Practices	Minimum audit plan
MP 1	<ul style="list-style-type: none"> • Operational Safety Organization • Resources Management
MP 3	<ul style="list-style-type: none"> • Personnel qualification and training
MP 5	<ul style="list-style-type: none"> • Qualification and Monitoring of contractors
MP 6	<ul style="list-style-type: none"> • Indicators related to operational safety • Indicators monitored at the Critical Analysis Meetings • Action plans for the indicators that showed insufficient performance
MP 7	<ul style="list-style-type: none"> • Reports of internal audits carried out at the unit • Action plan, deadlines and execution status for the NCs.
MP 8	<ul style="list-style-type: none"> • List of procedures and availability on board
MP 9	<ul style="list-style-type: none"> • Issued reports on accidents Investigation
MP 11	<ul style="list-style-type: none"> • Review of Safety Critical Elements • Review of contingency plans
MP 12	<ul style="list-style-type: none"> • Risk Analyses Reports • Review of Risk Analyses recommendations and implementation
MP 13	<ul style="list-style-type: none"> • Review of Mechanical Integrity Management system • Inspection, testing and maintenance plans
MP 14	<ul style="list-style-type: none"> • Emergency Response Plan • Simulation records and planning
MP 15	<ul style="list-style-type: none"> • Review of Operational Procedures
MP 16	<ul style="list-style-type: none"> • Management of Change Procedures, with execution status and deadlines
MP 17	<ul style="list-style-type: none"> • Work Permits Procedures

3.2.5 A more detailed audit plan would be defined by the Society considering the offshore unit characteristics and operational phase, as agreed with the Interested Party.

3.2.6 The Society will evaluate the Description of the Maritime Unit (DUM) considering design review and surveys on board before unit delivery or due to any update/modification, as requested by the Interested Party.

3.2.7 The DUM to be submitted to the Society is to include the description of the security items of the Installation, with the following minimum content:

- the updated Platform Operation Statement, as issued by Brazilian Navy (NORMAM01)
- updated Oil Registration Book (MARPOL Annex I)
- updated document index with main drawings and documents that detail the installation's design and operation, arrangement, electrical classification of areas, process flow charts, main equipment and lines, etc.

3.2.8 As indicated in [3.2.6] and [3.2.7] above, the documents issued and managed through the Classification process (design review, material and equipment certification and surveys on board) can constitute a valuable input for the activities required by the compliance with DUM verification and are to include, as a minimum:

- operation manual
- general arrangement
- accommodation
- capacity plan
- safety plan
- process system
- electrical and control system
- equipment list
- marine and naval systems
- drilling system (when applicable)
- dynamic positioning (when applicable)
- hazardous areas plan
- cranes, life raft, rescue boat and lifeboat davits;
- risk analysis reports (Preliminary Risk Assessment, HAZOP, HAZID, SIL study, Gas Dispersion analysis, Gas and Fire allocation reports, Explosion Analysis, Dropped objects study, Evacuation, Scape Rescue and Recovery Study, etc.)

3.2.9 The Society will receive the Concessionaire Information Report (RIC) for information only, before unit delivery or due to any update/modification, as requested by the Interested Party. The RIC is to be submitted considering the format as per Annex 3 and Annex 4 from SGSO.

3.2.10 In case of Drilling Installations, the Interested Party is also to include in the RIC a document that establishes a correlation between its Management System and the Installation's Operational Safety Management System considered. In this case, this document would be verified considering the activities already performed by Society as per [3.2] above.

4 Combined approach to classification and independent verification for notation IVBS-BRA

4.1 Benefits

4.1.1 The independent verification for notation **IVBS-BRA** and classification can be combined for the following benefits:

- Classification can contribute to the compliance with Brazilian Regulations, as Classification is based on prescriptive Rules considering implicitly risk aspects and incorporating risk mitigation principles, providing an important input for demonstrating the adequacy of marine systems according to the unit's Class and Statutory Certificates
- Classification requirements apply to key structure and systems which are important for safety and integrity of the offshore unit
- Documents issued and managed through the Classification process can constitute a valuable input for the activities required by the compliance with Brazilian Regulations
- The combined approach to Classification and independent verification improve the efficiency of both activities through avoidance of duplication, especially during operation phase where the **IVBS-BRA** scope may be combined with the foreseen Class and Statutory on-board surveys, as defined in NR 445, Pt A, Ch 2, Sec 1.

4.1.2 Classification, as defined in Sec 1, is based on the prescriptive requirements of the Offshore Rules. These Rules are based on experience and current good practice.

4.2 Classification based on risk analysis approach

4.2.1 Classification based on risk analysis approach is accepted by the Society provided that the conditions of Pt A, Ch 1, Sec 1, [2.6] of the Offshore Rules are complied with.

4.2.2 In such a case, the Classification scheme is based on risk analysis and the development and maintenance of the inspection and maintenance scheme shall comply with the requirements of NI 657.

4.3 Application to existing units, operating or intended to operate in Brazilian Jurisdictional Waters (AJB)

4.3.1 The Interested Party may apply for the assignment of the additional notation **IVBS-BRA** for existing units classed by the Society, operating or intended to operate in Brazilian Jurisdictional Waters (AJB).

In this case, a comprehensive verification scope of the implemented Operational Safety Management System is to be performed by the Society including, as minimum, the activities as defined in [3].

4.4 Independent verification for non-classed units

4.4.1 The independent verification scheme can be performed as a service, independently from class. In that particular case, it applies to units not classed by the Society.

4.4.2 In that particular case, the deliverable takes the form of a report stating the level of compliance with applicable Brazilian regulations.

APPENDIX 1 INDEX OF BRAZILIAN REGULATIONS

1 Summary of interested party's responsibilities for compliance

1.1 General

1.1.1 Summary of interested party's responsibilities for compliance with Brazilian regulations listed in [1.2] are defined in the following tables, grouped by topics:

Tab 1: general items

Tab 2: hull, accommodation modules and helidecks

Tab 3: oil and gas processing modules

Tab 4: power generation, automation and utility modules

1.1.2 Tab 1 is a set of regulations that each covers various topics. Consequently, for each other tables of [1.3.1] covering each a specific topic, all general items of Tab 1 are to be addressed with regards to the specific topic.

1.2 Index of Brazilian regulations

1.2.1 Ministry of Defence

The Ministry of defence regulations are covered by:

- DPC: Brazilian Navy - Ports and Coasts Directorate
NORMAM 01/DPC Maritime Authority Standard for Vessels employed in open sea navigation
NORMAM 05/DP Material homologation
NORMAM 15/DPC Maritime Authority Standards For Underwater Activities
NORMAM 20/DPC Maritime Authority Standards For Ballast Water Management
NORMAM 23/DPC Maritime Authority Standards For The Control Of Anti-Scaling Systems In Vessels
NORMAM 27/DPC Maritime Authority Standards For Registration of Helidecks Installed In Vessels and on Maritime Platforms
- DHN: Hydrography and Navigation Directorate
NORMAM 17/DN Maritime Authority Standards for Navigation Aid

1.2.2 Ministry of Mines and Energy / National Petroleum, Natural Gas and Biofuels Agency (ANP)

- General regulations
Resolution 817/2020 Technical Regulation for Decommissioning of Exploration and Production Facilities
ANP/INMETRO Nr. 1 Technical Regulation for oil & gas metering systems
Ordinance ANP 806/2020 Flare - Authorized Natural Gas Burns and Losses
- Operational Safety Management System requirements

SGSO (Resolution ANP n° 43/2007) Technical Regulation of the Operational Safety Management System for Oil and Natural Gas Drilling and Production Facilities

SGSS (Resolution ANP n° 41/2015) Operational Safety Management of Subsea Systems

SGIP (Resolution ANP n° 46/2016) Well Integrity Management System

1.2.3 Ministry of Economy / Labor Inspection Secretary

NR 10 Safety in Electricity Installations and Services

NR 11 Transport, Handling, Storage and Handling of Materials

NR 12 Safety at Work on Machines and Equipment

NR 13 Boilers, Pressure Vessels and Metallic Storage Pipes and Tanks

NR 15 Unhealthy Activities And Operations

NR 17 Ergonomics

NR 23 Fire Protection

NR 24 Sanitary And Comfort Conditions In Workplaces

NR 26 Safety Signals

NR 32 Safety And Health At Work In Health Services

NR 33 Safety And Health At Work In Confined Spaces

NR 35 Work at Height

NR 37 Safety And Health in Oil Platforms

1.2.4 Ministry of Science, Technology, Innovation and Communications / National Telecom Agency (ANATEL)

ICA 63-10 Telecommunications and Air Traffic Service Provider Stations - EPTA.

1.2.5 Ministry of the Environment / National Environment Council (CONAMA)

Resolution 8/1990 Provisions on the maximum levels of emissions of air pollutants caused by external combustion processes by fixed pollution sources

Resolution 247/2011 Provisions on maximum emission limits for air pollutants for fixed sources (installation license before 02/January/2007)

Resolution 267/2000 Provides for a ban on the use of substances that deplete the ozone layer

Resolution 269/2000 Regulates the use of chemical dispersants in oil spills at sea

Resolution 275/2001 Establishes the color code for the different types of waste, to be adopted in the selective collection.

Resolution 340/2003 Provides for the use of containers for the conditioning, storage, transport and commercialization of gases that destroy the ozone layer, and provides other measures.

Resolution 357/2005 Provides for the classification of bodies of water and environmental guidelines for their classification

Resolution 382/2006 Provisions on maximum emission limits for air pollutants for fixed sources

Resolution 393/2007 Provides for the continuous disposal of process or production water on platforms oil and natural gas, and other measures.

Resolution 397/2008 Provides for the classification of bodies of water and environmental guidelines for their classification, as well as establishing the standard conditions for the discharge of effluents

Resolution 398/2008 Individual Emergency Plan

Resolution 430/2011 Provides for the conditions and standards for effluent discharge

Resolution 491/2018 Atmospheric Emissions Control Plan

1.2.6 Ministry of the Environment / Brazilian Institute of Environment and Renewable Natural Resources (IBAMA)

TECHNICAL NOTE CGPEG / DILIC / IBAMA Nr. 01/11 POLLUTION CONTROL PROJECT Guidelines for presentation, implementation and reporting, in accordance with environmental licensing processes for maritime exploration and development projects oil and gas production.

TECHNICAL NOTE CGPEG / DILIC / IBAMA Nr. 07/11 POLLUTION CONTROL PROJECT Solid wastes from oil and gas Exploration and Production activities in Brazilian maritime sedimentary basins in 2009 - Consolidation of results of Technical Note CGPEG / DILIC / IBAMA No. 08/08.

1.2.7 Ministry of Health / National Health Surveillance Agency (ANVISA)

Federal Law 12.546/2011 (regulated in 2014) New rules prohibit smoking in closed places and for collective use throughout the country, extinguishes smoke-houses.

Ordinance Nr. 2914/2011 Provides for procedures for the control and surveillance of the quality of water for human consumption and its standard of portability.

Inter-ministerial Ordinance MTE/MS Nr. 775/2004 Provides for the prohibition, throughout the National Territory, of the marketing of finished products containing "benzene" in its composition.

Ordinance Nr. 3523/1998 Technical Regulation to guarantee the Indoor Air Quality and prevention health risks for occupants of air-conditioned environments.

Resolution RE Nr. 176 Technical Guidance on Standards Indoor Air Quality Benchmarks, in artificially heated environments for public and collective use.

Resolution RDC-50/2002 Technical Regulation for planning, programming, elaboration and evaluation of physical projects of health care establishments.

Resolution RDC-372/2020 Technical Regulation that aims to promote health in health control ports installed in national territory, and vessels that pass through them.

Resolution RDC-72/2009 Technical Regulation that aims to promote health in health control ports installed in national territory, and vessels that pass through them.

Resolution RDC Nr. 91/2016 Technical Regulation that aims to promote health in health control ports installed in national territory, and vessels that pass through them.

Resolution RDC-216/2004 Provides for Technical Regulations of Good Practices for Food Services.

1.2.8 Other technical standards as referred by the agencies

- Brazilian Association of Technical Standards (ABNT)
 - NBR 16725 Chemical waste
 - NBR 7195 Color code (Safety)
 - NBR 6493 Color code (Piping)
 - NBR 13434 Safety Signs (Fire and panic)
 - NBR IEC 60079 Electrical equipment (Construction, Testing and Marking)
 - NBR ISO 80079 Hazardous Areas (Non-electrical equipment)
 - NBR IEC 61892 Fixed and mobile marine units - Electrical installations
 - NBR 16385 Fire and Explosion (Control and Mitigation)
 - NBR 17025 Quality Management Systems in laboratories
- National Institute of Metrology, Quality and Technology (INMETRO)
 - Ordinance 179/2010 Equipment for hazardous areas (ATEX)
 - Ordinance 89/2012 Equipment for hazardous areas (ATEX) (Modifications)
- Ministry of Defence / Airspace Control Department (DECEA)
 - MCA 101-1 Installation of Surface and Altitude Meteorological Stations

1.3 Tables of regulations

1.3.1 The following section presents the Brazilian regulations within the scope of the **IVBS-BRA** class notation, under the form of tables.

The Subsea Systems and Well Integrity Management systems being out of the scope of the **IVBS-BRA** class notation, they do not appear in these tables. These items are covered by Sec 4, [2.1.4].

Table 1 : General items - Summary of interested party's responsibilities for compliance

Brazilian Regulation	Design requirements / approval	Material and equipment requirements	Apply for inspection / audit / testing	Technical File	Remarks
SGSO (Resolution ANP n° 43/2007)	X(1)	X	X(2)	X(3)	Operational Safety Management System (1) Critical Elements/Risk Analysis (2) Operational Safety Management System (3) Operational Safety Documentation (DSO)
NORMAM 01/DPC	X	X	X(1)(2)	X(1)	(1) To include BV Class and Statutory Certificates (2) Based on NORMAM's checklist for start operation
NR 10	X(1)	X(2)	X(3)	X(4)	(1) Systems descriptive specification, arrangements and accessibility (2) Material specification (3) Training / Safety (4) Authorized professional by the Brazilian Engineering Council (CREA)
NR 11	X	X(1)		X	(1) To include name plate (SWL)
NR 12	X(1)	X	X(2)	X	(1) Equipment access and mechanical protection (manuals of machinery and equipment, means of access, handrails and platforms, movable guards associated with interlocking devices, protection of rotating parts, emergency shutdown device, etc.) (2) Training / Safety
NR 13	X(1)	X(2)	X(3)	X(4)	(1) Pressure vessels and tanks (2) To include name plate (operational limits) (3) Initial safety inspection after installation on board and pressure tests during operational phase (4) Authorized professional by the Brazilian Engineering Council (CREA)
NR 17	X(1)	X	X(2)	X	(1) Ergonomics condition (Accommodation, offices, workshops, cranes, other equipment, etc.) (2) Final inspection
NR 26	X			X	Identification / Color code
NR 35	X	X		X	Work at height - Access / Equipment
NR 37	X(1)	X(2)		X(3)	(1) Escape routes (doors, width, lighting, signals, etc.) (2) Equipment installed in hazardous area (3) To include the Marine Installation Declaration (DIM)
CGPEG / DILIC / IBAMA Nr. 01/11	X	X		X	Pollution Control Project (PCP) required in the environmental licensing process
CGPEG / DILIC / IBAMA Nr. 07/11	X	X		X	Solid wastes treatment
CONAMA Resolution 382/2006	X	X		X	Emission limits for units in operation
CONAMA Resolution 436/2011	X	X		X	Emission limits for units in operation (installation licence before 02/January/2007)
CONAMA Resolution 491/2018	X	X		X(1)	(1) Minimum contents of the Atmospheric Emission Control Plan
ANP Resolution 817/2020	X(1)(2)	X	X(3)	X	Applicable only for the decommissioning phase (1) Justification Study (EJD) (2) Program / Planning (PDI) (3) Report of Activities (RDI)

Table 2 : Hull, Accommodation and Helideck - Summary of interested party's responsibilities for compliance

Brazilian Regulation	Design requirements / approval	Material and equipment requirements	Apply for inspection / audit / testing	Technical File	Remarks
All General items of Tab 1	X(1)	X(1)	X(1)	X(1)	(1) as per Tab 1
NORMAM 17/DHN	X(1)	X(2)			(1) Design requested by NORMAM01 for unit signalling and lighting (2) Homologation required
NORMAM 05/DPC		X(1)			(1) Homologation/ EC marking/ MED Wheel Marking (Personal transfer baskets, pilot ladder, etc.)
NORMAM 15/DPC	X(1)	X	X	X	(1) Fixed or moving platforms, access baskets, diving systems, bells for diving and other requirements
NORMAM 20/DPC	X			X	When arriving in Brazil, coming from a foreign port or from foreign/international waters
NORMAM 23/DPC	X	X			Anti-fouling system
NORMAM 27/DPC	X(1)	X	X(2)	X(3)	(1) Arrangement, marking, lighting, fire-fighting, under-deck storage tank, etc.) (2) Final inspection, including fire-fighting and Brazilian Authority helicopter approach/landing. (3) To include Bureau Veritas letter on helideck structural assessment
NR 15	X(1)			X	(1) Personal exposure to agents (chemicals exposure, noise level, air quality, vibration, etc.)
NR 23	X	X			Fire Protection
NR 24	X(1)			X	(1) Comfort and Health Conditions in Workplaces (accommodation, locker room, rest room, toilets, etc.)
NR 32	X(1)			X	(1) Working area preventive measures for each risk situation (area graphic signage, health and safety protection measures like shower, eye wash, etc.)
NR 33	X	X		X	Confined Space - Access / Equipment
ICA 63-10	X	X			ANATEL to regularize the use of the designated frequency
CONAMA Resolution 8/1990	X	X			Maximum levels of emissions of air pollutants
CONAMA Resolution 267/2000	X	X			Substances that destroy the Ozone Layer and makes other provisions
CONAMA Resolution 269/2000	X	X		X	Limits and conditions for the use of chemical dispersants in oil spills at sea
CONAMA Resolution 275/2001	X	X		X	Selective collection (color codes)
CONAMA Resolution 340/2003	X	X			Ozone Layer and makes other provisions
CONAMA Resolution 357/2005 CONAMA Resolution 397/2008 CONAMA Resolution 430/2011	X	X			Effluent disposal / discharge / treatment
CONAMA Resolution 398/2008	X	X		X(1)	(1) Minimum content for the Individual Emergency Plan
Ordinance Nr. 2914/2011	X	X	X(1)	X	(1) Fresh Water tanks / Fresh water Potable water (potability)
Inter-ministerial Ordinance MTE/MS Nr. 775/2004		X(1)		X	(1) Prohibits the sale of finished products that contain benzene in their composition
Ordinance Nr. 3523/1998	X	X	X	X	HVAC / Air quality interior spaces
Ordinance Nr. 2914/2011	X(1)			X	(1) Anti-smoking regulation / enclosed spaces
ANVISA Resolution RE Nr. 176	X	X	X	X	HVAC / Air quality
ANVISA Resolution RDC-50/2002	X	X	X	X	Hospital Facilities
ANVISA Resolution RDC-372/2020 ANVISA Resolution RDC-72/2009 ANVISA Resolution RDC-91/2016	X	X	X	X	Includes COVID-19 restriction
ANVISA Resolution RDC-216/2004	X	X	X	X	Galley/Catering services licensing

**Table 3 : Oil and Gas Processing Modules -
Summary of interested party's responsibilities for compliance**

Brazilian Regulation	Design requirements / approval	Material and equipment requirements	Apply for inspection / audit / testing	Technical File	Remarks
All General items of Tab 1	X(1)	X(1)	X(1)	X(1)	(1) as per Tab 1
CONAMA Resolution 393/2007	X(1)	X	X	X	(1) Produced Water (Discharge limits / re-injected, off-specification handling/storage tank, measuring instruments, etc.)
ANP/INMETRO Nr. 1	X(1)	X	X		(1) Fiscal Metering systems requirements (specific requirements, location, redundancy, flow computer, valves seat tightness, flow, calibrating system, sampling system, overpressure device, etc.)
Ordinance ANP 806/2020	X	X			(1) Includes ordinary extraordinary and emergency burning for production units

**Table 4 : Power Generation, Automation and Utility Modules -
Summary of interested party's responsibilities for compliance**

Brazilian Regulation	Design requirements / approval	Material and equipment requirements	Apply for inspection / audit / testing	Technical File	Remarks
All General items of Tab 1	X(1)	X(1)	X(1)	X(1)	(1) as per Tab 1
CONAMA Resolution 340/2003	X	X		X	Ozone Layer and makes other provisions (Enclosed Spaces)



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